



YOUR **FUTURE**  
YOUR **CHOICE**

COURSE HANDBOOK

**2019**

# Cork Institute of Technology

## Four Campuses One Institute

Bishopstown Campus | CIT Cork School of Music

CIT Crawford College of Art & Design | National Maritime College of Ireland

### Course Structures at CIT

There are two main entry streams for full-time students

- Four Year Honours Bachelor Degrees
- Three Year Bachelor Degrees

Many Three Year Bachelor Degree programmes have an "exit option" after two years. Students who successfully complete Year 2 of these programmes and who do not wish to progress to Year 3 will receive a Higher Certificate Award.

### Module Information

The website <http://courses.cit.ie> gives full details of all modules and has information on average weekly workload, assessments, and exams.

### The CIT Module - Creativity, Innovation and Teamwork

Every first year student, no matter what the course, takes this module in Creativity, Innovation and Teamwork. This is designed to motivate you for a lifetime of independent learning. The CIT module will also help you to map your way through the third level system.

### New Agri-Biosciences Programme

See page 138 for course details

CIT offers an exciting new Level 8 CR 370 BSc (Honours) in Agri-Biosciences. The agri-food sector is Ireland's largest indigenous industry and the Department of Agriculture, Food and the Marine aims to position Ireland as a world leader in sustainable Agri-Food production, through an emphasis on utilising research-led practices and novel biotechnologies.

### Scholarships

Please visit [www.cit.ie/scholarships](http://www.cit.ie/scholarships) for more information.

### Videos

Get the inside story by watching the latest set of video clips... check out [www.youtube.com/CIT](http://www.youtube.com/CIT)

### CIT Mathematics Exam

Some students who apply to CIT courses may not achieve the required entry standard in Mathematics through the Leaving Certificate. For such applicants, CIT offers a second chance to reach the required entry standard through a CIT Mathematics Exam, see Page 16.

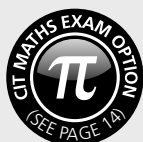
# CAO Courses

## at Cork Institute of Technology

### CAO Honours Degree (Level 8) List

CAO Code	Honours Bachelor Degrees (Level 8)	Round 1 Points 2018	Page
CR 105	Chemical and Biopharmaceutical Engineering	444	100
CR 106	Software Development	350	144
CR 108	Mechanical Engineering	416	84
CR 109	Structural Engineering	366	62
CR 112	Creative Digital Media	336	178
CR 116	Computer Systems	316	148
CR 121	Music (at CIT Cork School of Music)*	628	162
CR 125	Popular Music: Electric Bass Guitar (at CIT Cork School of Music)*	836	164
CR 126	Popular Music: Drums (at CIT Cork School of Music)*	697	164
CR 127	Popular Music: Electric Guitar (at CIT Cork School of Music)*	725	164
CR 128	Popular Music: Keyboards (at CIT Cork School of Music)*	708	164
CR 129	Popular Music: Voice (at CIT Cork School of Music)*	607	164
CR 150	Business Information Systems	316	32
CR 210	Contemporary Applied Art (Ceramics, Glass, Textiles) (at CIT Crawford College of Art & Design)*	666	174
CR 220	Fine Art (at CIT Crawford College of Art & Design)*	565	176
CR 305	Physical Sciences (Common Entry)	320	118
CR 310	IT Management	290	150
CR 312	Web Development	290	146
CR 320	Biomedical Science (Joint CIT/UCC)	521	136
CR 325	Pharmaceutical Biotechnology	371	142
CR 333	Nutrition & Health Science	350	140
CR 335	Biological Sciences (Common Entry)	381	132
CR 340	Analytical Chemistry with Quality Assurance	327	122
CR 360	Instrument Engineering	297	126
CR 365	Environmental Science & Sustainable Technology	307	128
CR 370	Agri-Biosciences	New Course	138
CR 400	Accounting	308	26
CR 420	Marketing	288	28
CR 425	International Business with Language	289	30
CR 500	Engineering (Common Entry)	391	60
CR 510	Sustainable Energy Engineering	300	102
CR 520	Biomedical Engineering	433	88
CR 560	Architectural Technology	273	76
CR 565	Interior Architecture	302	80
CR 570	Quantity Surveying	282	70
CR 572	Construction Management	252	68
CR 580	Electrical Engineering	300	96
CR 590	Electronic Engineering	300	92
CR 600	Visual Communications*	640	180
CR 660	Tourism Management	260	42
CR 700	Theatre & Drama Studies (at CIT Cork School of Music)*	836	166
CK 409	Industrial Physics (Joint CIT/UCC)	511	120
CK 606	Architecture (Joint CIT/UCC)	447	74

\* Restricted Application/Early Assessment Procedures



Some students who apply to CIT courses may not achieve the required entry standard in Mathematics through the Leaving Certificate. For such applicants, CIT offers a second chance to reach the required entry standard through a CIT Mathematics Exam. In order to avail of the CIT Mathematics Examination, students **MUST APPLY ONLINE** ([www.cit.ie/maths](http://www.cit.ie/maths)) by 12 noon on Monday, 19th August 2019.

## CAO Bachelor Degree / Higher Certificate (Level 6 & 7) List

CAO Code	Bachelor Degrees (Level 7)	Follow-on Degrees at CIT	Round 1 Points 2018	Page
CR 001	Applied Physics & Instrumentation ▲	BSc (Honours) Degree	297	130
CR 006	Applied Biosciences ▲ Degree Award options: Food & Health Science or Applied Biosciences and Biotechnology	BSc (Honours) Degree	360	134
CR 007	Analytical & Pharmaceutical Chemistry ▲	BSc (Honours) Degree	292	124
CR 010	Agriculture ▲	BSc (Honours) Degree	289	56
CR 016	Software Development ▲	BSc (Honours) Degree	270	152
CR 021	Business (Common Entry) ▲ Degree Award options: Business or Marketing or Accounting	BBus (Honours) Degree	240	22
CR 022	Business Administration ▲	BBus (Honours) Degree	201	24
CR 031	Social Care	BA (Honours) Degree	330	38
CR 032	Recreation & Leisure Management ▲	BBus (Honours) Degree	270	34
CR 035	Community Development ▲	BA (Honours) Degree	176	40
CR 041	Tourism Management ▲	BBus (Honours) Degree	214	44
CR 042	Hospitality Management ▲	BBus (Honours) Degree	204	46
CR 046	Automotive Technology & Management ▲	BSc (Honours) Degree	216	104
CR 051	Civil Engineering ▲	BEng (Honours) Degree	226	64
CR 052	Construction ▲ Degree Award options: Construction Management or Quantity Surveying	BSc (Honours) Degree	225	72
CR 053	Interior Architecture	BSc (Honours) Degree	252	82
CR 055	Environmental Engineering	BEng (Honours) Degree	226	66
CR 061	Electronic Engineering ▲	BEng (Honours) Degree	251	94
CR 062	Electrical Engineering ▲	BEng (Honours) Degree	250	98
CR 071	Mechanical Engineering ▲	BEng (Honours) Degree	270	86
CR 075	Biomedical Engineering ▲	BEng (Honours) Degree	312	90
CR 090	Architectural Technology	BSc (Honours) Degree	244	78
CR 094	Nautical Science (at NMCI)	BSc (Honours) Degree Ship's Master Level	278	110
CR 095	Marine Engineering (at NMCI)	Chief Engineer Level	241	112
CR 300	Physical Sciences (Common Entry)	BSc (Honours) Degree	300	118
CR 620	Early Childhood Education & Care	BA (Honours) Degree	346	36
CR 640	Culinary Arts	BBus (Honours) Degree	205	50
CR 650	Beverage Industry Management	BBus (Honours) Degree	204	54
CR 805	Marine Electrotechnology (at NMCI)		244	114
CR 888	Information Technology ▲	BSc (Honours) Degree	280	154

CAO Code	Higher Certificates (Level 6)	Follow-on Degrees at CIT	Round 1 Points 2018	Page
CR 655	Culinary Studies	BBus/BA Degree > BBus (Honours) Degree	179	52
CR 657	Hospitality Studies	BBus Degree > BBus (Honours) Degree	162	48

▲ Students who successfully complete Year 2 of programmes marked with " ▲ ", and who do not wish to progress to the Year 3 will receive the Higher Certificate award.

# Cork Institute of Technology

Institiúid Teicneolaíochta Chorcaí

incorporating

CIT Cork School of Music  
CIT Crawford College of Art & Design  
National Maritime College of Ireland

Bishopstown, Cork, Ireland.

T: 021 432 6100

E: info@cit.ie



[www.cit.ie](http://www.cit.ie)



[www.facebook.com/myCIT](http://www.facebook.com/myCIT)



[www.youtube.com/CIT](http://www.youtube.com/CIT)



[www.twitter.com/CIT\\_ie](http://www.twitter.com/CIT_ie)



# About Cork Institute of Technology

Whatever your plans and talents CIT has a course of study for you. We offer the full range of higher education qualifications, including Bachelor Degrees and Honours Bachelor Degrees, as well as postgraduate Masters and PhD Degrees. There is a flexible "ladder" system in place, which, in many cases, allows you to progress from one award to the next. For those returning to education from employment or for those with other commitments, CIT has a varied part-time and evening programme, one of the largest at third level in the country.

## CIT has four principal Campuses:

- Bishopstown Campus situated in the suburbs of Cork City
- CIT Crawford College of Art & Design situated in Cork City
- CIT Cork School of Music situated in Cork City
- National Maritime College of Ireland situated in Ringaskiddy, Cork Harbour

## Bishopstown Campus

The Bishopstown Campus is the main centre, and is the location for courses in Business, Science, Computing, Engineering, Media Communications, and Humanities. Also located here are Student Services, Administration, Research Centres, and Industry Support Centres. The Bishopstown Campus is situated in the western suburbs of Cork City. Leisureworld Sports Centre, which includes both a 25m and an 18m swimming pool, is right next door. Just a few minutes walk away are the suburbs of Bishopstown and Wilton with shops, restaurants and sports facilities. The city centre is just a short bus ride away.

The Student Centre is the main focus for student activity and leisure. It has all the services you could hope for, such as a common room, restaurant, meeting rooms, bank, supermarket, and various student services.

The Nimbus Centre is Ireland's only research centre devoted to the field of embedded electronic systems. Nimbus provides space for up to 80 researchers, including facilities for undergraduate project students, visiting postgraduate students and researchers from other institutions.

The Rubicon Centre is a business incubation centre for young graduates. It provides a supportive on-campus environment for start-up businesses. The CIT Information Technology Centre consists of computer laboratories, seminar rooms and open access computer stations for hundreds of students. All these computers are fully networked and online.

CIT's main library is located in the Berkeley Centre on the Bishopstown campus and has over 600 study spaces available. Other CIT libraries are located at CIT Crawford College of Art & Design, CIT Cork School of Music and the National Maritime College of Ireland. The library provides access to a wide collection of print, electronic and audio-visual resources appropriate to all subjects taught in the Institute. Electronic resources are available off campus 24/7 and other useful resources available from the library include bookable Groups Study Hubs, Exam Papers, Careers Section, Subject Guides, Wifi, Computers, Printers, Copiers, and of course, the library staff who are happy to support and advise students.



## CIT Crawford College of Art & Design (CCAD)

<http://crawford.cit.ie>

This is a self-contained College of CIT, located in Sharman Crawford Street, within easy walking distance of the city centre. The Department of Fine Art & Applied Art, based at the Sharman Crawford Street campus, offers Honours Degree programmes in Fine Art and in Contemporary Applied Art (Ceramics, Glass, Textiles). The Department of Media Communications, based at CIT Bishopstown campus, offers Honours Degree programmes in Creative Digital Media and Visual Communications. Postgraduate programmes in Fine Art, Art Education, and Art Therapy are based in the recently acquired and renovated city centre campus at No. 46 Grand Parade. Facilities at the CCAD include lecture rooms, library, studios, and personal work-areas for students. There are well equipped workshops and laboratories for an extensive range of specialist areas. The CIT CCAD annual Degree Show is one of the highlights of the arts calendar in Cork.



## CIT Cork School of Music (CSM)

<http://csm.cit.ie>

This is a Constituent School of CIT, located at Union Quay, Cork city, and provides Honours Degree programmes in Music, Theatre & Drama, and Popular Music. The School also has a wide range of MA and PhD degrees. The CSM provides the internationally renowned staff of Ireland's largest conservatory of music and drama with the very best of facilities to ensure that many more students are able to pursue their studies. The CSM has many award winning bands, chamber music ensembles, choirs, drama groups, opera groups, and orchestras – with the senior ones undertaking extensive national and international tours, broadcasting, and making commercial recordings.



## National Maritime College of Ireland (NMCI)

[www.nmci.ie](http://www.nmci.ie)

This purpose built College is on a 10 acre campus and located 18km from Cork city, in Ringaskiddy. It provides training and education for the Merchant Marine, and the non-military needs of the Irish Naval Service. The NMCI provides education services of the highest quality and includes Degree programmes in Nautical Science, Marine, Engineering, and Marine Electrotechnology. Specialist spaces including survival facilities, seamanship and shipwrights' workshops, fire-fighting/damage control, jetty and lifeboat facilities and engine room are provided. The College also provides specialised simulation equipment in the areas of navigation, bridge training, communications, engineering machinery operations, liquid cargo handling/damage control and vessel traffic systems. These facilities fully comply with the most up to date international standards and requirements. A multipurpose hall and sporting facilities are also included in the college.



**Cork Institute of Technology and  
The Institute of Technology Tralee  
are working together to create the  
Munster Technological University.**

**TOGETHER  
WE ARE**

**18,000+**  
LEARNERS

**6**  
CAMPUSES  
ACROSS CORK  
AND KERRY

**140+**  
COURSES AND  
PROGRAMMES

**100+**  
CLUBS AND  
SOCIETIES

**MTU** will be a centre of excellence in education, research and engagement for **career-focused learners seeking enterprise and community-ready qualifications and experiences**. Our entrepreneurial focus opens a world of opportunities.



## LEADING RESEARCH

MULTI-DISCIPLINARY,  
INDUSTRY-FOCUSED  
RESEARCH PROGRAMMES  
WITH NATIONAL AND  
INTERNATIONAL PARTNERS

## PARTNERING INDUSTRY

DYNAMIC CROSS-SECTOR  
RELATIONSHIPS WITH  
START-UPS, INNOVATORS  
AND INDUSTRY LEADING  
COMPANIES

## INVESTING IN THE FUTURE

STATE-OF-THE-ART  
RESEARCH, EDUCATION,  
ENTERPRISE, CULTURAL  
AND SPORTS FACILITIES



# CIT's Mission

To provide student-centred education with a career focus for the benefit of the personal, intellectual and professional development of the student and for the benefit of the whole of society.

## Dates to Remember



### NMCI Open Day

Ringaskiddy, Co. Cork  
> 8th November 2018



### CIT Open Day

Bishopstown Campus, Cork  
> 16th November 2018



### CIT Crawford College of Art & Design Open Day

Sharman Crawford Street, Cork  
> 16th & 17th November 2018



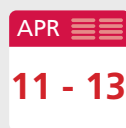
### CIT Cork School of Music Open Day

Union Quay, Cork  
> 17th November 2018



### CAO Closing Date

> 1st February 2019



### CIT Cork School of Music

Honours Degree Entrance Assessments  
BA (Honours) in Popular Music:  
> 11th - 13th April 2019  
BA (Honours) in Theatre & Drama Studies:  
> 11th - 13th April 2019  
BMus (Honours) Degree:  
> 13th April 2019



### Cork Mechanical, Manufacturing & Biomedical Engineering Annual Exhibition

> 11th April 2019



### CAO Late Applications

> 1st May 2019



### CAO Change of Mind

> 1st July 2019



### CIT Mathematics Exam

> 20th August 2019



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## Services for Students

Our Student Services aim to support the student community and provide opportunities for students to grow and develop in non-academic areas. Student Services also aim to assist students during periods of personal difficulty that may occur during their course, in planning their future and in progressing to employment or further study.

### Academic Learning Centre

E: [academiclearning@cit.ie](mailto:academiclearning@cit.ie)

W: <http://alc.cit.ie>

### Access Service

E: [access@cit.ie](mailto:access@cit.ie)

W: [www.cit.ie/access](http://www.cit.ie/access)

### Arts Office

E: [arts.office@cit.ie](mailto:arts.office@cit.ie)

W: <http://arts.cit.ie>

### Careers Service

E: [careersadmin@cit.ie](mailto:careersadmin@cit.ie)

W: [www.mycit.ie/careers](http://www.mycit.ie/careers)

### Chaplaincy

E: [dave.mcauliffe@cit.ie](mailto:dave.mcauliffe@cit.ie)

E: [edel.kelly@cit.ie](mailto:edel.kelly@cit.ie)

### Counselling Service

E: [counselling.admin@cit.ie](mailto:counselling.admin@cit.ie)

W: [www.mycit.ie/counselling](http://www.mycit.ie/counselling)

### International Students

E: [international@cit.ie](mailto:international@cit.ie)

W: <http://international.cit.ie>

### Library

E: [library.info@cit.ie](mailto:library.info@cit.ie)

W: <http://library.cit.ie>

### Medical Centre

T: 021 433 5780

W: [www.mycit.ie/medical](http://www.mycit.ie/medical)

### Student Smart Card

E: [citcard@cit.ie](mailto:citcard@cit.ie)

W: [www.mycit.ie/itsupport/cit-smartcard](http://www.mycit.ie/itsupport/cit-smartcard)

### Students' Union

E: [citsu@cit.ie](mailto:citsu@cit.ie)

W: [www.citsu.ie](http://www.citsu.ie)

# Accommodation

[www.cit.ie/accommodation](http://www.cit.ie/accommodation)

The Accommodation Office assists students in finding a suitable place to live. The service provides information and guidance to students on the accommodation most appropriate to their needs. If you would like any information on the student apartments, you can also contact them directly, see above link for details. The shared housing/lodgings list is available to students in early May and it is updated regularly.

## Contact

Deirdre Falvey  
Accommodation Officer  
T: 021 433 5750  
E: [deirdre.falvey@cit.ie](mailto:deirdre.falvey@cit.ie)  
[accommodation@cit.ie](mailto:accommodation@cit.ie)

## Types of Accommodation

### 1. Lodgings/Self Catering Lodgings (Living in a family home)

#### Lodgings:

Where a student receives breakfast, evening meal and light supper. Prices for this year are approximately:

**Single room 5 day:** €140

**Twin room 5 day:** €100

**Single room 7 day:** €180

**Twin room 7 day:** €120

#### Self-Catering Lodgings:

Where a student lives with a family and may have the use of the kitchen to cook meals. Prices per week for this year are approximately:

**Single room:** €120

**Twin room:** €90

### 2. Shared Houses/Flats

A list of houses/or rooms in houses is available throughout the year and this is updated regularly, especially during the summer months. As there is a high demand for this type of accommodation, it is advisable to contact the Accommodation Office regularly for an updated list. The approximate price per week for this year is:

**Single room:** €100

**Twin room:** €80

### 3. Student Apartments

There are a large number of student apartments in close proximity to the Institute. It is advisable to look into this option early in the intended Academic Year. Bookings should be made directly to the apartments. Payment is normally made in two instalments. The approximate price range per academic year is €3,500 - €6,000.

The cost depends on what type of room you choose (Standard Single, Single Ensuite, Double Ensuite, Twin Standard, Twin Ensuite, etc.). The average number of rooms per apartment is 3, 5 or 7. Students are advised to look at apartments before booking and to read leases carefully before signing them.

## Finding a Place to Stay

Please visit [www.daft.ie/student-accommodation/cork-institute-of-technology](http://www.daft.ie/student-accommodation/cork-institute-of-technology)

The most popular ways of finding accommodation are:

- CIT Accommodation Office
- Internet
- Auctioneers
- Word of mouth
- Notice boards
- Shop windows
- Flat finding agencies
- Newspapers

While every effort is made to facilitate students seeking accommodation, the Institute is not involved in any agreement/contracts entered into between students and landlords. We are happy to discuss any problems students may have in their accommodation and try to help resolve them in a reasonable manner.



▲ Shauna Whyte, Sinéad Corbett, Eoin Curtin, and Kerrie Wallace at a Tourism & Hospitality Entrepreneurship event in CIT

# Societies

<http://societies.cit.ie>



▲ The social college events of the year, CIT Societies Balls are held annually. Pictured are Mechanical Engineering students at the Peaky Blinders Ball.



▲ Student Life is about learning new skills and meeting others with common interests



▲ The CIT Musical society on stage with the Irish Premier of Bad Girls the Musical

Education means more than just academic learning. Joining a society will give you the opportunity to enhance your skills in organising events, activities and managing finance.

The diversity of CIT Societies means that practically every taste is catered for. During the academic year 2017/2018 there were 42 Societies in operation in CIT. Grab the opportunity to experience something new or pursue an interest you have always wanted to explore. Why not get involved in the Anime & Manga Society, Music Society or Zen Meditation Society or get to know more people by getting involved in your academic related Society.

CIT Societies are some of the best Societies in Ireland frequently winning at the BICS (Board of Irish College Societies) National Awards. Students who are at the heart of running CIT Societies have achieved the honour of winning National 'Society of the Year', 'Most Improved Society', 'Best Event' as well as 'Individual Awards'.

To be elected as a Society committee officer is a huge bonus for your CV by providing an opportunity to develop your communication and teamwork skills.

## How to Join a Society?

Online <http://societies.cit.ie/join> or come along to Societies Sign up drive which takes place in September in the Student Centre. A chance for you to find out what societies have planned and how you can get involved.



▲ CIT has some of the most active college societies in Ireland and attends the National Society awards each year

Many societies hold AGM meetings to which any student can attend. It is at these meetings that students are elected to the organising committee which usually include a chairperson, secretary and treasurer role. Getting involved in societies is a great way to broaden your horizons and learn new skills.

## Volunteer Abroad

Each year the Societies Office has been proud to support students who have chosen to experience volunteering abroad during the summer break. CIT provides financial support to students who wish to undertake a volunteer abroad programme. This has allowed students to make a difference around the world including Kolkata, Guatemala, South Africa, Nepal, Ecuador, Mozambique, Philippines and more.

In the past 8 years, 100 students were presented with Scholarships and Bursaries to help fund their contribution to voluntary participation abroad.

## Connect with CIT Societies

For up to date information, check out <http://societies.cit.ie> or find us at CITsocieties on Facebook and Twitter and Instagram.

**Academic:** Architectural, Automotive, Biotechnology, Business, Chemical Engineering, Civil & Structural Engineering, Construction Management, Electronic Engineering

**Activities:** Alexander Technique, Yoga, Zen Meditation

**Interest:** Anime & Manga, Debate, Film, Graphic Novel, Guild Gaming, Korean, Nutrition, Photographic, Poker, Programming

**Community:** Africa, Barrier free CIT, Cancer, Christian Union, Enactus, Enterprise, Indian, International Students, Islamic, LGBT\*, Mental Health, Students for Sensible Drug Policy, Tech Talk, Post Grad

**Music, Performance & Arts:** Dance, DJ, Drama, Music, Musical, Open Mic, Trad

# Sports

[www.mycit.ie/sport](http://www.mycit.ie/sport)

The Sports Office is the home of student sport in CIT. Whatever your sporting ambitions CIT students have the opportunity to get involved in a wide variety of sports. The Sports Office plays a key role assisting students in the organisation, coordination and development of student led clubs and oversees the management of sports facilities in the Institute. A section in the office is dedicated solely for club members to work on club business. The Sports Office is passionate about ensuring the opportunities on offer are meeting the needs of the students that want to play sport or be physically active, and add value to the academic experience.

## Sport in CIT is supported by:

- Sports Officers
- Rugby Development Officer
- GAA Development Officer
- Soccer Facilitator
- Athletics Development Officer
- Sports Administrators
- Gym Supervisor and Instructors

The CIT Sports Day is held every September in the Nexus Hall from 10am - 2pm and is the best way to meet all the CIT clubs on offer. Packed with stalls each club showcases their activities and competes for your membership. You can find out more information about the individual club activities, training and events. If you are interested in getting fit, learning a new sport, running your own sports club, making friends with similar interests or representing CIT in intervarsity competitions, don't miss Sports Day!

CIT participates at the highest level of competition amongst the country's third-level institutions and is a member of "Student Sport Ireland" (SSI). SSI is the Governing Body for Sports in Institutes of Technology and Universities; its aim is to promote and develop third-level student sport in Ireland. As well as catering for the competitive athlete, CIT Sports clubs place a big emphasis on participation and fun. This is reflected in the growing numbers who take part and in the broad range of sports clubs which include martial arts, field sports, indoor sports, water sports, and outdoor sports.

CIT's excellently prepared sports grounds and facilities played host to numerous competitions throughout the year including primary and second level schools' matches, the Rebel Run, the Cork City Sports International Athletics Meet, the Christmas day 'GOAL Mile' and the Special Olympics Munster Championships. CIT provides training facilities for a number of teams including the Cork GAA teams from juvenile to senior levels, Cork City Soccer, and Munster Rugby Academy.

The Sports Office organises and coordinates a number of physical activity classes and health initiatives such as Circuit Training, Indoor Cycling, Pilates, Bootcamp, Abs Blast, Yoga, and 5k Fun Run & Walk.

**CIT Sports Facilities are among the finest in Ireland. The main facilities are ideally located on campus and can be easily accessed in less than 5 minutes no matter where you are located at the Institute. These include:**

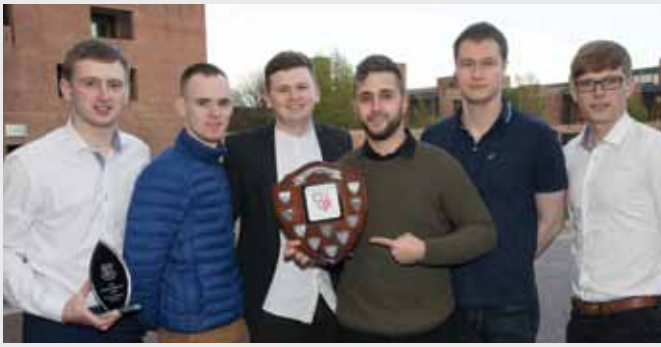
- A 1,200 seat fully-covered stadium that houses a two tier elite gym, meeting/studio room, doctor's room, and 6 dressing rooms that compliment a floodlit sand based multipurpose pitch
- A multi-purpose Sports Hall incorporating a state-of-the-art Gym & Weights Room. The Gym may be used by all full-time students and is open Monday – Friday 7.30am – 9.00pm and Saturday 11.00am – 4.00pm
- Synthetic International Standard Athletics 8 Lane Track with full track and field facilities. Includes a 1080-seat stand, results and administration centre, dressing rooms and Indoor 5 Lane 60m Track with an Olympic size long jump pit
- A fully equipped strength and conditioning gym that houses a 625m<sup>2</sup> gym area, dressing rooms and offices
- Three Soccer Pitches
- Two Rugby Pitches
- Two GAA Pitches
- A walking/jogging track encompassing the campus
- A floodlit full size Astro-Turf Pitch which can be divided into 4 five a-side pitches
- A synthetic surfaced floodlit Tennis Court

A further multipurpose sportshall, astro turf and swimming, diving and sailing facilities at the National Maritime College of Ireland in Ringaskiddy.

Leisure World is located off the main CIT Bishopstown Campus and has 3 swimming pools (25m, 18m and toddler pool). Special student discounts apply for use of the pool.



▲ CIT Boxing Club Members – Cara Powell and Ian Kelleher



▲ CIT Karting and Motorsport Club – Winners of the CIT Rísam Uile Award for their outstanding performance over the course of the Student Sports Ireland Karting and Motorsport Championship 2017/18



▲ CIT Golf Club at Fota Golf Resort where development squad members trained throughout the academic year



▲ CIT Swim Club members who completed the Swim A Mile Challenge



▲ Sports Scholarships are awarded by CIT across a wide range of sports



▲ CIT Club of Year - Powerlifting

While representing both CIT and their home clubs at the highest level, many have also represented their province as well as their country. These Sports Scholarships provide valuable assistance to students in their quest for sporting excellence. It is hoped that the recognition will encourage recipients to continue to train at the levels required, to continually strive for excellence in their chosen sport and ensure further sporting success, whilst also hoping that it will act as a further encouragement for students to continue their academic studies and realise their full potential.

### Sports Scholarships awarded in the Academic Year 2017/2018

- 91 CIT Sports Scholarships (56 Freshers/Development and 35 Senior) for Athletics, Basketball, Boxing, Camogie, Canoeing, Equestrian, Football, Golf, Handball, Hockey, Hurling, Karate, Kickboxing, Orienteering, Racquetball, Rowing, Rugby, Soccer, Taekwon-Do, Tennis, Volleyball
- 12 Munster Council GAA Scholarships
- 1 Jonathan Herlihy Scholarship

### Sports Scholarships

To underline its commitment to Sport, CIT annually awards Sports Scholarships to a wide range of sports for Seniors and First years (Freshers). The Sport Scholarships range in value from €500 to €1000. It is expected that those awarded the Scholarship will have high levels of achievement in their chosen sport and a full involvement and participation in this sport at the Institute.

For the 2017/2018 academic year, 104 Sports Scholarships were presented by Guest Speaker, Kerry Footballer Legend Colm "the Gooch" Cooper. Both male and female athletes from a wide variety of sports were recipients. These scholarships are awarded to students who display high achievement levels, commitment and dedication to their chosen sport and very importantly, loyalty to that sport within the Institute.



▲ CIT Sports Scholarship Recipients: Eoin Lavers, Kevin Fahey, Stephen Cahill with special guest Colm the Gooch Cooper at the CIT Sports Scholarship Function Evening

# CIT Sporting Success

The 2017/2018 academic season has been a busy one for CIT. The Institute featured prominently in a broad range of sports from indoor to outdoor, water to field sports. Outstanding achievements include the powerlifting club who over the course of the year set 25 national records, the karting club whose longstanding member Shane O'Leary won the Student Sport Ireland Individual Drivers' Intersarsity Championship while the club finished in 2nd place in Intersarsity Team Championship. The boxing club won 4 gold and 2 silver medals at the Irish Third Level Boxing Association Intersarsity Championships, and for the first time, the swim club competed in the Rebel Swim and the Swim A Mile challenge. The golf club saw 2 members compete in the prestigious R&A Scholars Tournament in St Andrews.



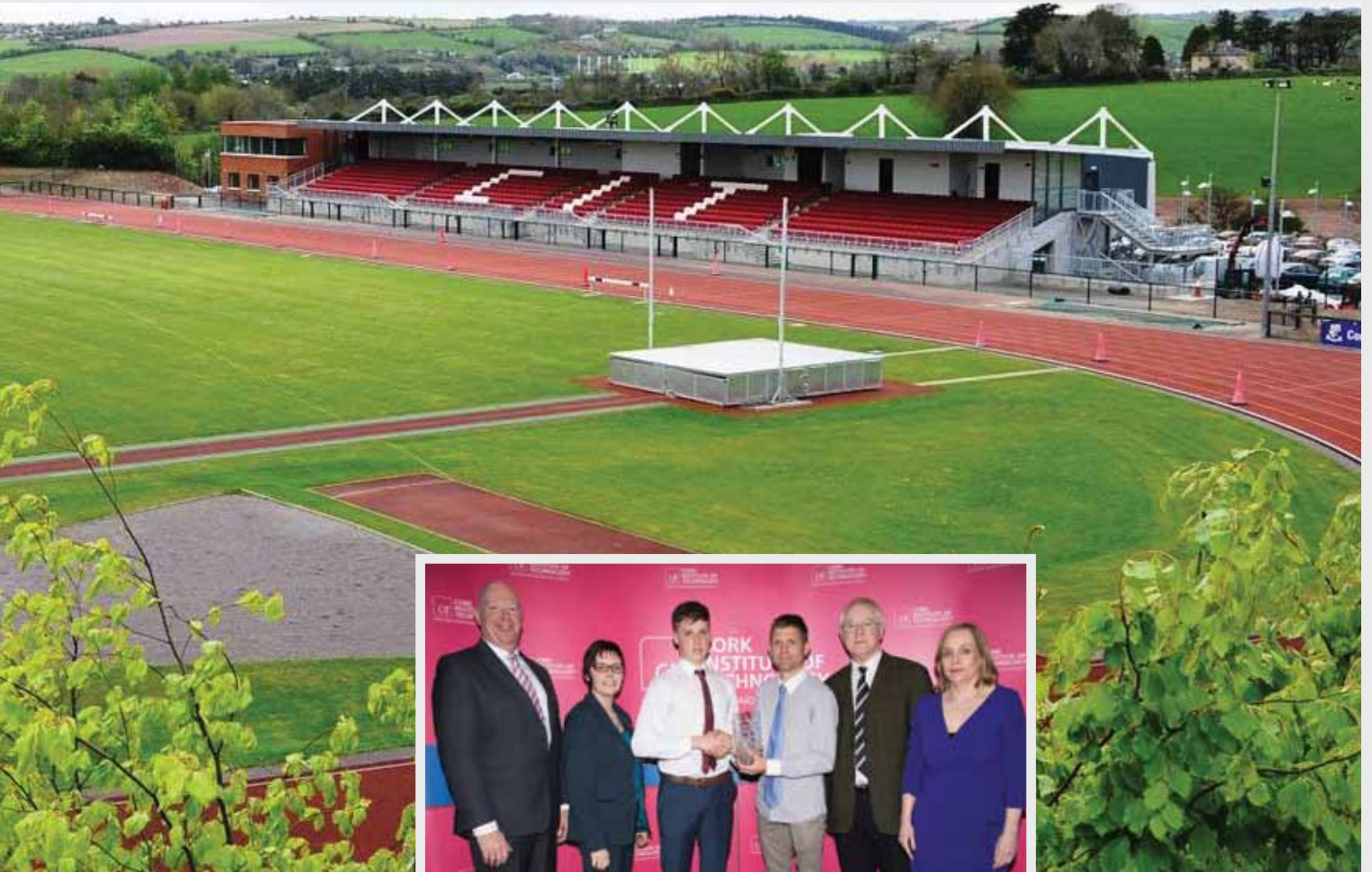
CIT Athletics Club welcomed the new addition of Athletics Development Officer Craig Harrington who was part of the highly successful year for the club. The Ladies team was crowned Munster University Road Relay Champions while the Men's team returned with 3 bronze medals from the IUAA Indoor T&F Championships. At the final event of the season, the IUAA Outdoor T&F Championships in Belfast, CIT returned home with 6 medals in total, a 7th place overall finish, including a gold medal for Fresher of the Year racewalker, David Kenny.





## CIT Fun Run & Walk

March saw the 6th mass participation event with students and staff of the Institute taking part in a Fun 5km Run & Walk. The event has proved a great success in the last few years and now takes place annually. Organised by the Sports Office and promoted as a fun event, it's a great way to complete a 5k, be it your first time or as seasoned runner. Great atmosphere along with encouragement and support are guaranteed! Make sure to aim for this challenge next year!



▲ Student athlete David Kenny presented with the CIT Fresher of the Year Award from ultra-marathon runner Alex O'Shea.

# CIT assists you in your course of study...

## Course Structures at CIT

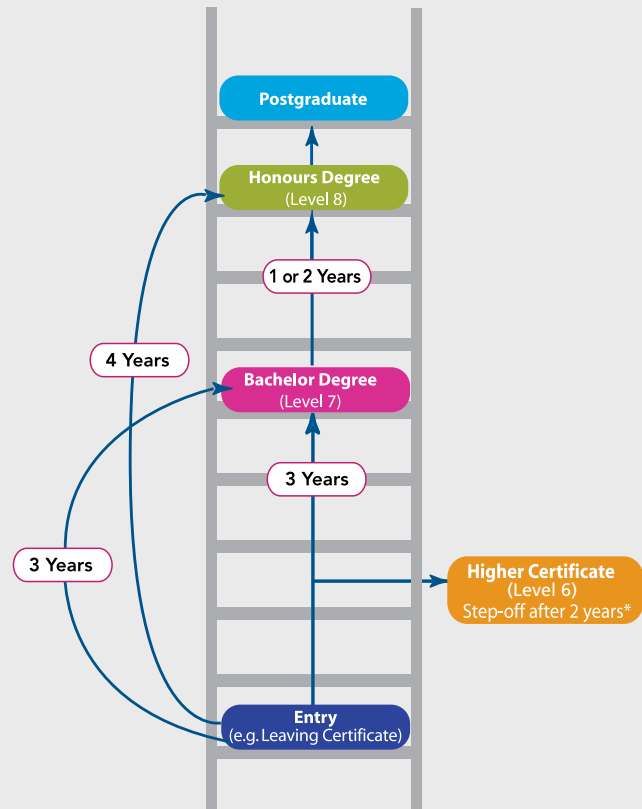
CIT has designed its courses in a very flexible way in order to give you the option of graduating at different levels – Bachelor Degree, Honours Bachelor Degree, Professional, and Postgraduate. This “Ladder” system enables you to progress through the system to qualifications appropriate to your personal requirements.

### Options at Entry

There are two main entry streams for full-time students. CIT offers many four year **Honours Degrees**. Students commit to the full four year programme from the start. These courses are shown in the CAO Level 8 list.

Alternatively, we have a great variety of **Bachelor Degree programmes that are three years in duration**, which are shown in the CAO Level 7 list. Most of these Degrees have the option to add on another year of study to gain an Honours Degree. Many of our three year Bachelor Degree programmes also have an “exit option” after two years. Students who successfully complete Year 2 of these programmes and who do not wish to progress to Year 3 will receive a Higher Certificate Award.

## CIT'S Ladder of Progression



\* For many three-year Bachelor Degree courses, students who successfully complete Year 2 and who do not wish to progress to Year 3 will receive a Higher Certificate award.



▲ CIT Blackrock Castle Observatory

## The National Framework of Qualifications

Quality and Qualifications Ireland (QQI) is responsible for the external quality assurance of further and higher education and training. QQI is also responsible for the maintenance, development and review of the National Framework of Qualifications (NFQ).

At third level, the Framework describes and links all the qualifications awarded by Institutes of Technology and Universities.

### The third level major award types (Level 6 to Level 10) are as follows:

Level 6	>	Higher Certificate
Level 7	>	Bachelor Degree
Level 8	>	Honours Bachelor Degree Higher Diploma
Level 9	>	Master's Degree Postgraduate Diploma
Level 10	>	Doctoral Degree (PhD)



## Modularisation & Semesterisation

CIT operates a Credit Based Modular System. This is compliant with the European Credit Transfer System (ECTS). The academic year is divided into two equal halves, and each semester will normally consist of six modules each worth five credits.

### What is a Semester?

A semester is half of an academic year. Each semester is of 15 weeks duration for which learners can earn 30 credits. Typically Semester 1 begins in September and ends in January while Semester 2 starts in January and ends in May.

### What is a Module?

A module is a standalone unit of learning and assessment and is completed within one semester. A full-time student will normally study six modules in each semester; part-time and ACCS (Accumulation of Credits and Certification of Subjects) students will have flexibility as to the number of modules taken.

### What are Credits?

Credits are a measure of the amount of learning within a module. They are awarded to learners who successfully complete the assessments in a module. A full-time year of study is worth 60 credits; this is the European norm under the ECTS system.

## Minimum Entry Requirements

*The following is a general guide – requirements for particular courses may vary.*

### For most Degrees on the CAO Level 7 List:

(but see exceptions listed below)

- Leaving Certificate with five O6/H7 grades including Mathematics, and either English or Irish.

### For most Honours Degrees on the CAO Level 8 List:

(but see exceptions listed below)

- Leaving Certificate with two H5 and four O6/H7 grades including Mathematics, and either English or Irish.

Minimum entry requirements may be satisfied by the results of more than one Leaving Certificate. The minimum entry requirements may be varied for Non-Standard Applicants and holders of QQI awards.

## Exceptions

Minimum entry requirements for some CAO courses are different, see list below:

- BEng (Honours) Degree courses – CR 105, CR 108, CR 109, CR 500, and CR 520
- BMus (Honours)\* CR 121
- BA (Honours) in Popular Music\* CR 125, CR 126, CR 127, CR 128, and CR 129
- BA (Honours) in Theatre & Drama Studies\* CR 700
- BA (Honours) in Contemporary Applied Art (Ceramics, Glass, Textiles)\* CR 210
- BA (Honours) in Fine Art\* CR 220
- BA (Honours) in Visual Communications\* CR 600
- BSc (Honours) in Industrial Physics CK 409
- BSc (Honours) in Architecture CK 606
- BSc (Honours) in Software Development CR 106
- BSc (Honours) in Computer Systems CR 116
- BSc (Honours) in Biomedical Science CR 320
- BSc in Nautical Science CR 094
- BEng in Marine Engineering CR 095
- BEng in Marine Electrotechnology CR 805
- BBus (Honours) in Accounting CR 400
- BA in Social Care CR 031
- BBus (Honours) in International Business with Language CR 425
- BA in Early Childhood Education & Care CR 620
- BA in Community Development CR 035
- BBus in Recreation & Leisure Management CR 032
- Higher Certificate in Culinary Studies CR 655
- Higher Certificate in Hospitality Studies CR 657

\*Early Assessment Procedures apply

Full details of minimum entry requirements for courses are outlined in the relevant course information section of this Handbook. Applicants are advised to check the relevant subjects, tests and dates very carefully. In particular, there are early assessment procedures for some courses.

## CIT Mathematics Exam

Some students who apply for CIT courses may not achieve the required entry standard in Mathematics through the Leaving Certificate. For such applicants, the Institute offers a second chance to reach the required entry standard through a CIT Mathematics Exam. This second chance facility allows applicants (depending on their results in the CIT Mathematics Examination) to gain entry to courses with an Ordinary Leaving Certificate Mathematics entry standard and (with a higher level of performance) courses with a Higher Leaving Certificate entry standard.

In order to sit the CIT Mathematics Examination, students **MUST APPLY ONLINE** ([www.cit.ie/maths](http://www.cit.ie/maths)) by 12.00 noon, Monday 19th August 2019.

## Important Information

The CIT Mathematics Examination is provisionally scheduled to take place on Tuesday 20th August 2019 and is open to all applicants to CIT programmes. A fee will be charged to cover administration costs. In case of over-subscription, CIT reserves the right to restrict the number of candidates for this examination.

This examination is not obligatory and does not result in the award of CAO points. Its sole purpose is to allow a student a second chance to achieve the qualifying standard in mathematics necessary for admission to certain CIT courses. It does not interfere in any way with an application made to other courses or colleges within the CAO system.

In June, sample mathematics examination papers and full details of the arrangements for the CIT Mathematics Examination will be posted on the CIT website at [www.cit.ie/maths](http://www.cit.ie/maths)

The CIT Mathematics Examination reflects the actual Mathematical requirements of CIT programmes. It is marked according to procedures and criteria set out by the Department of Mathematics at CIT.

This examination is specifically for applicants who have applied through the CAO for courses in CIT.

This examination does not interfere with your application for any other course in the CAO system. A pass in the CIT Mathematics Examination (i.e. 40% in Paper 1 or 40% overall) will allow an applicant to replace the Leaving Certificate Mathematics requirement of Grade O6/H7 minimum with a Grade O6/H7 minimum in another Leaving Certificate subject.

Attaining a qualifying standard in the CIT Mathematics Examination does not in itself guarantee a place on any course in CIT. The cut-off points for all courses will still apply.

## Supporting Access

[www.cit.ie/access](http://www.cit.ie/access)

### Progression Scheme for CIT Linked Schools

This is a supplementary admissions scheme to CIT for school leavers from 22 designated Linked Cork City and County Schools. CIT will make available up to 50 places for Progression Scheme participants. Successful applicants will be given the opportunity to apply for programmes of study in CIT on a reduced points basis.

#### Contact

Deirdre Creedon  
Access Officer  
T: 021 433 5140  
E: [deirdre.creedon@cit.ie](mailto:deirdre.creedon@cit.ie)

## Mature Students

A mature applicant must be 23 years of age by 1st January in the year of entry. Applications for entry into Year 1 of a full-time undergraduate programme must be made through the CAO by 1st February each year. If an applicant ticks this box he/she will be expected to provide a Statement of Interest, relevant work experience, skills gained through experiential learning, and other qualifications will be considered in the assessment of these applications.

For further information please refer to the CIT Mature Student Guide or visit [www.cit.ie/maturestudents](http://www.cit.ie/maturestudents) and [www.cao.ie](http://www.cao.ie)

#### Contact

Mature Student Officer  
T: 021 433 5109  
E: [maturestudent@cit.ie](mailto:maturestudent@cit.ie)



## QQI Awards:

### Admission to CIT

QQI operates within the National Framework of Qualifications (NFQ), and has awards (formerly FETAC awards) placed at Level 5 (Certificate) or Level 6 (Advanced Certificate) of the Framework. Holders of former FETAC awards at Level 5 of the NFQ should apply through the CAO system. Points will be allocated and will be used to place applicants in order, in the same rounds of CAO offers as Leaving Certificate applicants. Applicants must present a full award totalling 120 credits.

Practical steps to calculating your own scoring of QQI Awards in the CAO are available in the Learners Section (click on Higher Education Links Scheme) at [www.qqi.ie](http://www.qqi.ie). Details of Minimum Entry Requirements for QQI Award Holders and Portfolio guidelines are available on the QQI information section of [www.cao.ie](http://www.cao.ie)

## Cork Further Education Colleges Scheme (CCPS)

CIT has a special scheme for the admission of students who successfully complete courses in Further Education (FE) Colleges in Cork. Under this scheme a number of courses in CIT are linked to certain courses in the FE colleges. CIT reserves a number of places on its linked courses for applicants achieving specified levels and other requirements in their awards. Visit [www.cit.ie/ccps](http://www.cit.ie/ccps) for more information.

### Cork Further Education Colleges

Cork College of Commerce  
Coláiste Stiofáin Naofa  
CityNorth College of Further Education  
St John's Central College  
Kinsale College of Further Education  
Mallow College of Further Education

## Deferring a Place

The Institute will try to facilitate successful applicants who wish to postpone entry.

The recommended procedure is as follows:

1. Applicants should not accept the offer through the CAO
2. E-mail us at [admissions@cit.ie](mailto:admissions@cit.ie) or write to us at CIT, Admissions Office, Bishopstown, Cork setting out the reason(s) for your request. Write DEFERRED ENTRY in the subject line of your email or clearly on the Envelope. Please ensure that you quote your CAO Application Number and the Course Code of the offer that you wish to defer. The e-mail/letter must arrive in the Admissions Office at least two days before the "Reply Date" shown on the Offer Notice. CIT will communicate its decision to you in writing within three working days.

Applicants are NOT allowed to defer the results of the Entrance Test for the Bachelor of Music (Honours) CR 121, Bachelor of Arts (Honours) in Theatre & Drama Studies CR 700, or the Bachelor of Arts (Honours) in Popular Music CR 125, CR 126, CR 127, CR 128, CR 129 from one year to the next.

## Leaving Certificate Vocational Programme (LCVP)

Holders of the LCVP apply in the normal way through the CAO. Points are awarded on the same basis as for the Leaving Certificate, Pass 28 points; Pass with Merit 46 points; and Pass with Distinction 66 points. The link modules 'subject' may not be used to meet minimum entry requirements.

## Leaving Certificate Applied Programme

The LCA subjects do not meet the minimum requirements for entry to CIT full-time courses. Holders of Leaving Certificate Applied may wish to proceed to a QQI course and in turn to third-level on the basis of a QQI award.

## Student Garda Vetting

The National Vetting Bureau (Children and Vulnerable Persons) Acts 2012 to 2016 provide a statutory basis for mandatory vetting of persons who wish to undertake a work placement and/or activities that bring them into contact with children and/or vulnerable adults.

Some programmes at CIT require students to undertake mandatory placements with external agencies, which will bring them into contact with children and/or vulnerable adults and in which they will assume positions of public trust. The Institute is committed to ensuring that only suitable candidates are allowed to undertake these programmes.

Apart from the listed programmes, any students who engage in or are in the vicinity of activities that may involve unsupervised access to children and/or vulnerable adults will also be subject to the Institute's Vetting processes.

CIT requires students on the following designated programmes (the list is subject to review) to be vetted by the National Vetting Bureau.

### Undergraduate Programmes

CR 121 Bachelor of Music (Honours)  
CR 125 – 129 Popular Music BA (Honours)  
CR 700 Theatre and Drama Studies (BA Honours)  
CR 031 Social Care (BA)  
CR 032 Recreation and Leisure Management (BBus)  
CR 035 Community Development (BA)  
CR 620 Early Childhood Education & Care

Offers of places on these designated programmes will be provisional and contingent on the applicant's satisfactory completion of CIT's Garda Vetting Procedure. Depending upon the outcome of the vetting process, the Institute reserves the following rights:

- to not register a student
- to remove an existing registered student
- to delay the student's practice placement modules on the course

In all circumstances, it is the applicant/student's responsibility to proactively disclose any convictions/ cases pending. The Institute reserves the right to inform any placement agency of the existence of any convictions/cases pending.

Students who fail to engage with the Vetting Process as required by CIT and/or give information in an incomplete or inaccurate form are liable to have their course offers withdrawn and/or registration cancelled by the Institute.

## Foundation Level Mathematics

Most (but not all) CAO courses in CIT require Mathematics. A pass in Foundation Level Mathematics does not satisfy the entry requirements in regard to Mathematics. There are two exceptions to this rule, CR 655 Culinary Studies, and CR 657 Hospitality Studies; the requirement for O6/H7 Mathematics may also be satisfied by Grade F2 or higher in Foundation Level Mathematics.

Some courses have no requirement for Mathematics. A Grade F2 or higher in Foundation Level Mathematics is recognised as a subject for entry to CIT Crawford College of Art & Design: CR 210, CR 220, and CR 600. CIT Cork School of Music: CR 121, CR 125, CR 126, CR 127, CR 128, CR 129, and CR 700, and CIT Bishopstown Campus: CR 620 and CR 035.

In such cases CAO Points awarded for Foundation Level Mathematics are as follows: F1 = 20 points, and F2 = 12 points.

## Higher Education Student Contribution

**(Detailed information is available on Page 182)**

An annual fee\*, set by the Government for the higher education student contribution is payable to the Institute. For students who have been notified that they have been awarded a Grant, the fee is paid on their behalf by the grant authority.

\* (The fee for 2018/2019 is €3,000)

Prospective students are strongly recommended to check the website [www.studentfinance.ie](http://www.studentfinance.ie) All new grant applications are made online to a single awarding authority, Student Universal Support Ireland (SUSI) through <https://susi.ie>

## Union of Students in Ireland (USI) Levy

The USI membership levy of €7.00 has been introduced as a result of a referendum where students opted to affiliate to the national Students' Union. This Levy is not covered by a SUSI grant and must be paid before the start of Semester 1.

## Disability Support Service

**T:** 021 433 5107/5137

**E:** dss@cit.ie

**W:** www.cit.ie/dss

The aim of the Disability Support Service (DSS) in CIT is to encourage the participation and access of students with learning differences, health conditions and disabilities into third-level education. CIT offers a very person-centred approach to providing support to students with disabilities, recognising that each student will have different and individual needs. In order to best meet student needs as efficiently as we can, we would urge any student who needs to use the DSS to make contact and register with us as early as possible in the academic year. The DSS has a strict confidentiality policy. All students' records and disclosure of information will only occur with the students' consent or if necessary where a serious health and safety risk is involved.



### Disability Access Route to Education (DARE)

The Disability Access Route to Education (DARE) is a third level alternative admissions scheme for school-leavers whose disabilities have had a negative impact on their second level education. DARE offers reduced points places to school leavers (under the age of 23 as of 1st January, 2019) who as a result of having a disability have experienced additional educational challenges in second level education.

Before submitting a DARE application you should read the DARE Application Guide and discuss this with your parents, guardians or guidance counsellor. Applicants must apply through the CAO by 1st February 2019, disclose your disability and/or specific learning difficulty by 1 March 2019, and submit all documents to the CAO by 1st April 2019. Further information on the application process and DARE deadlines is available at <http://accesscollege.ie/dare>

There is a quota of reduced points places on all CIT courses for eligible DARE applicants. Applicants who receive a DARE offer must register with the CIT Disability Support Service as a condition of their offer and attend DSS meetings as requested. More information about DARE places at CIT and DSS DARE Information Evenings run throughout the year is available at: [www.cit.ie/dare](http://www.cit.ie/dare)

Mature and QQI students have different admissions routes and you can get further information on these routes from the CIT Access Service, T: 021 433 5138.

### Contact

CIT Disability Support Service (DSS)

**T:** 021 433 5107/5137

**E:** dare@cit.ie

**W:** www.cit.ie/dare

**T:** CAO Helpline number (091 509800)

**W:** www.cao.ie

**W:** www.accesscollege.ie

## Funding Support

The Fund for Students with Disabilities allocates funding to further and higher education colleges for the provision of services and supports to full-time students with disabilities/specific learning differences run by the Higher Education Authority. The purpose of the fund is to provide resources to colleges for the delivery of key services, reasonable accommodations and supports for learners with disabilities on full-time courses. It is funded by the Irish Government and co-funded from the European Social Fund Programme for Employability, Inclusion and Learning (PEIL) 2014-2020.

Applications to the fund are made on behalf of an eligible student by the DSS following an assessment of need. Applications cannot be made directly to the fund by students. Documentation from a professional is needed in order to apply for funding – for more information please see [www.studentfinance.ie](http://www.studentfinance.ie)

The DSS applies for funding for students who are or have:

- Hard of Hearing/Deaf
- Speech and Language Communication Disorder
- Vision impaired
- Autistic Spectrum Disorder (including Asperger's Syndrome)
- Developmental Coordination Disorder (DCD) - Dyspraxia/Dysgraphia
- Neurological Conditions e.g. epilepsy, brain injury
- Specific Learning Differences e.g. dyslexia, dyscalculia
- Physical Disability e.g. arthritis, cerebral palsy
- Significant Ongoing Illness e.g. diabetes type 1, cystic fibrosis
- Mental Health Conditions

## Supports Available

There are a range of DSS supports and CIT supports that DSS students can benefit from such as:

- DSS Assistive Technology Service
- DSS Learning Support Service
- Personal assistants
- Sign language interpreters
- Note Taking Support
- Alternative Media Formats
- DSS liaison with Academic staff
- Academic Learning Centre and Academic Success Coaching
- Counselling Service/Medical Centre

## Examination Supports

The CIT Exams Office provides exam supports for DSS students such as a use of a laptop, reading software, a shared centre and/or extra time for a registered student's official end-of-semester exams. These supports are confirmed in the student's DSS Needs Assessment.

If a student wishes to avail of exam supports then they MUST register fully with the DSS (includes completing the DSS registration form, submitting documents, and attending a DSS meeting) by certain dates.

Please see the booklet "Your Student Guide to the DSS" for more information on supports and deadlines – [www.mycit.ie/dss-handbook](http://www.mycit.ie/dss-handbook)

# Business & Humanities at a glance

## CAO Courses

### Level 8

- CR 150 BBus (Honours) in Information Systems 32
- CR 400 BBus (Honours) in Accounting 26
- CR 420 BBus (Honours) in Marketing 28
- CR 425 BBus (Honours) in International Business with Language 30
- CR 660 BBus (Honours) in Tourism Management 42

### Level 7

- CR 010 BSc in Agriculture 56
- CR 021 Business 22
  - Degree Award options:
  - BBus in Business or
  - BBus in Marketing or
  - BBus (Honours) in Accounting
- CR 022 BBus in Business Administration 24
- CR 031 BA in Social Care 38
- CR 032 BBus in Recreation & Leisure Management 34
- CR 035 BA in Community Development 40
- CR 041 BBus in Tourism Management 44
- CR 042 BBus in Hospitality Management 46
- CR 620 BA in Early Childhood Education & Care 36
- CR 640 BBus in Culinary Arts 50
- CR 650 BBus in Beverage Industry Management 54

### Level 6

- CR 655 Higher Certificate in Arts in Culinary Studies 52
- CR 657 Higher Certificate in Arts in Hospitality Studies 48

## Follow on Honours Degrees

### Level 8

- BBus (Honours)
- BBus (Honours) in Business Administration
- BBus (Honours) in Hospitality Management
- BA (Honours) in Community Development
- BA (Honours) in Social Care
- BA (Honours) in Early Childhood Education & Care
- BBus (Honours) in Sport and Exercise
- BSc (Honours) in Agriculture

## Postgraduate Programmes

- MSc in Marketing Practice (Taught)
- MA in Global Business Practice (Taught)
- MSc in International Business (Taught)
- MBA in Strategy (Taught)
- MSc in Digital Marketing Strategy (Taught)
- MA in Human Resource Management (Taught)
- MA in Integrative Psychotherapy (Taught)
- MA in Play Therapy (Taught)
- MBus (by Research)
- MA (by Research)
- PhD

## Other Programmes

- BA (Honours) in Montessori Education





# Business (Common Entry)

## CR 021 Level 7 Award

- ▶ Progression to Level 8 Honours Degrees and Postgraduate Programmes
- ▲ Higher Certificate Option

**Application:** CAO

**Award Title:** Depends on specialisation. Choose from:

- Bachelor of Business
- Bachelor of Business in Marketing
- Bachelor of Business (Honours) in Accounting

**Duration:** 3 Years (6 Semesters)

**Places:** Course size: 200 / Class size: 50



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 5 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
5	0	O6/H7	O6/H7

### What is Business?

Business brings together Management, Marketing, Accounting, Communications, and applications of Information Technology. Business courses aim to provide a broad business education with many opportunities to specialise. The courses are designed to be employment oriented. They are structured to give an interesting variety of topics, choice of specialist areas and choice of levels of qualifications, and they also provide the necessary skills for those seeking to set up their own enterprises.

### Helpful Leaving Certificate Subjects

Accounting, Business, and Economics.

### Work Placement

Formal work placement (minimum of 15 weeks) is an integral element of the course and takes place in Year 3.

### Potential Areas of Employment

- Marketing and Marketing Research
- Brand Management
- Sales and Sales Management
- Business Development
- Accounting

- Banking and Finance
- Insurance
- General Management
- Teaching and Lecturing

### First Year at a Glance

- Mathematics: The study of Mathematics supports the study of Accounting, and Financial Management
- Information Technology: Development of Information Technology (IT) skills
- Economics: This gives students an essential understanding of the environment in which businesses operate
- Communication Skills: assists students in the transition to third-level education; team projects, oral and written presentation skills
- Fundamentals of Management: This acts as a foundation for the subsequent study of Contemporary Management, Marketing and Human Resource Management
- Financial Accounting: This is the first of a number of Accounting modules offered to students throughout the courses
- It is encouraged that students take a foreign language for the benefits they will derive from it in their careers, however, this is optional



## About the Course

If you would like a broad range of business topics, with the opportunity to choose a specialism such as Business or Accounting or Marketing at a later stage, you should apply for CR 021.

Students applying under CR 021 share a common Year 1 and then choose their preferred Degree at the end of Year 1. This gives students the opportunity to study business subjects before deciding on the stream they wish to follow.

Students can choose from the following Degree programmes:

### 1. Bachelor of Business (Level 7)

This Business programme provides the knowledge and skills necessary to contribute effectively within a business and management setting and is designed to provide a solid foundation for success in a business career.

### 2. Bachelor of Business in Marketing (Level 7)

The Marketing programme focuses on the concepts, theory, processes and techniques of Marketing necessary to function in marketing, sales or customer service roles with particular emphasis on the skills required within the digital economy.

### 3. Bachelor of Business (Honours) in Accounting (Level 8)

The Accounting programme focuses on the specialist education and training necessary to enable graduates to gain employment in an Accounting/Financial capacity in any business sector. At the end of Year 1, students can choose the Accounting Stream. On successful completion of Year 2, students can transfer to Year 3 of the Bachelor of Business (Honours) in Accounting (Level 8) programme.

## Further Studies

For details, see <http://business.cit.ie>

Subject to availability of places and specialisation, suitably qualified graduates are eligible to apply for entry to Year 4 (final) of:

- > Bachelor of Business (Honours) (Level 8)
- or
- > Bachelor of Business (Honours) in Marketing (Level 8)

A large proportion of graduates progress onto postgraduate studies. The Bachelor of Business Honours degree (Level 8) satisfies the degree requirements of the Teaching Council. As with other recognised degrees, a postgraduate programme of Initial Teacher Education, accredited by the Teaching Council, consisting of two years full-time study or 120 ECTS credits must subsequently be completed to be eligible for registration with the Teaching Council.

## Contact Information

Dr Breda Kenny  
Department of Management & Enterprise  
T: 021 433 5923  
E: [breda.kenny@cit.ie](mailto:breda.kenny@cit.ie)

## Question Time

### What is the advantage of doing the Common Entry?

If you would like a broad range of business topics, with the opportunity to choose a business specialism such as Business, or Accounting or Marketing at a later stage, you should apply for CR 021. If, however, you are confident that Accounting or Marketing is your preference, you should consider applying for the relevant Level 8 course (i.e. CR 420 BBus (Honours) in Marketing or CR 400 BBus (Honours) in Accounting) which specialises in that area from Year 1.

### Is there a European language requirement for the course?

No, however, students who pursue French as an elective in Year 1 are expected to have completed a French Course at Leaving Certificate Level.

### Will I be at a disadvantage if I did not study Business or Accounting in the Leaving Certificate?

No, the core fundamentals of Accounting and Business are delivered in Year 1.



## Grace Mason

Supply Chain and Innovation SR Coordinator at PepsiCo.

I graduated from the bachelor of Business honours degree in October 2017. The broad range of modules available made the course very appealing and opportunistic. The lecturers are really experienced and create a personal relationship with each student which really helps to ensure we all succeed.

I am currently working in PepsiCo's Supply chain and Innovation team for almost a year now. I was informed of the job by a lecturer of mine who offered advice for interview and a reference. My time in CIT prepared me for life outside of college and I still use skills I learned from varied modules daily in my role.

I would definitely recommend this degree to anyone who is interested in all aspects of business.

# Business Administration

## CR 022 Level 7 Award

- ▶ Progression to Level 8 Honours Degrees and Postgraduate Programmes
- ▲ Higher Certificate Option

**Application:** CAO

**Award Title:** Bachelor of Business in Business Administration

**Duration:** 3 Years (6 Semesters)

**Places:** 65

**Location:** Bishopstown Campus



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

#### Minimum Entry Requirements

Leaving Certificate in 5 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
5	0	O6/H7	O6/H7

Holders of relevant NCVA/FETAC (now QQI) awards may apply through the CAO. Quality and Qualifications Ireland (QQI) operates within the NFQ, and has awards (formerly FETAC awards) placed at Level 5 (Certificate) or Level 6 (Advanced Certificate) of the Framework.

### What is Business Administration?

Business Administration incorporates many types of management positions. From major corporations to independent businesses, every operation needs highly skilled administrators in order to succeed.

The Business Administration programme provides students with a unique blend of technical and business skills that are required for the organisation and management of business tasks. This is a practical, skills-focused programme, exposing students to the most up-to-date technologies that businesses are using.

### Helpful Leaving Certificate Subjects

Business, English, and Mathematics

### Work Placement

Formal work placement (minimum of 15 weeks) is an integral element of the course and takes place in Year 3.

### Potential Areas of Employment

- Business Analytics
- Key Account Manager
- Customer Relationship Management
- Human Resource Management
- Supply Chain Management
- Digital Marketing
- Financial Services

### First Year at a Glance

- Introduction to web design, search engine optimisation (SEO) and web site maintenance along with IT applications including document production and the use of other MS Office applications
- Students' ability to summarise information and deliver individual and team presentations to live audiences is developed
- Students will significantly enhance their IT skills throughout each year of the programme, along with learning in areas such as management, marketing and accounting, in preparation for their internship in Year 3



## About the Course

The course aims to provide students with the technologies and practices which are essential to a modern organisational environment. Students will have the opportunity to learn a wide range of fundamental skills including; document presentation, desktop publishing, spreadsheets, accounting, marketing, management, Human Resource Management (HRM), web design, management information systems, public relations, digital marketing, social media, project management, supply chain management and more.

In Year 3, students undertake a minimum fifteen week work placement/internship. Students will have the benefit of an academic mentor from CIT and a mentor in the workplace. Feedback from students and our industry partners has been very positive to date. In many cases, students have secured full-time employment as a result of the placement.

## Further Studies

For details, see <http://business.cit.ie>

Graduates who achieve the specified level of academic performance are eligible to apply for entry to the one year add-on:

- > BBus (Honours) in Business Administration (Level 8) or
- > BBus (Honours) in Business (Level 8)

Honours Degree holders who achieve the specified level of academic performance are eligible to apply for a postgraduate course of study, both at CIT and at other third level colleges in Ireland and abroad.



### Jack Coade

Investor Relations  
Citco Fund Services

“One of the best aspects of studying the Bachelor of Business (Hons) in Business Administration at CIT, is the variety of topics that are covered throughout the programme. This allowed me to find the area that I wanted to pursue as a career, while getting exposure to other topics. The balance of theory classes and IT labs really help develop your skills quickly as the topics you learn in the lectures are backed-up by putting that theory into practice in the computer labs. This helped me to increase my familiarity with a range of business software.

The work placement is beneficial to students as it allows them to spend time in the work environment that they may want to pursue after college. In my case, the work placement was a real eye-opener as it helped me decide on the career path that I wanted to take. The skills I learned from the degree programme helped me to stand out to employers when applying for positions.”

## Career Opportunities

Business Administration graduates undertake a wide range of administrative duties and may obtain employment in areas such as administration, marketing, human resource management, supply chain management, IT, financial and shared services, banking, insurance, media, customer service, health service, local authorities, and fund services.

## Contact Information

Mary Oldham  
Department of Organisation and Professional Development  
T: 021 432 6128  
E: [mary.oldham@cit.ie](mailto:mary.oldham@cit.ie)

## Question Time

### Are there language recommendations for the programme?

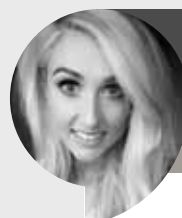
If taking French as an elective in Year 1, students are expected to have Leaving Certificate French. Languages German, Spanish, and Italian are at beginner level.

### What are the typical student numbers in first year?

First year course/class size is approximately 65. Computer lab groups are a maximum of 25.

### How much Information Technology (IT) is involved in the programme?

Over a third of the programme modules are focused on developing IT skills and working with business related software packages.



### Ciara Kiely

Procurement Coordinator,  
Essense of Australia

I graduated with a BBus (Honours) in Business Administration. After graduating, I was offered a Supply Chain Graduate role with Boston Scientific, a worldwide leading medical devices company. During this role, I had the opportunity to use the skills gained from IT, Supply Chain Management and Business Information Technology modules and put them into practice. I then went on to work as a Buyer with Boston Scientific and recently moved to Australia where I have started a new role as a Procurement Coordinator with Essense of Australia.

I found the work placement element of this programme hugely beneficial. It prepared me for the working in industry using the skills I gained, and gave me a CV that stood out compared to other graduates.

My daily tasks include adjusting and expediting purchase orders based on material requirement planning, customer satisfaction processes and maintaining supplier relationships.

CIT’s Business Administration degree programme has helped me find a career that I really enjoy and for which I have a great passion.

# Accounting (Honours)

## CR 400 Level 8 Award

► Progression to Postgraduate Programmes and Professional Accountancy Qualifications

**Application:** CAO  
**Award Title:** Bachelor of Business (Honours) in Accounting  
**Duration:** 4 Years (8 Semesters)  
**Places:** 40  
**Location:** Bishopstown Campus



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
4	2	O4/H7	O6/H7

### What is Accounting?

All businesses need to record details of their trading transactions (e.g. sales and purchases) so that they know who owes them money and what money they owe. This information is also used to assess the financial 'health' of the business and to make plans for the future. Accountants are involved in making many decisions necessary for the efficient operation of a business. Therefore, a well-run accounting function is critically important to the long-term management of a business.

### Helpful Leaving Certificate Subjects

Accounting, Business, and Economics

### Potential Areas of Employment

- Accountant in Practice
- Accountant in Industry
- Banking/Finance
- Teaching and Lecturing

### Work Placement

Formal work placement (minimum of 15 weeks) is an integral element of the course and takes place in Year 3.

### First Year at a Glance

- Financial Accounting: preparing accounts for business
- Cost & Management Accounting: understanding accounting for decision making
- Economics: understand how people use resources
- Law: understanding the legal system and how it affects business in Ireland
- Explore the role of a manager in business
- Understanding the role of marketing a company
- Learn to work with computerised accounts software, e.g. Sage



## About the Course

This four year Honours Degree programme offers an advanced specialist education in accounting as a firm base for either further academic study, a career in business or the pursuit of a professional qualification with one of the accountancy bodies. CIT offers Accounting students the benefit of small class sizes initially which assist with a smoother transition from second level and all CIT Accounting lecturers have professional qualifications and relevant industry experience.

## Further Studies

For details, see <http://business.cit.ie>

Upon successful completion of the Honours Degree, graduates with excellent exemptions from the professional accountancy bodies can enter industry or practice (i.e. work for a firm of accountants).

Graduates of the BBus (Honours) in Accounting may apply to the CIT full-time ACCA Programme. This programme provides graduates with the opportunity to complete the ACCA qualification on a full-time study basis. The advantage of completing this programme is that graduates will have their ACCA studies completed before they commence work and will not have to try to combine work and study.

Honours Degree holders who achieve the specified level of academic performance are eligible to apply for a postgraduate course of study, both at CIT and at other third level colleges in Ireland and abroad.

## Career Opportunities

Graduates from CIT accounting programmes secure employment within accountancy practices and also as accountants in industry. In practices, graduates work in the "Big 4" accountancy firms (PwC, KPMG, EY, and Deloitte), and with medium and small accountancy firms. Industry employers include Apple, DELL EMC, Dairygold, Kerry Group, Quintas, Musgrave Group, South Western Services (SWS), Financial Control Outsourcing Services (FCOS), PepsiCo, Bank of New York Mellon, and State Street Bank.

## Contact Information

Sylvia Dempsey  
Department of Accounting and Information Systems  
T: 021 433 5134  
E: [sylvia.dempsey@cit.ie](mailto:sylvia.dempsey@cit.ie)

## Question Time

**What do I need to do after qualifying in CR 400 to become an accountant?**

After attaining your BBus (Honours) in Accounting, you need to fulfil the additional requirements of the Accountancy Body with which you wish to qualify. This typically requires 3 to 3½ years relevant work experience and additional examinations.

**Will I receive exemptions from the main professional bodies?**

Yes. The BBus (Honours) in Accounting currently has excellent exemptions for Chartered Accountants Ireland, Chartered Institute of Management Accountants, Association of Chartered Certified Accountants, and Certified Public Accountants. These exemptions ensure that our graduates can minimise the number of exams necessary to qualify as an accountant after completing this Honours Degree.

**If I did not study Accounting at Leaving Certificate, can I study Accounting CR 400?**

Yes. You do not have to have studied Accounting as all modules in Year 1 assume no prior knowledge of content.

**What career options are available other than a professional accountant?**

Accountancy is a relevant background for any career in business. Many leading CEOs have an accountancy qualification. Accounting graduates can work in management, finance, insurance, banking, risk and compliance, project management, management consultancy, teaching and lecturing.



**Laura O'Callaghan**

Financial Analyst

"I graduated from the Accounting degree in CIT in 2011. It was a great place to study as all the lecturers get to know you. The exemptions I got from the course were definitely a benefit to me when I was looking for my first graduate position. I was well prepared for the working world and professional accountancy exams. I am now a qualified ACCA accountant working as a financial analyst in Eli Lilly."

# Marketing (Honours)

## CR 420 Level 8 Award

► Progression to Postgraduate Programmes

**Application:** CAO

**Award Title:** Bachelor of Business (Honours) in Marketing

**Duration:** 4 Years (8 Semesters)

**Places:** 60

**Location:** Bishopstown Campus



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

#### Minimum Entry Requirements

Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
4	2	O6/H7	O6/H7

### What is Marketing?

Marketing is essential to modern day business and life. It is the process of identifying, anticipating and satisfying customer requirements profitably. It is an area which has become even more exciting as many companies wonder how to best market in digital environments. Social Media, smartphones and technology are all playing an important role. As a person-focused role, marketers are equipped with a broad skillset including research, pricing, communication, branding, and psychology. This has served to make it a very enriching and engaging career choice with marketers acting as the public interface of a company and its products. Areas of specialism include digital marketing, social marketing, fashion marketing, and sports marketing all of which are skills in popular demand.

### Helpful Leaving Certificate Subjects

Business, Accounting, and Economics.

### Potential Areas of Employment

- Marketing and Marketing Research
- Brand Management
- Sales and Sales Management
- Business Development

### Work Placement

Students will have the opportunity to undertake placement in the 3rd year of the programme for one semester.

### First Year at a Glance

- Learn the basic principles of marketing
- Develop skills around selling and sales
- Find out about how marketing can help a business
- Explore how social media and the digital environment are changing business
- Learn a language, French, Spanish or German (optional)
- Discover how people in business think, act and view the world and the kind of competencies, character traits and behaviours they rely on





## About the Course

First year provides the student with a foundation in core business subjects. The course introduces students to marketing modules from semester one.

In Year 1, students cover a range of business topics and will explore how the digital world has had an impact on marketing. Skills that are developed include selling skills and Information Technology (IT). Throughout both semesters there is an emphasis on communication and some general business topics.

In Year 2, students delve further into various areas of marketing with particular focus on customers and how they can be understood. Emphasis is placed on digital marketing with further attention paid to areas like sponsorship, market research and content creation.

In Year 3, students undertake a variety of modules to develop their knowledge of Marketing. Throughout this semester, students experience live-case assessments where students work on real world problems for companies.

Students will have the opportunity to participate in industrial placement in semester 2 of third year with roles in various companies available. Students will be prepared for placement and will focus on digital and social media marketing as well as other areas.

Year 4, the final year of the course, has a strategic focus. This includes emphasis on strategy, finance and PR. Other topics covered include business to business marketing and sales strategy. Brand Management is a mandatory module in semester 2 of fourth year. Marketing areas include Social Marketing, Fashion Marketing and Sports Marketing. Business Ethics and Sustainable Business are also offered as an elective.

## Further Studies

For details, see <http://business.cit.ie>

Graduates may apply to professional bodies and may be exempt from certain examinations. Suitably qualified graduates are eligible to apply for postgraduate degrees at CIT:

- > MA in Global Business Practice (Taught)

- > MSc in Digital Marketing Strategy (Taught)
- > MA in Human Resources Management (Taught)
- > MSc in Marketing Practice (Taught)
- > MBus (Taught) (Part-time)
- > MBus (by Research)
- > PhD

## Career Opportunities

Graduates have a broad range of careers available to them. Advertising, Promotion, Digital Marketing, Social Media Development, Sales Management, Direct Marketing, Event Management, Reputation Management, Services Marketing, and International Sales and Management are all areas where our graduates have found solid career opportunities.

## Contact Information

Dr Pio Fenton  
Department of Marketing & International Business  
T: 021 433 5922  
E: [pio.fenton@cit.ie](mailto:pio.fenton@cit.ie)

## Question Time

**I am interested in Marketing, should I choose Level 7 CR 021 or Level 8 CR 420?**

If you would like a broad range of business topics, with the opportunity to choose a business specialism such as Marketing, Business, or Accounting, you should apply for Level 7 Business (Common Entry) CR 021. Please visit [www.cit.ie/course/CR021](http://www.cit.ie/course/CR021) for more information.

If, however, you are confident that Marketing is your preference, you should consider applying for Level 8 CR 420 which specialises in this area from Year 1.

**If I am not doing any of the recommended subjects in the Leaving Certificate, can I still apply for this course?**

Yes, the core fundamentals are delivered in Year 1 and we assume that students have not taken these subjects.

# International Business with Language (Honours)

## CR 425 Level 8 Award

» Progression to Postgraduate Programmes

**Application:** CAO  
**Award Title:** Bachelor of Business (Honours) in International Business with Language  
**Duration:** 4 Years (8 Semesters)  
**Places:** 40  
**Location:** Bishopstown Campus

### Admission

For admission to a programme, standard applicants must score the necessary CAO points and meet the minimum entry requirements.

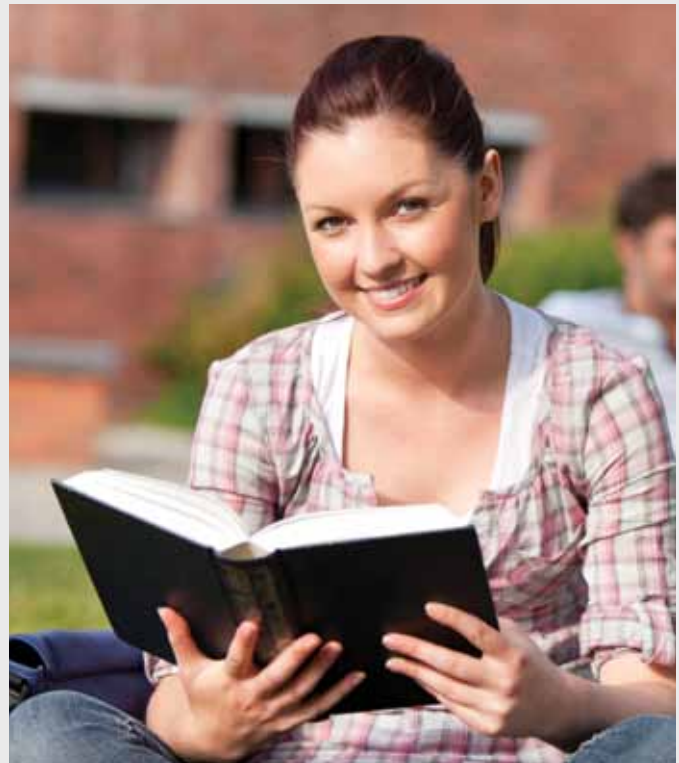
Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade	Relevant Language
4	2	O6/H7	O6/H7	O1/H4 (Note 1)

**Note 1:** Please note the H4 grade in a relevant language can also be used to satisfy one of the H5 entry requirements.



### What is International Business with Language?

The Bachelor of Business (Honours) in International Business with Language is an innovative programme geared at preparing students for working in roles that require broad understanding of business in an international environment. Students will have the opportunity to undertake a placement/study abroad while studying a language while also developing skills in marketing, sales, business development and management. Students will continue to learn either French, Spanish or German throughout the degree programme.

### Helpful Leaving Certificate Subjects

Business, Accounting, Economics, French, German, and Spanish.

### Semester Abroad

In Year 3, students will have the opportunity to go abroad for one or two semesters to study. The option to find and undertake a placement is also available for semester 2.

### Potential Areas of Employment

- International Business Development
- International Sales Management
- Project and Operations Management
- Logistics Associate/Manager
- Supply Chain Manager/Associate
- Global Project Coordinator
- International Fundraising Manager
- Global Human Resources Officer
- Innovation Specialist

### First Year at a Glance

- Develop an understanding of global business issues – so many Irish businesses and multinational companies trade internationally that this skill is in strong demand
- Find out more about marketing, sales, and culture Culture is an essential element of this programme as it broadens your insight into the wider world
- Build your teamwork and interpersonal skills by complementing your knowledge with strong interpersonal skills
- Further your knowledge of a language of your choice (French, Spanish, or German) and commence your journey to having a very strong business level proficiency after 4 years



## About the Course

This programme is geared at meeting the skills shortage that has been identified for roles in sales, business development and marketing in international environments. Students will develop a broad understanding of business issues with an international perspective while also studying a language of their choice. Topics such as culture, negotiation, trade, law, and much more underpin the development.

As part of the programme, students will undertake an international trip in Year 4 where they will experience the politics, culture and business approaches of another country. In Year 3, students will undertake a semester abroad in a country where the language they are learning is spoken widely. The programme has been designed to ensure that students have a wide range of opportunities upon completion. The semester abroad gives the student the opportunity to develop language skills and to develop a broader understanding of international cultures. While on semester abroad some students will seek placement which CIT will recognise while others will seek to study for the semester. Where a student pursues a placement they do so under their own responsibility but with CV, interview and career guidance from CIT.

## Further Studies

For details, see <http://business.cit.ie>

Graduates may apply to professional bodies and may be exempt from certain examinations. Suitably qualified graduates are eligible to apply for postgraduate degrees at CIT:

- > MSc in Marketing Practice (Taught)
- > MA in Global Business Practice (Taught)
- > MA in Human Resource Management (Taught)
- > MSc in International Business (Taught)
- > MBus (Taught) (Part-time)
- > MBus (by Research)
- > PhD

## Career Opportunities

Graduates may pursue careers in a wide number of areas including business development, international marketing, multi-territory sales, new product development, logistics management, customer relationship management, international project management, trade promotion and development, services marketing and a wide variety of roles where a second European language is valued.

## Contact Information

Dr Pio Fenton  
Department of Marketing & International Business  
T: 021 433 5922  
E: [pio.fenton@cit.ie](mailto:pio.fenton@cit.ie)

## Question Time

### What are the arrangements for the semester abroad?

The semester abroad is an integral part of the programme and is core to your development throughout the programme. Employers value the experience of those that have worked or studied abroad greatly. In the second semester of Year 3 you will undertake a semester abroad where you will develop your language and business skills. Some students decide to spend all of Year 3 in the country of their language - generally France, Germany or Spain. In the first semester, students take a study programme. In the second semester they can decide to continue study or seek a placement in that country. Where a student seeks a placement, they do so using their own responsibility and initiative. CIT offers guidance and support around this but cannot guarantee a placement for any student. To date about 50% have undertaken a placement element. Most study or placement opportunities are supported by ERASMUS+ Mobility Grant.

### How strong will my language ability be upon completion of the programme?

Your language development is a key part of your skill repertoire upon completing this programme. It has been designed so that you develop from a post Leaving Certificate level of ability to a level of fluency that will allow you to communicate effectively in any business or social situation.



▲ International Business students visiting Audi factory in Brussels

# Business Information Systems (Honours)

## CR 150 Level 8 Award

► Progression to Postgraduate Programmes

**Application:** CAO

**Award Title:** Bachelor of Business (Honours) in Information Systems

**Duration:** 4 Years (8 Semesters)

**Places:** 80

**Location:** Bishopstown Campus



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

#### Minimum Entry Requirements

Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
4	2	O6/H7	O6/H7

### What is Business Information Systems?

Business Information Systems is a comprehensive blend of business and technology subjects that equips students with the skills and knowledge required to develop, manage and use Information Technology systems and solutions in a variety of business environments. This will include a knowledge of management; digital marketing; financial and management accounting; information communication technology strategy; computer applications; enterprise resource planning systems; systems integration; legal studies; entrepreneurship; international business; project management; systems analysis; design and development; Big Data; Business Analytics, and Cloud Computing.

### Helpful Leaving Certificate Subjects

Mathematics, and Business.

### Work Placement

Formal work placement (minimum 15 weeks) is an option for students in Year 3.

### Potential Areas of Employment

- IT Consultant
- Business Analyst
- IT Developer
- Project Manager
- IT Support
- Business Analytics

### First Year at a Glance

- Introduction to basic programming
- Understanding the role of the manager and the business environment in which they work
- An insight into how Information Systems support business
- An introduction to Marketing and the world of Digital Marketing
- Small computer lab classes where you will learn word processing, spreadsheets, presentations and databases
- Understand how computers communicate with each other



## About the Course

The aim of the Honours Degree is to educate and train students in a wide range of Business and Information Systems skills. The course is assessed by end of module examination and through a significant amount of continuous assessment and project work throughout the four years. The programme represents 50% Business and 50% Technology knowledge.

In Year 3, students will have the option to complete a work placement in an IT related role in business. It will involve a set of agreed objectives for your placement, as well as the assistance of a supervisor on site and a member of the academic staff at CIT.

## Further Studies

For details, see <http://business.cit.ie>

Honours Degree holders who achieve the specified level of academic performance are eligible to apply for a postgraduate course of study, both at CIT and at other third level colleges in Ireland and abroad.

## Career Opportunities

The graduate develops a large range of skills and abilities which may lead to employment in diverse jobs/areas such as Business Analytics Roles; Systems Analyst; Project Manager; Management Consultant; Systems Administrator; Webmaster; Business Analyst; Customer Relationship Management; Management Accountant; Purchasing and Supply Chain Management; Logistics; Business Development Manager; Enterprise Systems Manager; Operations Management; Financial Analyst; Marketing and Market Research across a large variety of industries, including manufacturing, food processing, software, as well as banking and financial services.

## Contact Information

Martin Connolly  
Department of Accounting and Information Systems  
T: 021 433 5807  
E: martin.connolly@cit.ie

## Question Time

### How much Business content is in the course?

The course is 50% Business oriented and 50% Information Technology and Information Systems oriented.

### What level of proficiency with computers do you need?

Subjects are taught at an introductory level in Year 1.

### What kind of Programming is involved?

Programming is an important skill to have in the area of Business Information Systems. HTML, CSS, C#, and PHP are some of the exciting and useful programming languages that you will be working on.

### What Information Technology (IT) topics are involved?

IT topics covered on the course include Systems Analysis and Design, Database Design and Management, Computer Networks, Information Systems Project Management, Web Applications Development, and Enterprise Systems. Students will study Big Data, Business Analytics alongside Ethics and Privacy.



### Elaine Deasy

Manager, Technical Support Services

“For my student work placement, I worked with EMC as a Technical Support Engineer. I continued on a part-time basis for the EMC team while I was completing fourth year in college. Once I graduated with an Honours degree I was employed full-time with EMC. I knew I wanted to enter the management side of the business so when an opportunity arose to become a Workflow Manager I embraced the new opportunity. I was managing the flow of work that each engineer was accepting globally.

My recent position move was to the software side of the business as Manager. The BIS course has been really beneficial in preparing me for the working world.”



### Gary O'Donovan

Assistant Manager, Advisory Services

“As part of my role within EY, I lead the fieldwork of our Financial Audit IT engagements. During my time studying at CIT I found that the structure of the degree, and the lecturers, allowed the students the opportunity to work both on their own and as part of a group - a skill that I find extremely important to my career today. One of the major factors for me studying BIS was my interest in IT and Business. Learning that the degree has a Work Placement Programme is what really drew me to apply to study BIS.

BIS offered me a number of fantastic career opportunities. Employers seek graduates who are not only academically very good but also well rounded individuals. This degree is a great way of achieving both these traits. It is a challenging degree and one that I ultimately found enjoyable.”

# Recreation and Leisure Management

## CR 032 Level 7 Award

- ▶ Progression to Level 8 Honours Degrees and Postgraduate Programmes
- ▲ Higher Certificate Option

**Application:** CAO  
**Award Title:** Bachelor of Business in Recreation and Leisure Management  
**Duration:** 3 Years (6 Semesters)  
**Places:** 80  
**National Vetting Bureau:** Yes  
**Location:** Bishopstown Campus



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 5 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
5	0	O6/H7	O6/H7

CIT uses the National Vetting Bureau (NVB) to help assess the suitability of all applicants on this programme. It is important to note that participation in or completion of this programme may be affected by subsequent disclosure/discovery.

### What is Recreation and Leisure Management?

The Recreation and Leisure Management course combines Health, Fitness, Sports and Exercise related modules with core Business modules. The course prepares students to work in the business, sports and leisure sector of the economy and provides them with the specialist skills and competencies needed in these industries.

### Helpful Leaving Certificate Subjects

Business, English, Biology, and Accounting.

### Sport Aptitude

Active participation in sport is an advantage. However, applicants do not need to have exceptional ability or achievements in sport.

### Work Placement

Formal work placement (minimum of 5 weeks) is an integral element of the course and takes place in Year 3.

### First Year at a Glance

- **Fundamental Movement Skills:** This module focuses on the practical and theoretical aspects of planning, teaching and evaluating effective activity sessions to develop basic movement skills among children
- **Gym Instruction:** This module prepares the student for work as a gym instructor and as a circuit training instructor. The emphasis is on the student's ability to perform and demonstrate exercises correctly and on developing their skills to instruct
- **Sports Psychology:** This module provides students with an introduction to the basic theories of sports psychology and identifies ways in which it can be used in a sports performance setting
- **Nutrition for Health:** This module is designed to provide students with an understanding of the area of nutrition and its relationship with health-related matters such as diet, weight management and obesity



## Potential Areas of Employment

- Fitness Instructor
- Personal Trainer/Strength and Conditioning Coach
- Leisure/Sports Centre Management
- Sports Coaching/Team Management

## About the Course

The leisure industry is one of the fastest growing sectors of the economy. This has created a demand for personnel with specialist knowledge and skills in recreation and leisure. This course combines such skills and competencies with a strong business base, while offering students the opportunity to acquire appropriate practical and managerial expertise, which will enable them to be effective managers in the recreation and leisure industry. There is a mandatory supervised work placement of 5 weeks in Year 3 (e.g. Leisure Centres, Adapted Physical Activity Centres and Sports Coaching Settings).

## Professional Accreditation

A number of industry recognised external qualifications are incorporated into the course. These include REPs (Register of Exercise Professionals) Ireland Qualifications in the area of fitness instruction and personal training. Coaching Ireland awards in a variety of sports are incorporated into the sports coaching modules. Qualifications in Lifesaving, Swim Teaching, ITEC Massage Therapy, and Sports Massage can also be attained. CIT, through the Recreation & Leisure Management course, is an affiliated institution with the European College of Sport Science (ECSS), which is home to the most diverse network of sport science related institutions in the world with affiliates across Europe, Asia, the Middle East, Australasia and North America.

## Further Studies

For details, see [www.cit.ie](http://www.cit.ie)

Suitably qualified graduates are eligible to apply for entry to the one year add-on

- > Bachelor of Business (Honours) in Sport and Exercise (Level 8)

or

- > Bachelor of Business (Honours) (Level 8)

An Honours Degree will greatly enhance a graduate's career prospects at management level. In addition, the Bachelor of Business (Honours) satisfies the degree requirements of the Teaching Council. As with other recognised degrees, a postgraduate programme of Initial Teaching Education, accredited by the Teaching Council, consisting of two years full-time study or 120 ECTS credits must subsequently be completed to be eligible for registration with the Teaching Council.

## Career Opportunities

This course offers access to a wide range of employment opportunities in the sport and leisure industry such as Leisure/Sports Centre Management, Personal Trainer, Strength and Conditioning Coach, Sports Coaching/Team Management, Swim Teaching and Lifeguarding, Group Exercise Leadership, Sports Development, Health Promotion, Community Recreation, and Sports Marketing.

## Contact Information

Dr Con Burns  
Department of Sport, Leisure & Childhood Studies  
T: 021 433 5321  
E: [con.burns@cit.ie](mailto:con.burns@cit.ie)

## Question Time

### What areas of teaching am I qualified to teach in?

As with any Level 7 qualification, teaching is not an immediate possibility. However, for those students who decide to progress to the Bachelor of Business (Hons) in Sport & Exercise or the Bachelor of Business (Hons), there are 2 primary possibilities to embark on further study in Teacher Education.

- Professional Masters of Education (PME) in Primary Teaching, which is a 2-year Level 9 Qualification, as long as the applicant presents with the minimum Leaving Certificate requirement in Irish or suitable equivalent. The Department of Education and Skills recognises this PME to teach in primary schools.
- Professional Masters of Education in Business Teaching, which is accredited by the Teaching Council. This Postgraduate Teacher Education programme is offered in several Universities with Teacher Education programmes.

It is important to note that there is no direct link between this BBus in Recreation and Leisure Management degree and PE Teaching.

### What type of Business content is involved in the course?

Business Administration, Accounting, Marketing, Economics, Management, and Enterprise Development are the Business modules covered over the three years.

### How is my time spent on the course?

A mix of practical and theory classes make up the Recreation and Leisure modules and the Business related modules are mostly theory based. An estimated percentage of this Leisure to Business breakdown over the years is as follows: Year 1: 80/20, Year 2: 65/35, Year 3: 30/70 respectively.



## Juliet Murphy

Postgraduate Student

Juliet graduated with a BBus in Recreation and Leisure Management (Level 7) and with a BBus (Level 8). Several years later, she returned to full time education to pursue a postgraduate Primary Education degree. Juliet is a household name from her sporting exploits with the Cork Senior Ladies Football team. She is currently completing a Research Masters in CIT as part of the Project Spraoi Research Team.

"I really enjoyed my time in CIT and particularly all practical aspects of the Recreation and Leisure course. It is great that students may also progress to the Honours Degree in Sport and Exercise which is most definitely a growing industry."

# Early Childhood Education & Care

## CR 620 Level 7 Award

► Progression to Level 8 Honours Degree and Postgraduate Programmes

**Application:** CAO  
**Award Title:** Bachelor of Arts in Early Childhood Education & Care  
**Duration:** 3 Years (6 Semesters)  
**Places:** 60  
**National Vetting Bureau:** Yes  
**Location:** Bishopstown Campus



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 5 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
5	0	(Note 1)	O6/H7

**Note 1:** There is no requirement for Mathematics. A Grade F2 or higher in Foundation Level Mathematics is recognised as one of the subjects for entry.

**Note 2:** CIT uses the National Vetting Bureau (NVB) to help assess the suitability of all applicants on this programme. It is important to note that participation in or completion of this programme may be affected by subsequent disclosure/discovery.

### What is Early Childhood Education & Care?

There is an ever increasing demand for quality Pre-School services in Ireland today and the BA in Early Childhood Education & Care provides specialised training, support, advice and information on best practice for the education and care of young children from 0 to 6 years with a view to supporting the development of an Early Childhood Education & Care workforce.

### Helpful Leaving Certificate Subjects

English and Business.

### Work Placement

There are 2 mandatory work placement experiences in this course

- Year 2: 12 Weeks
- Year 3: 12 Weeks

### First Year at a Glance

- **Process Led Arts:** This module aims to introduce students to the Artistic Elements within the disciplines of Music, Art and Drama. The Artistic Elements will be central to the concepts explored within experiential workshops. National Frameworks, Regulations and Guidelines (e.g. Aistear and Siolta) will inform the structure, delivery and assessment of the module
- **Creative & Critical Thinking:** This module provides students with the theoretical underpinning of how creativity & creative development promotes and extends critical thinking in the context of the young child. Focus will be placed on the role of the adult in providing authentic learning opportunities through an Inquiry Based Learning approach in order to promote self-initiation and investigation in children under the age of six





## First Year at a Glance (continued)

- Playful Learning; Birth to 3: This module aims to foster student awareness of the significance of play as a fundamental right for all children and its impact on the holistic learning and development of children from birth to age 3. Students will explore their own roles and acquire the necessary skills, tools and knowledge to support play for children from infancy to age 3 years in inclusive Early Childhood Care and Education (ECEC) contexts
- Development Psychology: This module is designed to introduce students to the psychology of child development and to enable the student to apply principles of developmental psychology in a variety of Early Childhood Education and Care (ECEC) settings

## Potential Areas of Employment

- Early Childhood Education & Care
- Children with additional needs
- Children’s Residential Care Centres
- Family and Community Support Centres

## About the Course

The course aims to train graduates to educate and meet the needs of children aged 0-6 years and to manage childcare facilities. The various biological, cognitive, emotional, and social stages of a child’s development are studied.

The course offers the student the opportunity to study early childhood from differing perspectives – educational, psychological, social, and cultural. The course also includes tuition in Art, Music and Drama, which will provide an extensive portfolio of child-centred activities. Attention is also paid to practical skills needed in this type of work such as child health, exercise and nutrition, and the physical care of children. Central to the EYE Degree is the Professional Work Practice (PWP), i.e. a Placement experience of 12 weeks duration in both Years 2 and 3 of the course. This involves supervised hands-on experience in centres approved by the Institute, for example, Preschools, Naíonraí, Creches, Primary Schools, and Centre for Children with Special Educational Needs.

There is an option of international placements with partner organisations in other European countries.

## Further Studies

For details, see [www.cit.ie](http://www.cit.ie)

Suitably qualified graduates are eligible to apply for entry to the one year add-on

- > Bachelor of Arts (Honours) in Early Childhood Education & Care (Level 8)

Honours Degree holders who achieve the specified level of academic performance are eligible to apply for a postgraduate course of study, both at CIT and at other third level colleges in Ireland and abroad.

## Career Opportunities

Employment opportunities include working in the Early Childhood Education & Care industry; Children with Specific Learning Needs; Children’s Residential Care Centres; Family and Community Support Centres; and After School Services. BA Honours graduates (Level 8) are strongly positioned and fully qualified to take up management roles in each of the above settings.

## Contact Information

Dr Judith Butler  
 Department of Sport, Leisure & Childhood Studies  
 T: 021 433 5348  
 E: [judith.butler@cit.ie](mailto:judith.butler@cit.ie)

## Question Time

**Am I fully qualified to work in Early Childhood Education & Care setting after three years’ study in CR 620?**  
 Yes.

**Is there a pathway to primary school teaching from this course?**  
 BA (Honours) graduates are eligible to apply for the Professional Masters in Education (PME) in Primary Teaching, which is a 2-year Level 9 Qualification, as long as they present with the minimum Leaving Certificate requirement in Irish or suitable equivalent. The Department of Education and Skills recognises this PME to teach in Primary Schools.



## Clíodhna Walsh

Self Employed

“Work experience, Creative Arts, small classes, and dedicated lecturers make this course the best of its kind. Graduates from this course have a new and different approach.

Group work and psychology played a major role in my personal and emotional growth as a childcare professional. The support from lecturers of this course is exceptional. They will go above and beyond their call of duty for their students. They are available for discussions, emails, and feedback to help you along, and their support enabled me to attain my first class honours degree.

I established my own business, a Naíonra. The Business Administration, Law in Early Years, and Business modules contributed to this accomplishment.”

# Social Care

## CR 031 Level 7 Award

» Progression to Level 8 Honours Degree and Postgraduate Programmes

**Application:** CAO

**Award Title:** Bachelor of Arts in Social Care

**Duration:** 3 Years (6 Semesters)

**Places:** 80

**National Vetting Bureau:** Yes

**Location:** Bishopstown Campus

### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

#### Minimum Entry Requirements

Leaving Certificate in 5 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
5	0	O6/H7	O6/H7

CIT uses the National Vetting Bureau (NVB) to help assess the suitability of all applicants on this programme. It is important to note that participation in or completion of this programme may be affected by subsequent disclosure/discovery.



### What is Social Care?

Social Care is a profession where people work in partnership with those who experience marginalisation or discrimination, or who have special needs.

Social care practitioners may work, for example, with children and adolescents in residential care; people with learning or physical disabilities; people who are homeless; people with alcohol/drug dependency; families in a community setting; or recent migrants to Ireland.

### Helpful Leaving Certificate Subject

English.

### Work Placement

There is mandatory work placement as follows:

- Year 1: 6 week placement
- Year 2: 10 week placement
- Year 3: 60 days (spread over the two semesters)

### First Year at a Glance

- Psychology: The study of theoretical and research knowledge of the psychology of human development from birth to old age
- Professional & Personal Development: This consists of practical skills development, self-awareness and personal development groups, and Professional Work Practice preparation classes
- Social Care Services: Introduces students to the primary areas of care work
- Sociology: The study of different social groups and their ever changing role in society
- Political Economy of Welfare: Studies the economy within the wider political policy process
- Law: Examines the legal framework within which social care professionals operate, to introduce specific areas of law most frequently encountered in social care practice



## Potential Areas of Employment

- Residential Care Centres
- Community Projects
- Family Casework
- Adoption/Fostering Agencies
- Probation and Welfare Agencies
- Hostels for Adolescents
- Travellers Centres
- Special Schools
- Centres for the Elderly
- Centres for Asylum Seekers
- Youth Centres

## About the Course

The course aims to strike a balance between theory and practice. Material from various disciplines is organised and presented in ways which enable students to see its relevance to the objectives of the course, to the placement settings and their own supervised practice. The student will be given the opportunity of acquiring some practical skills needed in this type of work, such as household management, sport and leisure.

There is work placement in each year of the course. Such placements enable the student to apply theory taught on the course to a professional placement and to appreciate the number of, and variety of, relevant work situations.

## Further Studies

For details, see [www.cit.ie](http://www.cit.ie)

Suitably qualified graduates are eligible to apply for entry to

- > Bachelor of Arts (Honours) in Social Care, (Level 8)  
1 year full-time or by ACCS mode

Honours Degree holders who achieve the specified level of academic performance are eligible to apply for a postgraduate course of study, both at CIT and at other third level colleges in Ireland and abroad.

## Career Opportunities

The BA in Social Care is the nationally recognised qualification for working as a Social Care Worker in either

the residential area or in the community. The applied and practical aspect of the work is very important.

Graduates are employed in a wide variety of care settings and employments such as Residential Care Centres, Community Projects, Youth Centres, Family Casework, Elder Care Centres, Adoption/Fostering Agencies, Probation and Welfare Agencies, Hostels for adolescents/young adults, Travellers Centres, etc.

## Contact Information

Roisín Lane  
Department of Applied Social Studies  
T: 021 433 5324  
E: roisin.lane@cit.ie

## Question Time

### What is the difference between a Social Care Worker and a Social Worker?

A Social Care Worker will typically work in a direct person-to-person capacity with clients. He or she will seek to provide a caring, stable environment in which various social, educational and relationship interventions can take place in the day-to-day living space of the client.

The Social Worker's role is to manage the 'case', e.g. arranging the residential child care placement in which a child is placed; coordinating case review meetings; negotiating the termination of a placement; and responding to child protection concerns in a given area. (Social Care Ireland 2011)

### Am I fully qualified to work as a Social Care Worker after successfully completing the three years study in CR 031?

Yes. The BA in Social Care is the nationally recognised qualification for working as a Social Care Worker.

### Can I convert to a Social Worker after completing the Social Care qualification, i.e. BA in Social Care CR 031?

It is not possible to 'convert' to be a Social Worker with the BA (Honours) in Social Care (Level 8). To become a Social Worker, you will need to complete a Masters in Social Work (Level 9).

Suitably qualified graduates of the BA (Honours) in Social Care may also be eligible to apply for a range of other Postgraduate courses, such as Occupational Therapy, Community Development, Social Care, etc.



## Dr Aoife Killeen

Social Care Worker

"I chose Social Care in CIT as it provided me with the opportunity to learn and practice in a diverse area. Having been awarded a BA (Honours) in Social Care in 2008, I carried on and achieved a PhD in Social Care in 2014.

Having worked in the community and residential care, I now work as a part time social care worker and researcher, and lecture full-time in the area. I have taken part in various social care conferences and had a chapter in the 2014 publication "Social Care - Learning from Practice" based on my residential work experience.

I put my positive progression through the years down to the support I received from those involved in social care in CIT."

# Community Development

## CR 035 Level 7 Award

- ▶ Progression to Level 8 Honours Degree and Postgraduate Programmes
- ▲ Higher Certificate Option

**Application:** CAO  
**Award Title:** Bachelor of Arts in Community Development  
**Duration:** 3 Years (6 Semesters)  
**Places:** 25  
**National Vetting Bureau:** Yes  
**Location:** Bishopstown Campus



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

#### Minimum Entry Requirements

Leaving Certificate in 5 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
5	0	(Note 1)	O6/H7

**Note 1:** There is no requirement for Mathematics. A Grade F2 or higher in Foundation Level Mathematics is recognised as one of the subjects for entry.

**Note 2:** CIT uses the National Vetting Bureau (NVB) to help assess the suitability of all applicants on this programme. It is important to note that participation in or completion of this programme may be affected by subsequent disclosure/discovery.

### What is Community Development?

Community Development is a process that seeks to build strong, sustainable communities by bringing people and groups together for the good of the wider community and society. Based on principles of equality, fairness and respect it sets out to influence power structures and remove barriers that prevent people from taking part in decisions that affect their lives.

### Work Placement

At present, the placement is composed of supervised community work, for 100 hours over a 20 week period. It may be possible for applicants, who are already active in community work, to continue this work in order to meet the placement requirements.

Participants must have satisfactorily completed the Institute's mandatory Vetting before commencing

placement. Vetting is conducted by the National Vetting Bureau (formerly known as the Garda Central Vetting Unit).

### Potential Areas of Employment

- Statutory Organisations
- Non-Governmental Organisations (NGOs)

### First Year at a Glance

- Community Development: Community development principles and everyday life
- Community Work Placement 1: The application of theory in practice settings
- Sociology and Community: Sociology in community spaces
- Social Analysis: Analysis of how Irish and European Society functions
- Education: Analysis of the Education system in Ireland and the EU
- Group Work and Community: Applying group work principles and practice in community contexts



## About the Course

The broad aim of the programme is to provide an opportunity for people who are active in the community to achieve formal qualifications in the community work field. This course has been developed in partnership with community groups and consists of lectures, workshops, seminars, combined with a substantial practical element, based in the community. Participants will remain within the community setting, thereby sustaining their contribution to the community while developing the capacity to add value to that contribution through supervised and supported learning in the workplace.

The course will be assessed by continuous assessment: essay, reports, role play and presentations. Practical work placement within the community will also contribute to assessment. No formal, terminal, written examination will be undertaken.

## Further Studies

For details, see [www.cit.ie](http://www.cit.ie)

Suitably qualified graduates may be considered to proceed to the one year add-on

- > Bachelor of Arts (Honours) in Community Development (Level 8)

Where applicants for the Honours Degree do not have a qualification at Diploma or Bachelor Degree level in Community Development at the specified minimum level, they may be admitted on the basis of a learning portfolio that verifiably demonstrates learning performance equal to that specified by the learning outcomes of the BA Degree programme at CIT.

## Career Opportunities

Graduates of the Degree programmes can expect to take supervisory/management/leadership roles in community projects and within statutory agencies. It is envisaged that Higher Certificate holders will be qualified to seek employment in any of the following areas:

- > Development worker within a Community Education Project
- > Development worker within a Community Resource Centre
- > Worker within a Community Development Project (CDP)
- > Resource worker in Community based health programmes

## Contact Information

Dr Margaret O'Keeffe / Paddy Anderson  
Department of Applied Social Studies  
T: 021 433 5932 / 5931  
E: [margaret.okeeffe@cit.ie](mailto:margaret.okeeffe@cit.ie) / [paddy.anderson@cit.ie](mailto:paddy.anderson@cit.ie)

## Question Time

### What is the weekly workload?

The BA in Community Development (BACD) is a full-time programme at CIT Bishopstown Campus. Your weekly work schedule will consist of lectures at the Bishopstown Campus as well as supervised work placements.

The placement is an integral part of the BACD programme and is core to your professional development. In addition, employers value the experience gained via the supervised placement.

### What are the arrangements for the work placement?

The work placement will take place in selected locations around Cork City, which are easily accessible via public transport.

### What personal skills are most suited to the programme and subsequent careers?

The best students and professional community workers all possess a keen interest in social justice issues alongside a desire to make a positive difference to peoples' lives.

### What kind of person should you be?

The community work profession requires individuals who are mindful of their responsibility towards other people and their communities.

The community work professional also involves a strong legal and ethical commitment to promoting the safety of children and 'vulnerable' adults in society.

### Can I obtain a Higher Certificate after two years?

Yes, students who successfully complete Year 2 and do not wish to progress to Year 3 will receive a Higher Certificate in Arts in Community Development.



## Noreen O'Regan

Community Development Supervisor

"I graduated with a BA (Honours) in Community Development. I have always been active in my local community. The Honours Degree helped me to make the transition from a voluntary role to a paid professional role. I was an Administrator in the local Community Development Project and the Honours Degree gave me the confidence and skills base to apply for the Coordinator Post when it became available.

I remain closely connected to CIT's Community Development Programme as I now supervise Community Development Placement students. I would strongly recommend the Community Development Programme at CIT."

# Tourism Management (Honours)

## CR 660 Level 8 Award

» Progression to Postgraduate Programmes

**Application:** CAO

**Award Title:** Bachelor of Business (Honours) in Tourism Management

**Duration:** 4 Years (8 Semesters)

**Places:** 30

**Location:** Bishoptown Campus



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

#### Minimum Entry Requirements

Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
4	2	O6/H7	O6/H7

### What is Tourism Management?

Tourism is a dynamic, global industry through which people experience the culture, heritage and environment of other countries, whether they are travelling for leisure, business or indeed adventure.

A wide variety of employment opportunities are available to specialists in the area of Tourism as it involves the management and operation of a vast range of businesses, which include airlines, hospitality providers, cruise and ferry operators, tour operators, visitor attractions, heritage centres, travel agencies, and destination management organisations.

### Helpful Leaving Certificate Subjects

A European language, Geography, and Business subject(s).

### Potential Areas of Employment

- Festival and event management
- Business Tourism
- Social media and E-tourism
- Tourism promotion and marketing
- Visitor attractions & activity management
- Destination management organisations

- Travel agencies and tour operations
- Marketing, Communications and Promotion
- Airport and Airlines

### First Year at a Glance

- The principles and practice involved in the general business of Tourism
- The Irish Tourism Experience and what the visitor can enjoy
- Tourism Geography
- The basic conditions for managing a business operation, with an understanding of Economics
- Understanding the motivations and behaviour of the tourist/visitor
- Learn a European Language





## About the Course

The Bachelor of Business (Honours) in Tourism Management provides students with the expertise and knowledge needed to become a successful manager or entrepreneur in this challenging and exciting industry. This course has a strong emphasis on the broad business, management and marketing subjects complemented with tourism specific modules. Learning is based around class delivered lectures, field trips, practical lab classes, guest speakers, and both group and individual project work.

CIT has an excellent reputation for working in partnership and consultation with the travel and tourism industry. The delivery of certain modules provides the student with the opportunity to engage actively with industry. In the past, projects have been conducted on behalf of Fota Wildlife Park, Kinsale Chamber of Tourism, Blackrock Castle, Spike Island Tourism Development Plan, Clonakilty Chamber of Commerce, Cork City Council, and Cork County Council.

Students have access to the wider Institute facilities such as an excellent library, IT facilities, sports and recreation facilities, and other student supports. Student facilities are offered in an environment where students have direct access to an experienced and qualified lecturing team.

## Further Studies

For details, see [www.cit.ie/th](http://www.cit.ie/th)

Honours Degree holders who achieve the specified level of academic performance are eligible to apply for a postgraduate course of study, both at CIT and at other third level colleges in Ireland and abroad.

## Career Opportunities

Graduates have numerous opportunities in this dynamic and exciting tourism industry both nationally and internationally. The range of skills throughout the course includes marketing, management, human resources, language, social media, IT, communication, and customer services. These allow for the graduate to be flexible in terms of their employment prospects.

Many graduates progress to managerial positions in travel operations while others take an entrepreneurial role and run their own tourism related business. Other opportunities for employment include airlines, airport operations, travel agencies, government and semi-state organisations, sea carriers, resort representatives, coach tour operators, activity management, tourism environmental management, and local tourism development and promotions.

## Contact Information

Dr Aisling Ward  
Department of Tourism & Hospitality  
T: 021 433 5846  
E: [aisling.ward@cit.ie](mailto:aisling.ward@cit.ie)

## Question Time

### Is there a placement as part of this course?

Yes, there is an opportunity for students to engage in placement as part of the course.

### Is it essential to have studied a language before commencing the course?

Having a European language is very useful. In order to study French you must have successfully completed Leaving Certificate French and in order to study German you must have successfully completed Junior Certificate German. Spanish is taught from an introductory stage. It should be noted that studying a language is mandatory for year one of the course.

### Are there opportunities to work outside the tourism industry?

The course provides the student with a broad range of business and entrepreneurial skills which are transferable to a wide range of service industries, such as finance, retail, education and IT in addition to general marketing and management businesses.

### Are there opportunities to travel?

The nature of the tourism industry allows students to take up opportunities abroad and to travel and work overseas. Students are also provided with the opportunity to study for a semester abroad on an Erasmus or international programme in one of CIT's partner institutions.



## Damien O'Driscoll

Area Sales/Office Manager

Damien O'Driscoll is the current Area Sales/Office Manager for South Ireland at Paddywagon Tours. Paddywagon Tours started in 1998 and since then has become renowned for the quality of its tours all over Ireland, welcoming a broad demographic of tourists to Ireland each year from 2 to 2,000 people! Damien graduated with a BBus (Honours) in Tourism (now retitled Tourism Management) and began his career with PaddyWagon Tours in 2014 as a Tour Sales Consultant, before moving on to take care of digital marketing, in advance of promotion to his current position.

# Tourism Management

## CR 041 Level 7 Award

- ▶ Progression to Level 8 Honours Degree and Postgraduate Programmes
- ▲ Higher Certificate Option

**Application:** CAO  
**Award Title:** Bachelor of Business in Tourism Management  
**Duration:** 3 Years (6 Semesters)  
**Places:** 30  
**Location:** Bishopstown Campus



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 5 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
5	0	O6/H7	O6/H7

### What is Tourism Management?

The global tourism sector is continuing to expand in all sectors, providing worldwide opportunities for enterprise and development across a wide range of activities and businesses including regional tourism development, tourism promotion and marketing, visitor and heritage attractions, conference and exhibitions, air, sea and land transport, and reservations and bookings; both agency and online. There are also the areas of holiday activity, entertainment, and the traditional hospitality providers of food and accommodation.

Tourism Management is a dynamic and competitive industry. It requires the ability to constantly adapt to customers' changing needs and desires, as the customer's satisfaction, entertainment and enjoyment are particularly the focus of all tourism businesses.

### Helpful Leaving Certificate Subjects

A European language, Geography, and Business subject(s).

### Potential Areas of Employment

- Tourism & Heritage Promotion and Development
- Air, Cruise, and Coach based Travel and Management
- Visitor Attractions & Activity Centres
- Tourism Promotion & Marketing
- State Bodies involved in Tourism
- Social Media and Marketing
- Marketing, Communications and Promotion
- Travel Agencies and Tour Operations

### First Year at a Glance

- The principles and practice involved in the general business of Tourism
- The Irish Tourism Experience and what the visitor can enjoy
- Tourism Geography
- The basic conditions for managing a business operation, with an understanding of Economics
- Understanding the motivations and behaviour of the tourist/visitor
- Learn a European Language





## About the Course

The Bachelor of Business in Tourism Management provides students with the expertise and knowledge needed to become a successful manager or entrepreneur in this challenging and exciting industry. This course has a strong emphasis on the broad business, management and marketing subjects complemented with tourism specific modules. Learning is based around class delivered lectures, field trips, practical lab classes, guest speakers, and both group and individual project work.

CIT has an excellent reputation for working in partnership and consultation with the travel and tourism industry. The delivery of certain modules provides the student with the opportunity to engage actively with industry. In the past, projects have been conducted on behalf of Fota Wildlife Park, Kinsale Chamber of Tourism, Blackrock Castle, Spike Island Tourism Development Plan, Clonakilty Chamber of Commerce, Cork City Council, and Cork County Council.

Students have access to the wider Institute facilities such as an excellent library, IT facilities, sports and recreation facilities, and other student supports. Student facilities are offered in an environment where students have direct access to an experienced and qualified lecturing team.

## Further Studies

For details, see [www.cit.ie/th](http://www.cit.ie/th)

Suitably qualified graduates are eligible to apply for entry to Year 4 of  
> Bachelor of Business (Honours) in Tourism Management (Level 8)

Honours Degree holders who achieve the specified level of academic performance are eligible to apply for a postgraduate course of study, both at CIT and at other third level colleges in Ireland and abroad.

## Career Opportunities

Graduates have gained the necessary qualifications to enable them to work in a fast-moving, creative and challenging industry. These include planning, promotion, marketing and development of tourism business projects along with entrepreneurial tourism opportunities.

Other opportunities for employment include airlines, airport operations, travel agencies, government and semi-state organisations, sea carriers, resort representatives, coach tour operators, activity management, and in the area of local tourism development and promotions.

## Contact Information

Dr Aisling Ward  
Department of Tourism & Hospitality  
T: 021 433 5846  
E: [aisling.ward@cit.ie](mailto:aisling.ward@cit.ie)

## Question Time

### Is it essential to study a language on this course?

Having a European language is very useful. In order to study French you must have successfully completed Leaving Certificate French and in order to study German you must have successfully completed Junior Certificate German. Spanish is taught from an introductory stage. It should be noted that studying a language is mandatory for year one of the course.

### Are there opportunities to work outside the tourism industry?

The programme provides the student with a broad range of business and entrepreneurial skills which are transferable to a wide range of service industries, such as finance, education, retail, and IT in addition to general marketing and management businesses.

### Is there a placement as part of this course?

Yes, there is an opportunity for students to engage in placement as part of the course

### Are there opportunities to travel?

The nature of the tourism industry allows students to take up opportunities abroad and to travel and work overseas. Students are also provided with the opportunity to study for a semester abroad on an Erasmus or international programme in one of CIT's partner institutions.



## Karen Buchanan

Tourism Entrepreneur

"I really benefited from my time at CIT and gained invaluable knowledge and experience. Overall, the standard of the lecturers was excellent; I admired their approach, experience, preparation and interest in their students. The adjustment of going from second level school to college was very easy at CIT.

Having worked in a Business Development role in a busy hotel after graduation, I set up my own business in 2016, involving Social Media management and training."

# Hospitality Management

## CR 042 Level 7 Award

- ▶ Progression to Level 8 Honours Degree and Postgraduate Programmes
- ▲ Higher Certificate Option

**Application:** CAO

**Award Title:** Bachelor of Business in Hospitality Management

**Duration:** 3 Years (6 Semesters)

**Places:** 32

**Location:** Bishopstown Campus



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

#### Minimum Entry Requirements

Leaving Certificate in 5 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
5	0	O6/H7	O6/H7

### What is Hospitality Management?

The term Hospitality Management refers to a range of occupations and professional practices associated with the management of areas such as hotels, resorts, restaurants, and other hospitality venues.

Strong practical content in the early years of study, along with our graduates broad range of knowledge, skills and competencies, have meant that they are a candidate of choice for a variety of organisations.

For graduates, there are opportunities to work either in Ireland or abroad and it is not uncommon for graduates in their twenties to hold senior positions in organisations.

### Helpful Leaving Certificate Subjects

English, Mathematics, and Business subject(s).

### Work Placement

- There is a mandatory work placement of a minimum of 12 weeks between Year 1 and Year 2.
- There is a 6 month Management Internship in Year 3.

### Potential Areas of Employment

- Hotel, Restaurant, Catering and Licenced Premises Management
- Reservations and Revenue Management
- Conference and Event Management
- Human Resources and Training
- Hospitality Entrepreneur
- Marketing and Sales

### First Year at a Glance

- Learn about the theory and practice of Food & Beverage Operations
- Learn about the theory and practice of the Rooms Division
- Using IT applications
- Explore the structures within the various hospitality businesses
- Managing the business of various hospitality premises such as hotels, restaurants and bars
- Building the personal skills and attributes to be an effective hospitality manager
- Industry placement



## About the Course

The Institute boasts one of the finest Tourism and Hospitality buildings in Europe, with state-of-the-art facilities. Our courses combine practical elements of hospitality management with key management skills, knowledge and competencies, in a multicultural classroom environment, providing graduates with the best possible foundation for a future career. Modern Demonstration and Production Kitchens, IT and Front Office Laboratories, a Demonstration Theatre, Training Restaurants and Bar, and well equipped classrooms are all features of the Tourism and Hospitality Building at CIT. In addition, students have easy access to the wider Institute facilities such as an excellent Library, IT facilities, sports and recreation facilities, and other student supports.

Administration and support facilities are offered in an environment where students have direct access to an experienced and qualified lecturing team.

Formal lectures, tutorials, individual and team project work, guest speakers, industry visits and field trips are all an integral part of the course. A range of elective modules are available so that students can pursue particular topics which interest them.

Work Placement is an important part of the Bachelor of Business in Hospitality Management and this allows the student to experience hospitality organisations at various grades in Ireland and gives them opportunities to travel abroad for their 3rd year work placement. Cork boasts one of the largest variety of hospitality organisations in the country, allowing students to study in a vibrant city with a strong culture of hospitality. Students who take the opportunity to travel abroad for work placement experience a greater international awareness, and develop the ability to effectively communicate in the global hospitality environment.

## Accreditation

Graduates are eligible to become members of the Irish Hospitality Institute.

## Further Studies

For details, see [www.cit.ie/th](http://www.cit.ie/th)

Suitably qualified graduates are eligible to continue onto the one year add-on Bachelor of Business (Honours) in Hospitality Management (Level 8).

Honours Degree holders who achieve the specified level of academic performance are eligible to apply for a postgraduate course of study, both at CIT and at other third level colleges in Ireland and abroad.

## Career Opportunities

Graduates will specialise in areas of the hospitality business such as Food & Beverage Management, Conference & Banqueting Management or Rooms Division Management. Opportunities may also be available in Sales & Marketing, Human Resource Management, Training & Development, Event Management or Financial Control. Graduates will aspire to senior General Management positions or become involved in entrepreneurial activities and may start their own business.

## Contact Information

Séamus Forde  
Department of Tourism & Hospitality  
T: 021 433 5828  
E: [seamus.forde@cit.ie](mailto:seamus.forde@cit.ie)

## Question Time

### What are the facilities like for this course in CIT?

The facilities at the Department of Tourism & Hospitality are of the highest European standard. The Department operates to the highest levels of industry recognised Hygiene and Environmental management requirements.

### What are the duties of a Hotel Manager?

Hotel Managers combine the role of the business host with the technical skills, including the provision of high quality Food, Beverage and Accommodation standards along with the skills of successful business management including financial, marketing, human resource and operational skills.

### What other careers could I work in?

Hospitality Managers work across a wide range of businesses in the sector to include many and varied types of hotels, restaurants and resorts and equally can work in areas such as cruise line operations or indeed start their own business within the sector. There is a wide range of sector specific support businesses for which Hotel Management provides the ideal background and these can include food & beverage suppliers, equipment suppliers, training specialists, hospitality centred IT companies, and many others.



## Dan Murphy

Managing Director

Dan is the Managing Director of the award winning Galway Bay Hotel. Dan leads a team which has attained such prestigious awards as the Best 4 Star Hotel in Ireland, Deloitte Best Managed Company, and the prestigious EFQM Award for quality. In 2007, Dan was awarded the IHI's Hotel Manager of the Year award.

Dan gained valuable experience on his college placements in Adare Manor and Ashford Castle. Having graduated, Dan worked with the Hilton Group in Chicago before joining the Rochestown Park Hotel and then the Galway Bay Hotel.

# Hospitality Studies

## CR 657 Level 6 Award

► Progression to Level 7 Degrees and Level 8 Honours Degree

**Application:** CAO  
**Award Title:** Higher Certificate in Arts in Hospitality Studies  
**Duration:** 2 Years (4 Semesters)  
**Places:** 25  
**Location:** Bishopstown Campus



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

#### Minimum Entry Requirements

Leaving Certificate in 5 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
5	0	O6/H7 or F2 (Note 1)	O6/H7

**Note 1:** The requirement for O6/H7 Mathematics may also be satisfied by Grade F2 or higher in Foundation Level Mathematics.

**Note 2:** Holders of all FETAC (now QQI) Level 5 awards may apply through the CAO. Quality and Qualifications Ireland (QQI) operates within the National Framework of Qualifications (NFQ), and has awards (formerly FETAC awards) placed at Level 5 (Certificate) or Level 6 (Advanced Certificate) of the Framework.

### Special Category Applications

Mature Students (23 years by the 1st January on year of entry to the course) and holders of the Leaving Certificate Applied with one year's relevant industrial experience may apply as Special Category Applicants through the CAO. They may be required to undertake an Institute interview.

### What is Hospitality Studies?

Hospitality Studies is a broad programme of learning which provides an introduction to all of the operations areas in the hospitality sector. Students get an opportunity to study and practice the areas of restaurant service, bar service operations, front office, rooms division, accommodation, event organisation, introduction to culinary skills, along with a range of business subjects.

The combination of practical skills and theoretical subjects gives the student the opportunity to identify their area of preference in the sector and to subsequently develop a valuable career in their chosen field.

### Helpful Leaving Certificate Subjects

English, Mathematics, Business subject(s), and a European Language.

### Work Placement

There is a formal structured work placement over the summer at the end of Year 1.

### First Year at a Glance

The course will introduce all Front of House areas in hotels, restaurants and bars

- Gain a knowledge of running the business of hospitality
- Develop your own personal skills and attributes for effective Hospitality Operations
- The theory and practice of Bar Operations and service
- The theory and practice of Food Operations
- Communications for hospitality
- Restaurant service skills
- Industry placement



## Potential Areas of Employment

- Hotels, Restaurants, Licenced Premises
- Accommodation Providers
- Catering and Events Companies
- Specialist functions such as Reservations, Training and Human Resources

## About the Course

The Higher Certificate in Arts in Hospitality Studies is designed to meet the skills requirements of students who wish to pursue careers within the hospitality sector. Graduates typically work in contact with the customer in hotels, restaurants or bar operations or associated areas such as conferences and events. The strong element of practical learning involved in this course is appealing to many candidates.

Practical classes, formal lectures, guest lectures, site visits and group projects are all used to ensure students receive a fully rounded study environment. A formal work placement allows the student to put into practice the skills which they have learned while in college, under the guidance of an experienced hospitality professional, and students are awarded academic marks for this important component of their course.

The Tourism and Hospitality buildings are of the best modern standard and include modern Demonstration and Production Kitchens, IT Laboratories, a Demonstration Theatre, Training Restaurants, a Training Bar, Training Reception and fully equipped classrooms. In addition students have easy access to the wider Institute facilities such as an excellent Library, IT facilities, sports and recreation facilities and other student supports; such as a large range of student clubs and societies.

Administration and support facilities are offered in an environment where students have direct access to an experienced and qualified lecturing team.

## Further Studies

For details, see [www.cit.ie/th](http://www.cit.ie/th)

Suitably qualified graduates can progress to:

> Year 2 of the Bachelor of Business in Hospitality Management (Level 7)

or

> Year 2 of the Bachelor of Business in Beverage Industry Management (Level 7)

and subsequently progress to the one year add-on

> Bachelor of Business (Honours) in Hospitality Management (Level 8)

Honours Degree holders who achieve the specified level of academic performance are eligible to apply for a postgraduate course of study, both at CIT and at other third level colleges in Ireland and abroad.

## Career Opportunities

For the student who is prepared to work hard and who brings flair and passion to hospitality, the opportunities are endless. Hotels, restaurants, bars, events and work place catering are all areas which are an ideal career choice for graduates. Many of our graduates travel overseas to gain experience and to enhance their skills or go on to embark on further studies in the area of hospitality.

## Contact Information

Joe O'Donovan  
Department of Tourism & Hospitality  
T: 021 433 5841  
E: [joe.odonovan@cit.ie](mailto:joe.odonovan@cit.ie)

## Question Time

### What is the difference between Hospitality Studies and Hospitality Management?

Hospitality Studies focuses on the day-to-day operations within the hospitality sector, where positions require a hands-on customer centred focus.

Hospitality Management focuses on the successful operation and profitable management of the overall business and its resources.

### What are the facilities like for this course in CIT?

The facilities in the Department of Tourism and Hospitality are of the highest European standard. The Building is run with the leading standards relating to both hygiene and the environment in mind at all times.

The Department is located within its own building on the campus and provides excellent facilities to enhance student learning including a range of Kitchens, Classrooms, Labs and other training facilities.

### The work placement sounds exciting. Is it based in Ireland or can you be placed abroad?

The work placement takes place in a quality hospitality establishment in Ireland and it is supported by a Department of Tourism & Hospitality staff member together with a workplace mentor. However, on qualification, graduates possess a skillset which they can use to gain employment in many different roles abroad.



## Louise Lyne

Restaurant Supervisor

Having graduated from CIT with a Higher Certificate in Hospitality Studies, Louise decided to progress and pursue a degree in Hospitality Management in the Department of Tourism & Hospitality. During her time in college, Louise represented CIT at the final of the National Skills Restaurant Service Competition.

Louise is currently the Restaurant Supervisor in the 5 Star Park Hotel in Kenmare, where she works daily with expert hoteliers, the Brennan brothers, of the Irish makeover television programme 'At Your Service'.

# Culinary Arts

## CR 640 Level 7 Award

► Progression to Level 8 Honours Degrees and Postgraduate Programmes

**Application:** CAO

**Award Title:** Bachelor of Business in Culinary Arts

**Duration:** 3 Years (6 Semesters)

**Places:** 32

**Location:** Bishopstown Campus



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

#### Minimum Entry Requirements

Leaving Certificate in 5 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
5	0	O6/H7	O6/H7

### What is Culinary Arts?

It is the study of food and wine and its impact on our society and way of life. The Culinary Arts make a significant contribution to the worldwide hospitality and tourism industries. Practitioners in this area include restaurateurs, chefs, food critics, food journalists, and educationalists. Many become entrepreneurs in their own right setting up their own business in the food industry.

Culinary Arts combines a high level of technical skills, creativity and flair with a modern, technical, scientific, academic, and business approach.

### Helpful Leaving Certificate Subjects

English, Mathematics, Home Economics, and Business subject(s).

### Work Placement

There is a mandatory work placement over the entire summer at the end of Year 1.

### Potential Areas of Employment

- Hotels and Restaurants
- Food Marketing & Product Development
- Pastry & Confectionary
- Training & Education
- Food Writing & Styling
- Culinary Manager in the Industrial Sector

### First Year at a Glance

- Culinary Operations, Larder and International Cuisine
- The importance of Food Safety Principles
- Introduction to Information Technology (IT)
- Learn about kitchen design and sustainability
- A knowledge of business calculations in the hospitality sector
- Develop the skills to manage catering and culinary businesses
- Build the skills and knowledge to manage the 'front of house' side of restaurants
- Learning about food and the food developed in various cultures
- Industry placement



## About the Course

The key aim is to develop a well-educated graduate with the ability to learn and adapt to meet new challenges in both their education and professional development. We have a strong emphasis on student centred learning, using methods which include formal lectures, tutorials, visiting lecturers, site visits, and both individual and team project work.

Students study modules such as Culinary Arts Principles, Larder & International Cuisine, Food Safety, Creativity, IT, Management, Kitchen Design, Wine Appreciation, Operations and Business subjects.

The work placement is an intrinsic part of the Bachelor of Business in Culinary Arts in terms of developing the students understanding of the organisation and its procedures, as it gives experience in a real-life setting. It is supported by a Tourism & Hospitality Department staff member, who works with a workplace mentor, to ensure that each student achieves their maximum potential.

The Tourism and Hospitality building is one of the foremost in the country and includes modern Demonstration and Production Kitchens, IT Laboratories, a Demonstration Theatre, Training Restaurants, Training Bar and fully equipped classrooms. In addition, students have easy access to the wider Institute facilities such as an excellent Library, IT facilities, sports and recreation facilities, and other student supports including a wide array of student clubs and societies.

In the past, students under the guidance of an experienced academic staff member, have won such prestigious titles such as the "Knorr Chef of the Year", TV3's "Head Chef", and the "Dunhill Cuisine Award for Best Commercial Food Product". With their Tutors' guidance, students also regularly compete in competitions such as AEHT, CATEX and Eurotoque and have successfully won prizes in all of these competitions.

## Further Studies

For details see [www.cit.ie/th](http://www.cit.ie/th)

Suitably qualified graduates are eligible to apply for entry to the one year add-on

> Bachelor of Business (Honours) in Culinary Entrepreneurship (Level 8)

or

> Bachelor of Business (Honours) in Hospitality Management (Level 8)

Honours Degree holders who achieve the specified level of academic performance are eligible to apply for a postgraduate course of study, both at CIT and at other third level colleges in Ireland and abroad.

## Career Opportunities

Graduates work in a range of diverse organisations of the food sector, ranging from Senior Chefs in 5 Star Hotels, gourmet restaurants, stylish bistros to catering and events companies and food product companies, along with food education. Many graduates go on to establish their own business. A Culinary Arts Degree provides a wide array of opportunities to work in other countries in both culinary and food related fields.

## Contact Information

Catherine O'Mahony  
Department of Tourism & Hospitality  
T: 021 433 5842  
E: [catherine.omahony@cit.ie](mailto:catherine.omahony@cit.ie)

## Question Time

### What is the difference between Culinary Arts and Culinary Studies?

Culinary Arts provides a broad range of learning which combines the skills of business management with the skills of culinary activity. This provides an ideal combination of skills for the successful operation of many food related business enterprises.

Culinary Studies is a course more specifically designed for those who aspire to be Chefs and it therefore focuses on the key skills required by Chefs at all kitchen levels, in larger or smaller operations.

### Is it possible to open your own business with this qualification?

Quite a number of graduates have opened their own businesses such as restaurants or food service companies, or have gone on to develop and produce a food product for retail sales.



## Sarah Healy

Area Sales Representative

"I completed the BBus in Culinary Arts in 2013, which was extremely educational and enjoyable at the same time. I always loved cooking and enjoyed being a chef. However, I was very interested in food sales and that's why I applied for La Rousse Foods with whom I now work. The BBus in Culinary Arts can lead to so many different career opportunities and is definitely an excellent course to do."

# Culinary Studies

## CR 655 Level 6 Award

► Progression to Degrees, Honours Degrees and Postgraduate Programmes

**Application:** CAO

**Award Title:** Higher Certificate in Arts in Culinary Studies

**Duration:** 2 Years (4 Semesters)

**Places:** 64

**Location:** Bishopstown Campus



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

#### Minimum Entry Requirements

Leaving Certificate in 5 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
5	0	O6/H7 or F2 (Note 1)	O6/H7

**Note 1:** The requirement for O6/H7 Mathematics may also be satisfied by Grade F2 or higher in Foundation Level Mathematics.

**Note 2:** Holders of all FETAC (now QQI) Level 5 awards may apply through the CAO. Quality and Qualifications Ireland (QQI) operates within the National Framework of Qualifications (NFQ), and has awards (formerly FETAC awards) placed at Level 5 (Certificate) or Level 6 (Advanced Certificate) of the Framework.

### Special Category Applications

Mature Students (23 years by the 1st January on year of entry to the course) and holders of the Leaving Certificate Applied with one year's relevant industrial experience may apply as Special Category Applicants through the CAO. They may be required to undertake an Institute interview.

### What is Culinary Studies?

Culinary Studies is a course designed to meet the needs of students who wish to pursue careers as Professional Chefs. Graduates go on to take up positions in hotels, restaurants, catering and events, along with many who set up their own businesses such as bistros, café-delicatessens, stylish cafes and restaurants.

### Helpful Leaving Certificate Subjects

English, Mathematics, Business subject(s), and Home Economics.

### Work Placement

There is a formal structured work placement over the summer at the end of Year 1.

### First Year at a Glance

- Practical Classical Cookery techniques including fishmongery and pastry
- Dish development in a nutritional context
- Cost control as it relates to the kitchen
- Develop practical restaurant skills
- Build the full range of skills needed to become a chef
- Learn about the background of food and service of food and the different food environments
- Understand the skills of managing the business of catering
- Industry placement





## Potential Areas of Employment

- Hotels ranging from 5 Star Resorts through to smaller family-run hotels
- Fine-dining Restaurants, local Speciality Restaurants, Bistros
- Catering Companies
- Event Catering
- Gastro Pubs and café-delicatessens

## About the Course

The Higher Certificate in Arts in Culinary Studies is mainly practical in nature and is supported by theory subjects relating to the world of cookery. Approximately 70% of the class time is spent in practical classes and kitchens covering subjects such as cookery techniques, classical and traditional cookery, along with specialist cookery from the Mediterranean, the Orient and other interesting world foods. Pastry, Larder, Confectionery and Buffet Work are also explored.

Along with practical classes, formal lectures, guest lectures, site visits, and group projects are also used to ensure students receive a fully rounded study environment. The formal, paid work placement allows the student to put into practice the skills which they have learned while in college and students are awarded academic marks for this important component of their course.

The Tourism and Hospitality buildings are of a leading standard and include modern Demonstration and Production Kitchens, IT Laboratories, a Demonstration Theatre, Training Restaurants, a Training Bar, and well equipped classrooms. In addition students have easy access to the wider Institute facilities such as an excellent Library, IT facilities, and sports and recreation facilities.

Administration and support facilities are offered in an environment where students have direct access to an experienced and qualified lecturing team. Students have participated and succeeded in the "Knorr Chef of the Year", TV3's "Head Chef" and the "Dunhill Cuisine Award for Best Commercial Food Product", along with the annual AEHT, Eurotoque, and CATEX competitions.

## Further Studies

For details, see [www.cit.ie/th](http://www.cit.ie/th)

Suitably qualified graduates can progress to:

- > Year 2 of the Bachelor of Business in Culinary Arts (Level 7)

or

- > Bachelor of Arts in Culinary Arts (day release, delivered one day per week over two years)

and subsequently progress to the one year add-on

- > Bachelor of Business (Honours) in Culinary Entrepreneurship (Level 8)

or

- > Bachelor of Business (Honours) in Hospitality Management (Level 8)

Honours Degree holders who achieve the specified level of academic performance are eligible to apply for a postgraduate course of study, both at CIT and at other third level colleges in Ireland and abroad.

## Career Opportunities

Students will graduate as professional Chefs, equipped to embark on exciting careers which will allow them to develop their skills further and to travel extensively if desired.

Our graduates hold exciting positions as Head Chefs and Executive Chefs in a wide variety of hotels, restaurants and other food operations. Artisan food production, food product development, health care, food journalism and large scale catering facilities all offer opportunities to graduates for employment. Other graduates have gone on to set up their own successful businesses.

## Contact Information

John Hartnett  
Department of Tourism & Hospitality  
T: 021 433 5851  
E: [john.hartnett@cit.ie](mailto:john.hartnett@cit.ie)

## Question Time

**What is the difference between Culinary Arts and Culinary Studies?**

Culinary Studies is the course designed for students who aspire to become a professional chef and it focuses on the key skills required by chefs in all kitchen types, whether a large upmarket hotel kitchen or a smaller specialist restaurant operation.

Culinary Arts provides a broad range of learning which combines the skills of business management with the skills of culinary activity. This provides an ideal combination of skills for the successful operation of many food related business enterprises.



## Robert Hales

Restaurant Proprietor

Having graduated from CIT, Robert worked in large hotels in Cork and London, but always had a burning ambition to own his own business. He opened his first restaurant, Amicus, in Cork and quickly went on to establish three further restaurant businesses in the Cork area, Restaurant 14A, La Lavanda, and the Douglas Tea Room.

Robert's advice to aspiring chefs is to "work hard while studying at CIT, always think positively, plan your career path and set achievable goals for yourself".

# Beverage Industry Management

## CR 650 Level 7 Award

► Progression to Level 8 Honours Degree and Postgraduate Programmes

**Application:** CAO  
**Award Title:** Bachelor of Business in Beverage Industry Management  
**Duration:** 3 Years (6 Semesters)  
**Places:** 25  
**Location:** Bishopstown Campus



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

#### Minimum Entry Requirements

Leaving Certificate in 5 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
5	0	O6/H7	O6/H7

### What is Beverage Industry Management?

Beverage Industry Management is a challenging and rewarding job. There are excellent opportunities for graduates across a wide range of businesses including bars, clubs, hotels, restaurants and with trade suppliers. A Beverage Industry Management qualification also gives the graduate opportunities to travel and experience diverse cultures.

The area is constantly evolving to meet new trends and customer needs and the graduate will have the opportunity to experience these changes and hopefully to contribute towards developing new and exciting concepts in bars and entertainment.

Recent changes in the industry have led to the development of modules in brewing and distillation with separate certification from the Institute of Brewing and Distilling.

### Helpful Leaving Certificate Subjects

English, Mathematics, and Business subject(s).

### Work Placement

There is a mandatory work placement element throughout the first year of the programme.

### Potential Areas of Employment

- Bar Management
- Bar Training & Education
- Wine Retailing and Sommelier
- Hotel, Restaurant, Catering Management
- Stock Control
- Club Management
- Entrepreneurship/Bar Business Ownership
- Brewing Industry
- Distilleries

### First Year at a Glance

- The theory and practice of Bar Operations and associated legislation
- Learn about food preparation and service as suitable for licensed premises
- Introduction to IT
- Wine Appreciation and its service
- Learn about the business side of pubs and other licensed premises
- Develop the personal skills and attributes to manage effectively



## About the Course

The Bachelor of Business in Beverage Industry Management course develops student's knowledge of the concepts and processes that are essential for sound managerial practice in the area, along with imparting the operational skills in areas such as drinks service and stylish food preparation and service.

The work placement is a core aspect of the course and allows the student the opportunity to apply the knowledge, insight and skills gained in class to the workplace under the guidance of an experienced industry professional and is supported by the Tourism & Hospitality Department.

The course is taught in a modern building, which is one of the finest Tourism and Hospitality buildings in Europe and includes a stylish Training Bar, a Demonstration Theatre, Training Restaurants, IT Labs and well equipped classrooms. In addition, students have easy access to the wider Institute facilities such as an excellent Library, IT facilities, sports and recreation facilities, and other student supports including a wide array of clubs and societies to suit every student's interests and tastes.

Strong practical content in early years of study, along with our graduates broad range of knowledge, skills and competencies, have meant that they are a candidate of choice for a variety of organisations and many have gone on to become entrepreneurs, owning their own successful business.

## Further Studies

For details, see [www.cit.ie/th](http://www.cit.ie/th)

Suitably qualified graduates are eligible to apply for entry to the one year add-on:

- > Bachelor of Business (Honours) in Hospitality Management (Level 8)

Honours Degree holders who achieve the specified level of academic performance are eligible to apply for a postgraduate course of study, both at CIT and at other third level colleges in Ireland and abroad.

## Career Opportunities

Graduates will find that there are opportunities to use their knowledge both in Ireland and abroad. This Degree offers students the opportunity to acquire appropriate managerial skills and techniques that will enable them to be effective and efficient in Beverage Industry Management and related areas such as retail and the food and entertainment industries.

## Contact Information

Gail Cotter  
Department of Tourism & Hospitality  
T: 021 433 5835  
E: [gail.cotter@cit.ie](mailto:gail.cotter@cit.ie)

## Question Time

### What are the facilities like for this course in CIT?

The facilities for this course are contained in the Department of Tourism & Hospitality Building which is of the highest European standards. The Department contains a stylish Training Bar, Training Restaurants, IT Labs and modern classrooms. The greater campus area boasts excellent sports, recreation and student support facilities.

The Brewing and Distillation modules will be delivered in the Faculty of Engineering and Science (also located at CIT Bishopstown Campus).

### What level of Business is incorporated into the course?

The course blends the skills of Business Management approximately 50/50 with the skills and knowledge needed for Beverage Industry Management. Business skills attained during the course complement career options and improve the future prospects of graduates.

### Should I have experience in bar work in advance of applying for this course?

Some experience in the licenced trade is an ideal preparation for undertaking a career in Beverage Industry Management, however, this is not a requirement for entry to this course.



## Roisín O'Sullivan

General Manager

"I can't believe how I fitted into college life so well almost immediately and loved my time there. During my time on this course, I participated in the 'Masters Apprentice', an RTE TV Show, which was a wonderful medium to showcase the skills which I had learned.

Following graduation, my career progressed quickly and I was only 21 when I achieved my first management role. I found that I had all of the practical training and business skills necessary to succeed in this. I am now the General Manager of what is one of the most progressive venues in Cork City. I am also a Brand Ambassador for a large drinks supplier and through this role I am involved in training bar staff on a range of products."

# Agriculture

## CR 010 Level 7 Award

- ▶ Progression to Level 8 Honours Degree and Postgraduate Programmes
- ▲ Higher Certificate Option

**Application:** CAO  
**Award Title:** Bachelor of Science in Agriculture  
**Duration:** 3 Years (6 Semesters)  
**Places:** 40  
**Location:** Bishopstown Campus & Teagasc Clonakilty Agricultural College



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

#### Minimum Entry Requirements

Leaving Certificate in 5 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
5	0	O6/H7	O6/H7

Holders of relevant NCVA/FETAC (now QQI) awards may apply through the CAO. Quality and Qualifications Ireland (QQI) operates within the NFQ, and has awards (formerly FETAC awards) placed at Level 5 (Certificate) or Level 6 (Advanced Certificate) of the framework.

### What is Agriculture?

Agriculture is of major importance in the Irish economy and represents the art and science of growing plants and the raising of animals for food, other human needs, or economic gain. The agri-food sector contributes significantly to Ireland's GDP, employment and exports. Most Irish farms are family operated, with the farmer being the owner, manager and provider of much of the labour. This wide remit calls for a range of knowledge and skills. In addition, the agri-business sector has been identified as a major sector for growth in the coming years across a range of associated industries.

### Helpful Leaving Certificate Subjects

English, Mathematics, Biology, and Agricultural Science.

### Work Placement

Formal work placement (minimum of 15 weeks) is an integral element of the course and takes place in Year 2.

### Potential Areas of Employment

- Farm Manager
- Agricultural Consultant
- Sales Representative
- Retail Management

### First Year at a Glance

- Crop Production: using land for maximum benefit while growing crops
- Human/Animal & Plant Biology
- Components of food and their role in human and animal nutrition
- Maintenance and operation of farm machinery including tractors, crop sowing and harvesting
- Finance for the agribusiness sector
- Basic mathematics to assist on decision making in an agricultural enterprise
- Workshops in animal management including experience with dairy, sheep and beef herds
- Information Technology (IT) Skills
- Soil Science: understanding the properties of soil and their impact of crop and animal production
- Site Visits e.g. National Ploughing Championships.



## About the Course

The students attend both Cork Institute of Technology and Teagasc Clonakilty Agricultural College throughout the course.

- In Year 1, students typically spend two days a week in Teagasc Agricultural College and three days in CIT.
- In Year 2, students typically spend two days in Teagasc Clonakilty Agricultural College and three days in CIT.
- In Year 3, students typically spend five days in CIT.

Students are required to complete a minimum of 15 weeks work placement in Year 2 in an agriculture related business. It will involve a set of agreed objectives for your placement, as well as the assistance of a person on site and a member of the academic staff at Teagasc Clonakilty Agricultural College or CIT. Students can travel on work placement to international destinations such as New Zealand, Australia, USA, or UK. It is a fantastic opportunity for students to travel and learn simultaneously. Placement can also be organised in Ireland.

## Further Studies

For details, see <http://business.cit.ie>

Suitably qualified graduates are eligible to apply for entry to the one year add-on

- > Bachelor of Science (Honours) in Agriculture (Level 8)

Graduates of the programme can also pursue specialisations in Agriculture with other Higher Education Institutes in Ireland and overseas.

## Career Opportunities

The course develops farming, business and management skills to enable graduates to follow careers as successful commercial farmers or in the agri-business sector. It will provide graduates with the skills they will need to be able to participate actively in policy decisions – whether they are local, regional or international – which will influence their profession and its role in a modern economy.

## Contact Information

Marie Dorgan  
Department of Accounting and Information Systems  
T: 021 433 5517  
E: [marie.dorgan@cit.ie](mailto:marie.dorgan@cit.ie)

Keith Kennedy  
Teagasc Clonakilty Agricultural College  
T: 023 883 2500  
E: [keith.kennedy@teagasc.ie](mailto:keith.kennedy@teagasc.ie)

## Question Time

### What level of Business is involved in the course?

The programme is taught using one third business modules and two third agriculture or science related modules.

### Do I have to be a farmer to study Agriculture?

No. The course has access to the farm resources at Teagasc Clonakilty Agricultural College necessary to complete the programme.

### What are my other career prospects if I don't want to go into farming?

Graduates can progress to complete the one year add-on BSc (Honours) in Agriculture or pursue employment opportunities with agricultural related business, e.g. sales representative, quality control and production manager.

### Are there travel opportunities?

Each year, students undertake placement opportunities overseas, e.g. with large dairy farms in New Zealand. Graduates have travelled abroad to continue their career in agriculture.

### Are there any further requirements?

Yes, Students will be required to hold a provisional driving licence and to purchase health and safety equipment such as hi-visibility jackets and safety boots. Further details will be given at induction.



## Daniel Hickey

Production Manager

"The Agriculture course in CIT allows you to diversify across all areas in agriculture. The course material is so broad that it offers a sector to suit everyone in agriculture. Rotating between both CIT and Teagasc Clonakilty Agricultural College was incredibly valuable as it gave me an in depth view of the practical side of agriculture as well as the theory behind running the business side in Agriculture.

In my opinion my placement was the best experience of my time in college. It helped me to understand exactly what area I wanted to work in and something that still stands to me is that it taught me that there are always different ways of doing things than how they are done at home.

I now work in the food production sector where I work with my parents to run a meat production business in West Cork called Skeaghanore West Cork Duck and also run a dairy operation on my father's farm. I concentrate mainly on Quality Control, Production Management, New Product Development and Dispatch.

I based my Final Year Project around New Product Development. This allowed me to create a project, which would relate to my future work area. With the help of the college and some external food businesses I got a unique insight into the food-manufacturing sector.

The material covered in the Agriculture Degree in CIT fashioned me into an employee that employers in the food sector want working for them. The material is broad enough to allow a student to go into any sector in food that he or she wishes."

# Engineering at a glance

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- Postgraduate Diploma in Structural Engineering
- Postgraduate Diploma in Civil Engineering (Environment and Energy)
- Postgraduate Diploma in Science in Construction Project Management
- Master of Architecture
- MSc in Architectural Technical Design (Taught)
- MSc in Interior Architecture (Taught)
- MEng in Chemical and Biopharmaceutical Engineering (Taught)
- MEng in Mechanical Engineering (Taught)
- MEng in Embedded Systems Engineering (Taught)
- MEng in Structural Engineering (Taught)
- MEng in Civil Engineering (Environment & Energy) (Taught)
- MSc in Construction Project Management (Taught)
- MEng (by Research)
- MSc in Architectural Technical Design (Research)
- MSc in Interior Architecture (Research)
- PhD



# Engineering (Common Entry) (Honours)

## CR 500 Level 8 Award

### ► Progression to Postgraduate Programmes

**Application:** CAO

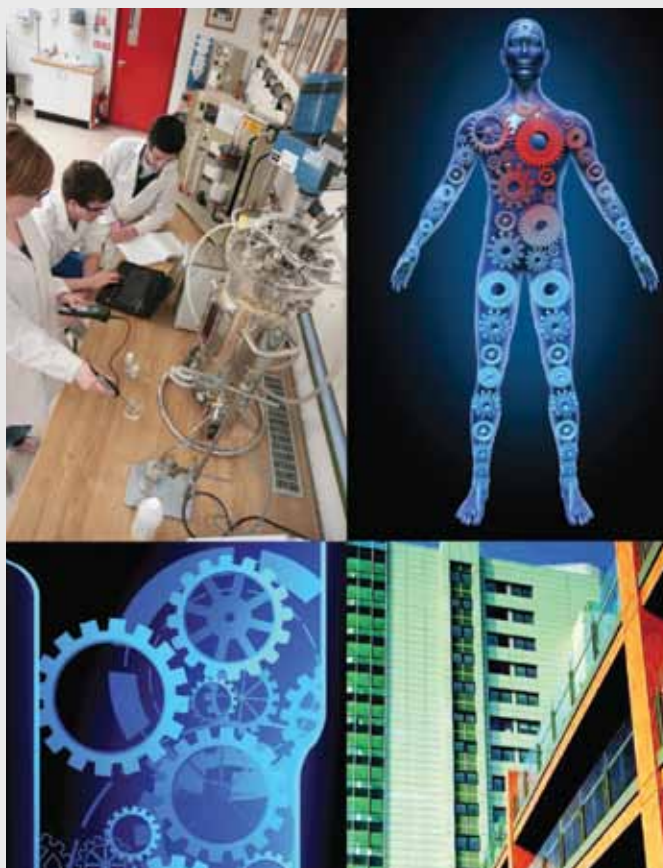
**Award Title:** Dependent on chosen specialisation.

- BEng (Honours) in Chemical and Biopharmaceutical Engineering
- BEng (Honours) in Mechanical Engineering
- BEng (Honours) in Structural Engineering
- BEng (Honours) in Biomedical Engineering

**Duration:** 1 Year (2 Semesters). On successful completion of the common entry year, students enter Year 2 of the chosen specialisation BEng (Honours) programme.

**Places:** 80

**Location:** Bishopstown Campus, Cork



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
4	2	O1/H6	O6/H7

### What is Engineering?

Engineering is the practical application of science and mathematics to solve problems, and it is everywhere in the world around you. Engineering technologies improve the way that we communicate, work, travel, stay healthy, and entertain ourselves.

Engineers are problem-solvers who want to make things work more efficiently, quickly, and less expensively. From computer chips and satellites to medical devices and renewable energy technologies, engineering makes our modern life possible.

### Helpful Leaving Certificate Subjects

Mathematics, Physics, Chemistry, and English.

### Potential Areas of Employment

- Chemical & Process Engineering
- Mechanical Engineering
- Civil, Structural & Environmental Engineering
- Biomedical Engineering

### First Year at a Glance

- Engineering Mechanics: understanding the performance of engineering materials when subject to external loads and forces
- CAD & Design: computer-aided design similar to the Leaving Certificate subject Design and Communication Graphics
- Engineering Physics: introduction to geometric optics, atomic and nuclear physics, electromagnetism, and thermal physics
- Engineering Chemistry: fundamentals of atomic theory and chemical bonding; inorganic and physical chemistry
- Material Science and Engineering: understanding the nature and properties of engineering materials
- Engineering Mathematics: mathematical topics of direct relevance to professional engineering studies
- Creativity, Innovation and Teamwork - Semester 1: in addition to introducing the student to third level education and to communication studies, this module explores and discusses the various engineering professional disciplines which the student will choose to pursue in Year 2 of the BEng (Hons) programmes





## First Year at a Glance (continued)

- Discipline Specific Elective Modules - Semester 2: choose 3 from 8 available: Structural Engineering (Mechanic 2 & Land Surveying); Mechanical Engineering (Mechanical

Engineering Design, Thermofluids); Biomedical Engineering (Biomechanics, Applied Anatomy & Physiology); Chemical & Process Engineering (Industrial Biotech, Process Engineering Labs)

## About the Course

The Common Engineering Honours Entry Scheme is a one year programme for students interested in engineering as a career, but who may be unsure of which discipline to follow.

The Scheme gives students the opportunity to see all four engineering disciplines first hand. Through the various modules on offer, interaction with the lecturers and site visits will assist the student to decide which discipline suits him/her best.

On successful completion of Year 1, students can enter the second year programme of their choice from any of the following Honours Engineering Degrees:

- CR 105 BEng (Honours) in Chemical and Biopharmaceutical Engineering
- CR 108 BEng (Honours) in Mechanical Engineering
- CR 109 BEng (Honours) in Structural Engineering
- CR 520 BEng (Honours) in Biomedical Engineering

Applicants are advised to visit each of the course sites for detailed descriptions at [www.cit.ie](http://www.cit.ie)

Each of the four BEng (Hons) programmes from which the student chooses his/her specialisation is fully accredited by Engineers Ireland at the Bachelor (Honours) Level 8 educational standard. For further details refer to <http://www.engineersireland.ie/Services/Accredited-Courses/Chartered-Engineer.aspx>

Lectures are supplemented by tutorials, laboratory and fieldwork. There is continuous assessment of reports and projects in addition to end of semester module examinations.

## Career Opportunities

Graduate engineers from the Honours Engineering Degree Programmes can choose from a range of excellent career opportunities working in the private or public sector with opportunities available at both national and international Level. Many graduates ultimately progress to senior management positions in their organisations. These Honours Engineering Degree Programmes also provide a basis for suitably qualified graduates to pursue more advanced studies.

## Contact Information

Department of Civil, Structural & Environmental Engineering

Des Walsh  
T: 021 432 6765  
E: [des.walsh@cit.ie](mailto:des.walsh@cit.ie)

Niamh Power  
T: 021 433 5959  
E: [niamh.power@cit.ie](mailto:niamh.power@cit.ie)

## Question Time

**Am I guaranteed my choice of study at the end of Year 1?**

Yes. Successful completion of the Common Engineering Entry Year ensures guaranteed entry to Year 2 of BEng (Honours) programme of choice from the list given.

**If I did not study Higher Level Mathematics in the Leaving Certificate will I struggle on the courses given that all course streams would normally require Higher Level Mathematics?**

The mathematics modules in Year 1 are specifically tailored to address the topics which underpin subsequent BEng (Honours) programme studies; this gives a very specific focus to student learning. While the Common Entry students undertake the same mathematics modules as the Year 1 BEng (Honours) students, an additional module of mathematics is undertaken in the inter-semester period in January each year.

This provides the Common Entry students with an additional learning opportunity in advance of the Semester 2 mathematics module. Experience has shown that students who do not have the usual BEng (Honours) minimum H4 requirement do succeed in the Common Entry programme if they have also taken Leaving Certificate Physics and/or Chemistry and are committed to their Year 1 studies.

**Students who do not have the O1/H6 Maths requirement, or equivalent, and who do not have Leaving Certificate Physics or Leaving Certificate Chemistry may find the programme particularly challenging and additional work effort and application is required of these students if they are to succeed.**

**What is the advantage of choosing the Common Entry?**

The Common Entry gives the student an opportunity to discover more about the various fields of engineering and to identify the engineering profession which is best suited to them. Entry to Year 2 of the BEng (Honours) programme of their choice, from the list identified, is guaranteed for Common Entry students who successfully complete the one year programme – there are no quotas or limits on the number of students who may enter Year 2 of a particular discipline.

The Common Entry offers those who may not have had the opportunity to take Higher Level Mathematics at Leaving Certificate, or those who may have opted out of Higher Level Mathematics during the Leaving Certificate programme, a second opportunity to attain the mathematical skills and competences required for BEng (Honours) Engineering Studies.

**CIT's Academic Learning Centre provides free tuition in a number of disciplines (<http://alc.cit.ie>).**

# Structural Engineering (Honours)

## CR 109 Level 8 Award

► Progression to Postgraduate Programmes

**Application:** CAO  
**Award Title:** Bachelor of Engineering (Honours) in Structural Engineering  
**Duration:** 4 Years (8 Semesters)  
**Places:** 20  
**Location:** Bishopstown Campus, Cork

### Admission

For admission to a programme, standard applicants must score the necessary CAO points and meet the minimum entry requirements.

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
4	2	H4 or (Note 1)	O6/H7

**Note 1:** The requirement for H4 Mathematics may also be satisfied by H4 in Applied Mathematics plus H6 in Mathematics.

**NB:** Please note the H4 grade in Mathematics can also be used to satisfy one of the H5 entry requirements.



### What is Structural Engineering?

Structural Engineering is the science and art of designing civil engineering facilities so that they can safely resist the forces to which they may be subjected. All structures from bridges to buildings, harbours to airports, must be able to meet these requirements. Structural Engineers aim to design these structures with safety, economy and elegance. This course provides graduates with the skills to work as a Civil Engineer, however, an additional emphasis is placed on Structural Engineering studies thus giving the graduates enhanced skills in this area.

### Helpful Leaving Certificate Subjects

Mathematics, Physics, and English.

### Work Placement

There is a work placement of 8 weeks at the end of Year 3. This module is a very popular elective with students and employers; the module can create employment opportunities for the graduate when s/he completes the final year of study.

### Potential Areas of Employment

- Consulting Civil & Structural Engineers
- Civil Engineering Contractors
- State/Semi-State Bodies and Utility Companies
- Local Authorities

### First Year at a Glance

- Engineering Mechanics: understanding the performance of engineering materials when subject to external loads and forces
- CAD & Design: computer-aided design similar to the Leaving Certificate subject Design and Communication Graphics
- Engineering Physics: introduction to geometric optics, atomic and nuclear physics, electromagnetism, and thermal Physics
- Engineering Chemistry: fundamentals of atomic theory and chemical bonding; inorganic and physical chemistry
- Material Science and Engineering: understanding the nature and properties of engineering materials
- Engineering Mathematics: mathematical topics of direct relevance to professional engineering studies
- Land Surveying: theory and practical application of linear surveying, levelling angle measurement, and the measurement of buildings
- Communication Skills: assists students in the transition to third-level education; team projects, oral & written presentation skills
- Elective module



## About the Course

The course is taught primarily through lectures, practicals, and tutorials. A significant emphasis is placed on project and experimental work with site visits and field trips making up an integral part of the coursework. There is a continuing regional, national and international requirement for structural engineers with a knowledge of construction. Students may use appropriate work experience in the summer period between Year 3 and Year 4 to complete the module with assessment and credit allocated in Year 4. Third year students are offered guidance, advice and assistance with the necessary arrangements and approval for their work experience proposal in the second semester of Year 3.

## Accreditation

The BEng (Honours) in Structural Engineering is fully accredited by Engineers Ireland for Chartered Engineer eligibility. This qualification meets the education standard for Chartered Engineer for graduates on or before 31/12/2012. For graduates after 1/1/2013 further learning is required to meet the education standard for Chartered Engineer. The taught MEng in Structural Engineering and the taught MEng in Civil Engineering (Environment and Energy), available in the Department as one year follow on courses, are fully accredited by Engineers Ireland as meeting the educational standard for Chartered Engineer from 1/1/2013. Engineers Ireland represents all engineering disciplines in Ireland and is a member of Federation Europeene d'Associations Nationales d'Ingenieurs (FEANI) through which Irish engineers are recognised in Europe. Engineers Ireland is a signatory to the Washington Accord through which Irish engineers are recognised in USA, UK, Canada, Australia, New Zealand, Hong Kong & South Africa.

## Further Studies

For details, see [www.cit.ie/cse](http://www.cit.ie/cse)

Suitably qualified graduates of an Honours Degree programme in Civil, Structural or Environmental Engineering are eligible to apply for a postgraduate degree at CIT:

- > Master of Engineering in Structural Engineering (Taught)
- > Master of Engineering in Civil Engineering (Environment & Energy) (Taught)
- > Master of Engineering (by Research)

Suitably qualified graduates in Civil, Structural or Environmental Engineering may proceed to a research programme leading to a PhD.

## ARUP Trust Scholarship

The Arup Scholarship will be awarded to a first year student who registers on the programme and will comprise an award of €2,250 for each of the four years of the programme. Scholarship applications may be made at <http://www.cit.ie/cse/scholarship> Please note the closing date: 21st March.

## Career Opportunities

Graduates will be well equipped to find employment opportunities in Consulting Engineering Offices and with Building & Civil Engineering contractors. They may also be employed by state and semi-state bodies, including local authorities and utilities boards.

For further information in relation to the Civil and Structural Engineering profession please refer to the Engineers Ireland website at [www.engineersireland.ie](http://www.engineersireland.ie)

For further information in relation to the Structural Engineering profession please refer to the Institution of Structural Engineers website at [www.istructe.org/](http://www.istructe.org/) The website for the Republic of Ireland branch of the Institution may be found at [www.istructe.ie/](http://www.istructe.ie/)

## Contact Information

Brian O'Rourke  
Department of Civil, Structural & Environmental Engineering  
T: 021 432 6485 E: [brian.orourke@cit.ie](mailto:brian.orourke@cit.ie)

## Question Time

### What is the difference between Structural Engineering and Civil Engineering?

Civil Engineering is the professional engineering discipline which deals with the design, construction and maintenance of the physical infrastructure of the built environment. This includes works such as buildings, roads, bridges, water and wastewater treatment and supply and harbour and coastal engineering works. In addition to the technical skills required for the above work a Civil Engineer will also have competencies in related fields such as project and asset management & health and safety.

Structural Engineering is a specialist discipline within Civil Engineering which deals with design, construction and maintenance of structures such as buildings, bridges, culverts, towers, masts and foundations. This course provides graduates with the skills to work as a Civil Engineer, however, an additional emphasis is placed on Structural Engineering studies thus giving the graduates enhanced skills in this area.



## Anna Pietrzak

Structural Design Engineer

Anna graduated with BEng (Hons) in Structural Engineering in 2016. She is currently employed with Arup Consulting Engineers as a Structural Design Engineer in its Cork Office. Anna is involved in a number of Irish and international projects working on structural analysis and design of new buildings, surveys of existing structures and infrastructure solutions where structural knowledge and problem solving skills are essential.

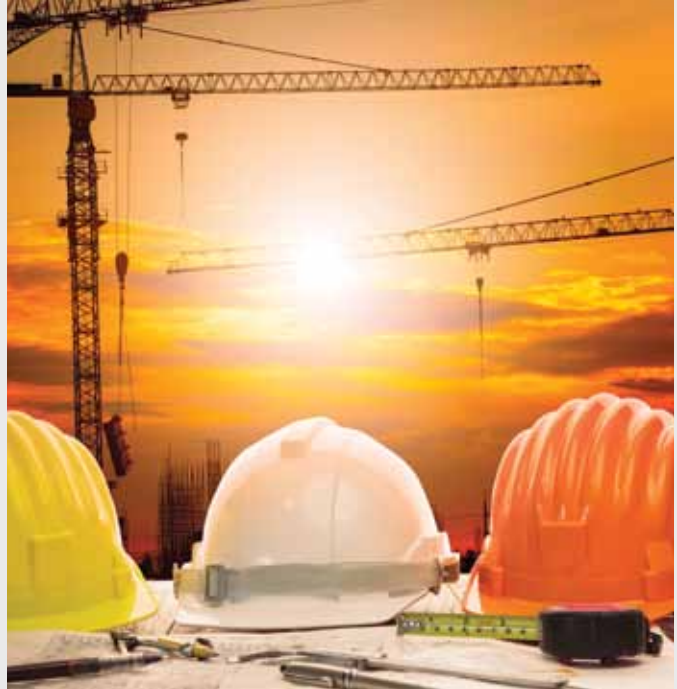
"My studies in CIT allowed me to apply theoretical knowledge to practical application. Use of the analysis software for my final year project provided a quick transition to the software used in a professional environment."

# Civil Engineering

## CR 051 Level 7 Award

- ▶ Progression to Level 8 Honours Degrees & Postgraduate Programmes
- ▲ Higher Certificate Option

**Application:** CAO  
**Award Title:** Bachelor of Engineering in Civil Engineering  
**Duration:** 3 Years (6 Semesters)  
**Places:** 40  
**Location:** Bishopstown Campus, Cork



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 5 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
5	0	O6/H7	O6/H7

### What is Civil Engineering?

Civil Engineering deals with one of the most visible signs of change and progress around us: the construction of new buildings, structures and infrastructure. New roads, rail-links, bridges and airports are always needed. New buildings are required for the public and private sectors and older buildings are redeveloped. Civil Engineers are required to plan, design, construct and maintain these facilities.

### Helpful Leaving Certificate Subjects

Mathematics, English, Physics, Design and Communication Graphics, and Construction Studies.

### Potential Areas of Employment

Associate Engineer/Higher Technician Level in the following areas:

- Consulting Engineers
- Civil Engineering Contractors
- State/Semi-State Bodies and Utility Companies
- Local Authorities
- Self-Employed Consultant

### First Year at a Glance

- **Mechanics:** understanding the performance of engineering materials when subject to external loads and forces
- **CAD:** computer-aided design similar to the Leaving Certificate subject Design and Communication Graphics
- **Construction:** domestic scale construction addressing the detailing of traditional and passive house techniques, external works and service provision
- **Health & Safety:** professional obligations under the Safety, Health and Welfare at Work Act and how to apply them to the workplace
- **Environmental Engineering:** an understanding of the environment in an engineering context; topics include water cycle, water quality, air and noise pollution, soil contamination
- **Land Surveying:** developing the ability to use specialist surveying equipment to complete land surveying and building measurement tasks
- **Material Science:** understanding the nature and properties of engineering materials
- **Mathematics**
- **Communication Skills**



## About the Course

Practical sessions are carried out to provide as much “hands on” experience as possible. There is continuous assessment of reports, drawings and projects in addition to mid and end of module examinations. The Department of Civil, Structural & Environmental Engineering has active links with colleges in France, Germany, Finland and the Czech Republic and arranges student study exchanges with these colleges.

## Accreditation

This course is fully accredited by Engineers Ireland. Engineers Ireland represents all engineering disciplines in Ireland and is a member of Federation Europeene d’Associations Nationales d’Ingenieurs (FEANI) through which Irish engineers are recognised in Europe. Engineers Ireland is a signatory to the Sydney and Dublin Accords through which Irish engineers are recognised in USA, Canada, Australia, New Zealand, Hong Kong, South Africa, and UK.

## Further Studies

For details, see [www.cit.ie/cse](http://www.cit.ie/cse)

Subject to availability of places, suitably qualified graduates may be considered for entry to Year 3 of

- > Bachelor of Engineering (Honours) in Structural Engineering

This is the most common progression route for graduates wishing to pursue a career in Civil/Structural Engineering. However, a civil engineering qualification provides a broad range of skills and graduates successfully seek opportunities for further studies at Honours Bachelor Degree level across a wide range of other cognate disciplines. For example, in recent years, some graduates of the programme have pursued further studies in CIT in

- > Year 3 of Bachelor of Engineering (Honours) in Sustainable Energy Engineering (CR510)
- > Year 4 of Bachelor of Science (Honours) in Construction Management (CR572)

## Career Opportunities

An undergraduate education in Civil Engineering provides a very good platform not only for a career and/or further

education in Civil Engineering but potentially for a much wider spectrum of employment opportunities. Graduates are likely to work in conjunction with architects, quantity surveyors, builders and also with personnel from other engineering disciplines.

For further information in relation to the Civil Engineering profession please refer to the Engineers Ireland website at [www.engineersireland.ie](http://www.engineersireland.ie)

## Contact Information

David Cadogan  
Department of Civil, Structural & Environmental Engineering  
T: 021 433 5957  
E: [david.cadogan@cit.ie](mailto:david.cadogan@cit.ie)

## Question Time

### What do Civil Engineers do?

Civil Engineering is the professional engineering discipline which deals with the design, construction and maintenance of the physical infrastructure of the built environment. This includes works such as buildings, roads, bridges, water treatment and supply, wastewater treatment, and harbour and coastal engineering works. In addition to the technical skills required for the above work a Civil Engineer will also have competencies in related fields such as project and asset management, Building Information Modelling, and health and safety.

### Why study Civil Engineering?

Civil Engineers identify and analyse problems, and develop and implement solutions. In addition to technical skills Civil Engineers have competences in related fields of project management and health and safety. Civil Engineers work as individuals and in teams. The problem solving, solution implementation and management skills of Civil Engineers are applicable to a broad range of work environments and are valued by a wide range of employers.

### What level of drawing is required for this course?

Prerequisite drawing studies are not required. Drawing skills are addressed in the programme modules on the assumption that the students have no prior knowledge or skills in the area.



## Edward Hurley

### Engineering Technologist

Edward graduated with a BEng in Civil Engineering in 2016 and is currently employed by DOSA Consulting Engineers as an Engineering Technologist. The company specialises in innovative execution of complex engineering projects including recreational, industrial, commercial, educational and residential development projects. Edward works as a member of the design team to ensure that projects are delivered in a timely and professional manner to clients.

Edward also undertook the Certificate in Building Information Modelling (BIM) Technologies. DOSA utilises their BIM capabilities to promote collaboration, coordination and integration within the design environment. Understanding and applying BIM technologies and methodologies is an important element within the architecture, engineering and construction (AEC) industry. “The relevance of my BEng education is evident on a daily basis and has equipped me with the necessary skills to meet the ongoing challenges of my position.”

# Environmental Engineering

## CR 055 Level 7 Award

» Progression to Level 8 Honours Degrees & Postgraduate Programmes

**Application:** CAO  
**Award Title:** Bachelor of Engineering in Environmental Engineering  
**Duration:** 3 Years (6 Semesters)  
**Places:** 20  
**Location:** Bishopstown Campus, Cork



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 5 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
5	0	O6/H7	O6/H7

### What is Environmental Engineering?

Environmental Engineering is that branch of engineering concerned with the application of scientific and engineering principles for the protection and improvement of the environmental quality of the world in which we live.

Environmental Engineers work on issues of sustainability, provide safe and secure drinking water, collect, treat and properly dispose of wastewater and other wastes, design flood protection measures, maintain or improve air and noise quality, design sustainable urban drainage systems, clean up contaminated land and groundwater, and help communities and industry minimise pollution, among many other activities.

It is most commonly a distinct and specialist engineering discipline within the Civil Engineering profession and it is in this context that this course has been developed.

### Helpful Leaving Certificate Subjects

Mathematics, English, and Physics.

### Potential Areas of Employment

- Consulting Engineers
- State/Semi-State Bodies
- Utility Companies
- Local Authorities
- Contractors
- Self-Employed Consultant

### First Year at a Glance

- **Mechanics:** understanding the performance of engineering materials when subject to external loads and forces
- **CAD:** computer-aided design similar to design and communications graphics in the Leaving Certificate
- **Construction:** domestic scale construction addressing the detailing of traditional and passive house techniques, external works and service provision
- **Health & Safety:** professional obligations under the Safety, Health and Welfare at Work Act and how to apply them to the workplace
- **Environmental Engineering:** an understanding of the environment in an engineering context; topics include water cycle, water quality, air and noise pollution, soil contamination
- **Land Surveying:** developing the ability to use specialist surveying equipment to complete land surveying and building measurement tasks
- **Material Science:** understanding the nature and properties of engineering materials
- Mathematics
- Communication Skills

### About the Course

Practical sessions are carried out to provide as much “hands on” experience as possible. There is continuous assessment of reports, drawings and projects in addition to mid and end of module examinations. The Department of Civil,



Structural & Environmental Engineering has active links with colleges in France, Germany, Finland, and the Czech Republic and student study exchanges with these colleges can be arranged.

Many graduates of the programme will use the qualification as a stepping stone to attain an Honours degree in the discipline.

### Accreditation

The Department has a long history of professional accreditation of its courses; the well-established BEng in Civil Engineering course is fully accredited by Engineers Ireland and it is envisaged that the BEng in Environmental Engineering will be similarly accredited in due course.

The BEng (Honours) and taught MEng programmes in the Department successfully completed the Engineers Ireland accreditation process in 2012 & 2014. Engineers Ireland represents all engineering disciplines in Ireland and is a member of Federation Europeene d'Associations Nationales d'Ingenieurs (FEANI) through which Irish engineers are recognised in Europe. Engineers Ireland is a signatory to the Sydney and Dublin Accords through which Irish engineers are recognised in USA, Canada, Australia, New Zealand, Hong Kong, South Africa, and the UK.

### Further Studies

For details, see [www.cit.ie/cse](http://www.cit.ie/cse)

Subject to the achievement of the appropriate entry requirements graduates of the programme may progress to an Honours engineering degree programme in Civil or Environmental Engineering.

- Further study opportunities in CIT include direct entry to
- > Year 3 of Bachelor of Engineering (Honours) in Sustainable Energy Engineering (CR510)
  - > Year 4 of Bachelor of Science (Honours) in Construction Management (CR572)

The Department has an active environmental engineering research unit and additionally offers taught postgraduate opportunities in the environmental engineering discipline (Level 7 & Level 8 Special Purpose Awards - Certificate in Environmental and Energy Engineering and a Level 9 MEng in Civil Engineering (Environment and Energy) programme).

### Career Opportunities

An undergraduate education in engineering provides a very good platform not only for a career and/or further education in engineering but potentially for a much wider

spectrum of employment opportunities. Graduates of this programme will have developed skills in a broad range of civil engineering disciplines but will have developed particular expertise in environmental engineering.

For further information in relation to the environmental engineering profession please refer to the Engineers Ireland website at [www.engineersireland.ie](http://www.engineersireland.ie)

### Contact Information

David Cadogan  
Department of Civil, Structural & Environmental Engineering  
T: 021 433 5957  
E: [david.cadogan@cit.ie](mailto:david.cadogan@cit.ie)

### Question Time

#### What topics are studied in this programme?

The first two years of the programme involve foundation studies in theory and fundamental principles. Fundamental civil engineering practice studies are undertaken in the areas of Environmental Engineering, Construction, Health and Safety, Materials Technology, Surveying, and Structural Engineering.

In Year 3 the mandatory modules have a particular focus on Environmental Engineering with skills in Water, Wastewater, Integrated Waste, Transport Planning and Infrastructure Design being developed; engineering practice skills are further developed in the areas of Management and Geotechnical Engineering. The theory and fundamental principles studies necessary for the further academic progression of the graduate are also provided. The Year 3 Project module (10 credits) affords the student an opportunity to carry out an engineering investigation into a specific topic where he/she can use the knowledge gained during his/her studies.

#### Why study Environmental Engineering?

Increased environmental awareness and significant developments in environmental legislation and quality assurance requirements have created increased career opportunities locally, nationally and internationally for environmental engineers. Environmental engineering infrastructure such as systems for water supply and distribution, wastewater collection and treatment and flooding control, which were developed some time ago, are in urgent need of renewal and the provision of modern management systems for the broad remit of today's environmental engineering infrastructure is a priority in a world increasingly aware of sustainability and cost issues; qualified Environmental Engineers are needed to deliver this renewal.



## Michael Daly

Graduate Engineer

Michael graduated with a BEng in Environmental Engineering in 2016 and is currently employed as a Graduate Civil engineer with J Murphy & Sons. He is based in the Natural Resources and Marine (pipelines) sector of the company and is currently involved in the Design and Build of 100 AGI gas terminals across the UK for National Grid. His studies in CIT equipped him with the necessary knowledge and skills across a broad range of engineering disciplines including environmental, civil, and land surveying.

# Construction Management (Honours)

## CR 572 Level 8 Award

» Progression to Postgraduate Programmes

**Application:** CAO  
**Award Title:** Bachelor of Science (Honours) in Construction Management  
**Duration:** 4 Years (8 Semesters)  
**Places:** 20  
**Location:** Bishopstown Campus, Cork

### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
4	2	O6/H7	O6/H7



### What is Construction Management?

Construction Management is the overall planning, coordination, and control of a development from inception to completion. Construction Management is aimed at meeting a client's requirements in order to produce a functionally and financially viable project in the Engineering and Architectural environment.

Construction Management involves the planning, design, production, adaptation, maintenance, restoration, conservation, financial and engineering management, evaluation and recycling of the built environment.

### Helpful Leaving Certificate Subjects

Construction Studies, Engineering, Technology, and Science subjects.

### First Year at a Glance

- Construction Industry and Procedures: Who does what in the development process i.e. types of firm (sole trader, partnerships, company); participants in the industry (clients, consultants, contractors); roles and responsibilities (construction manager, architect, quantity surveyor, building surveyor); sectors in the industry (architecture and design, planning and development, construction, health & safety, estates and facilities management); measurement of basic structures
- Construction Management Measurement & Procedures: how to measure what makes up a building i.e. interpret client requirements, and the responses of consultants and contractors; and outline the principles of measurement and complete measurement of basic construction works
- Construction Materials & Structures: testing materials for a building, i.e. identify basic structural forms; recognise equilibrium in structural forms; structural use and material properties of concrete, steel, glass, timber and plastics
- Organisation and Management: organising people to do things in the right place at the right time i.e. identify principles and practices of management in construction; describe the roles and duties of the construction manager at the pre-contract and post-contract stages of a construction project; determine the resources for construction projects





## Potential Areas of Employment

- Project and Contracts Management
- Project Planning & Control
- Facilities Management
- Building Surveying
- Project Evaluation & Development
- Design Management & Administration
- Education - Teaching & Lecturing

## About the Course

The course is taught primarily through lectures, practicals, and tutorials. Significant emphasis is placed on project and experimental work with site visits and field trips making up an integral part of the coursework. The student is required to submit a project evaluation and development report, and a dissertation.

## Accreditation

The Construction Management Honours degree is recognised internationally because of its accreditation by the Chartered Institute of Building (CIOB) enabling graduates to find suitable employment, either in Ireland or abroad.

## Further Studies

For details, see [www.cit.ie](http://www.cit.ie)

Suitably qualified graduates are eligible to apply for a postgraduate degree at CIT:

- > Postgraduate Diploma in Construction Project Management (Taught)
- > MSc in Construction Project Management (Taught)
- > MSc (by Research)

## Career Opportunities

It is a challenging and rewarding career by providing the opportunity to be involved in the development of essential infrastructure in many parts of the world.

The Construction Manager is adaptable to many roles within the broader built environment. This may include: the overall management and development of construction and infrastructure projects, building control for Local and National Authorities, Education, Design, and Consultancy.

## Contact Information

Joseph Kehoe  
Department of Construction  
T: 021 433 5410  
E: [joseph.kehoe@cit.ie](mailto:joseph.kehoe@cit.ie)

## Question Time

### Why does a Client require a Construction Manager?

A Client requires a Construction Manager to plan, coordinate, supervise, and control complex and financially demanding developments. Most Clients would not have the necessary experience or expertise to carry out these functions, and rely on their Construction Management expert to guide them through the process.

### Is a Construction Manager site based?

Not necessarily, the Construction Manager may be site-based or office based. The Construction Manager can perform a number of different roles within the Built Environment. These include working for Contracting organisations, Multidisciplinary Project Management Companies, Local and National Governmental Authorities, and Consultancies.

### What are the prospects for employment in Construction Management?

Due to the variety of potential employment areas for Construction Management Graduates, the majority of recent graduates have successfully gained employment either at home or abroad.

### Is the BSc (Honours) in Construction Management recognised abroad?

Yes, the Construction Management Honours degree is recognised internationally because of its accreditation by the Chartered Institute of Building (CIOB) enabling graduates to find suitable employment, either in Ireland or abroad.



## Conor O'Keefe

Construction Manager

"Since graduating from CIT, I trained with a principal contractor under a graduate development scheme. The scheme provided technical, commercial and management experience which enabled me to utilise the knowledge I gained from the BSc (Honours) in Construction Management. I have worked on a number of complex, inner city projects in a project management role. Achieving Chartered status (MCIOB) of the Chartered Institute of Building has been my career highlight to date.

The honours degree provided me with the skills to develop a rewarding and challenging career in the construction industry. The importance of professionalism was highlighted at CIT and has given me the appetite to pursue a diverse career in construction management. I am currently based in London with a major construction organisation."

# Quantity Surveying (Honours)

## CR 570 Level 8 Award

» Progression to Postgraduate Programmes

**Application:** CAO  
**Award Title:** Bachelor of Science (Honours) in Quantity Surveying  
**Duration:** 4 Years (8 Semesters)  
**Places:** 20  
**Location:** Bishopstown Campus, Cork



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
4	2	O6/H7	O6/H7

### What is Quantity Surveying?

A Quantity Surveyor manages all costs relating to building and civil engineering projects, from the initial calculations to the final figures. Quantity Surveyors seek to minimise the costs of a project and enhance value for money, while still achieving the required standards and quality. A Quantity Surveyor may work for either the client or the contractor, working in an office or on-site. They are involved in a project from the start, preparing estimates and costs of the work.

### Helpful Leaving Certificate Subjects

Construction Studies, and Design and Communication Graphics.

### Potential Areas of Employment

- Professional Quantity Surveyor
- Contractor's Quantity Surveyor
- Estimator

### First Year at a Glance

- Construction Industry and Quantity Surveying Procedures: who does what in the development process i.e. identify the types of firms, their roles and responsibilities in the construction industry; interpret client requirements, and the responses of consultants and contractors; outline the principles of measurement and complete measurement of basic construction works
- Quantity Surveying Organisation and Management: organising people to do things in the right place at the right time i.e. identify principles and practices of management in construction; describe the roles and duties of the construction manager at the pre-contact and post-contract stages of a construction project; determine the resources for construction projects
- Building and Environmental Science: how you light, heat and ventilate a building, i.e. principles of heat loss; conventional domestic heating systems; low carbon emitting domestic heating systems; domestic water supply and waste water
- Maths for Technology: maths that you would need for building



## About the Course

A significant emphasis is placed on project and experimental work with site visits and field trips making up an integral part of the coursework. The course culminates with students submitting a bespoke construction project of their choosing demonstrating the application of technically appropriate, economically viable and environmentally sustainable solutions, from inception through to contract completion. Graduates, upon gaining employment, may commence their structured training leading to designation as a Chartered Surveyor.

## Accreditation

The course is fully accredited by the Society of Chartered Surveyors Ireland (SCSI), The Royal Institution of Chartered Surveyors (RICS), the Chartered Institute of Civil Engineering Surveyors (CICES), and the Chartered Institute of Building (CIOB).

## Further Studies

For details, see [www.cit.ie](http://www.cit.ie)

Suitably qualified graduates are eligible to apply for a postgraduate degree at CIT:

- > Postgraduate Diploma in Construction Project Management (Taught)
- > MSc in Construction Project Management (Taught)
- > MSc (by Research)

## Career Opportunities

It is a challenging and rewarding career and affords the Quantity Surveyor an opportunity to travel to many parts of the world in his or her role as construction cost advisor/manager.

The Professional Quantity Surveyor is normally office based within a consultancy firm and their working hours will invariably involve visiting sites to attend site meetings and to monitor the progress and financial aspects of their construction projects.

The Contractor's Quantity Surveyor is normally site based and involves controlling construction costs for the Contractor/Builder as they occur on site. He/she also procures various subcontractors to carry out different work packages for the building contract.

## Contact Information

James Kilduff  
Department of Construction  
T: 021 432 6108  
E: james.kilduff@cit.ie

## Question Time

### What is the difference between a Professional QS and a Building QS?

The Professional Quantity Surveyor represents the client in all aspects of construction from feasibility study to final construction costs and is normally practice based. The Contractor's Quantity Surveyor works for the main contractor/builder to control construction costs as they occur on site and normally this Quantity Surveyor is site based.

### How do I become Chartered?

Eligible graduates may apply to the Society of Chartered Surveyors Ireland (SCSI) for membership and undertake the Assessment of Professional Competence (APC). This is typically over two years and successful completion of this entitles them to full chartered membership of the SCSI.

### Can a Quantity Surveyor work also as a Project Manager?

The project management role can be undertaken by any of the construction professions, provided they have the necessary management skills and capability.



## Liam O'Shea

Quantity Surveyor

"In 2007, I graduated with a BSc (Honours) in Quantity Surveying. I am employed by Michael Barrett Partnership in Cork and I work on a diverse range of both public and private sector projects. My responsibilities include cost management of construction contracts at both pre and post contract stages.

CIT has provided me with an excellent understanding of the roles and responsibilities of Quantity Surveyors."

# Construction (Common Entry)

## CR 052 Level 7 Award

- ▶ Progression to Level 8 Honours Degrees & Postgraduate Programmes
- ▲ Higher Certificate Option

**Application:** CAO

**Award Title:** Depends on specialisation. Choose from:

- BSc in Construction Management
- BSc in Quantity Surveying

**Duration:** 3 Years (6 Semesters)

**Places:** 40

**Location:** Bishopstown Campus, Cork



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

#### Minimum Entry Requirements

Leaving Certificate in 5 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
5	0	O6/H7	O6/H7

### What is Construction?

Construction is a process of the built environment which involves many areas of employment. For modern, complex buildings it involves the commissioning, management, design, and assembly of huge amounts of raw materials and the use of considerable labour resources.

### Helpful Leaving Certificate Subjects

Construction Studies, and Design and Communication Graphics.

### Potential Areas of Employment

- Site Management
- Quantity Surveying/Estimating
- Project Planning and Management
- Working with Developers, Designers and Contracting Organisations

### First Year at a Glance

- Construction Technology: site visit, analysis and set up; introduction to foundations, walls, floors, insulation, radon protection; building regulations; and roofs
- Building and Environmental Science: how you light, heat and ventilate a building, i.e. principles of heat loss; conventional domestic heating systems; low carbon emitting domestic heating systems; domestic water supply and waste water
- Construction Graphics: how to communicate what is in a building by drawing and computer aided design, i.e., drawing equipment, sheet layout, lettering, lines, scales, dimensioning and representation of materials; geometrical setting out of arches; freehand drawing; location floor plans; reading and interpretation of a drawing; and AutoCAD
- Construction Materials & Structures: testing materials for a building; identify basic structural forms; recognise equilibrium in structural forms; structural use and material properties of concrete, steel, glass, timber and plastics
- Maths for Technology: maths that you would need for Building



### About the Course

For the first two years of the programme students follow a common curriculum. Students who successfully complete Year 1 and Year 2 may choose either the Bachelor of Science in Construction Management or the Bachelor of Science in Quantity Surveying in Year 3.

The Construction Manager monitors the progress and quality of the work on site, supervising and coordinating subcontractors and specialist suppliers.

The objective of Quantity Surveying is to control cost, limit risk and add value to a project.

In addition to lectures, time is also given to practical work in surveying, drawing, project work, and Computer Aided Design (CAD).

### Accreditation

This course qualifies for exemptions from the Chartered Institute of Building.

### Further Studies

For details, see [www.cit.ie](http://www.cit.ie)

Suitably qualified graduates may apply for entry to Year 4 (final) of:

- > Bachelor of Science (Honours) in Construction Management
- or
- > Bachelor of Science (Honours) in Quantity Surveying

### Career Opportunities

The principal areas of employment are as surveyors or as construction managers with contracting organisations, government departments, semi-state bodies, and private practice companies.

### Contact Information

Tim McNamara  
Department of Construction  
T: 021 433 5414  
E: [tim.mcnamara@cit.ie](mailto:tim.mcnamara@cit.ie)

### Question Time

#### What is the advantage of studying the Common Entry?

The student has the flexibility of the common two years of the course before having to decide on which specialist option they want to graduate in.

#### What level of drawing is required for this course?

Drawing is a useful skill but not essential. It helps students understand the technology that they will ultimately be managing or measuring.



### Gerry O'Rourke

Project Manager

A previous Lord Pilkington Prize Gold Medallist, Gerry is currently working as a project manager for MACE Limited, a major Construction Management Company in the UK. "The course is very focused, ensuring that up to date methods are to the fore."

Gerry aims to rise to the top of his profession and having already achieved first in the world for his Construction Management Project, his future seems assured.



### Nadine Scallan

Chartered Quantity Surveyor

"I am currently employed as a Senior Surveyor. Projects with which I have been involved to date include housing and apartment developments, hotels, an art gallery and a health centre. My role on these projects extends from preparing budgets, bills of quantities, interim valuations, project cost control and cost reviews to the preparation and agreement of final accounts. What I enjoy most about my job is the range and variety of projects."

# Architecture (Honours)

## CK 606 Level 8 Award

» Progression to Postgraduate Programmes

**Application:** CAO

**Award Title:** Bachelor of Science (Honours) in Architecture

**Duration:** 4 Years (8 Semesters)

**Places:** 45

**Location:** Cork Centre for Architectural Education, Copley St., Cork



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English and Irish Grade
4	2	O6/H7	O6/H7

### What is Architecture?

Architecture explores new ways of living, investigates new technologies and materials, and strives to ensure that new buildings, towns and landscapes are environmentally sustainable. Architecture combines art, science and technology in the design and construction of buildings and their surroundings within a socio-cultural context. Architects engage themselves in all aspects and stages of the architectural process from design, through planning, to construction and management. They are involved in projects of a diverse nature, including the design of domestic, retail, leisure, health, commercial, industrial and educational buildings, towns and urban landscapes.

### Helpful Leaving Certificate Subjects

Art, Mathematics, English, Design and Communication Graphics, and a Science subject.

### Where will I be studying?

The majority of lectures, practicals, and studio work are held in the Cork Centre for Architectural Education in Cork city. Some instruction may take place in the CIT Bishopstown campus and the University College Cork (UCC) campus.

### Potential Areas of Employment

- Private Practice
- Commercial
- Government Organisation
- Local Authority

### First Year at a Glance

- Design Studio: basic design projects and sketchbooks involving individual and group work; basic graphic techniques; sketching and painting; pencil drawing to scale; freehand drawing; model-making; and photography
- Construction, Materials and Structures: introduction to the basic principles which are pertinent to the issues of building construction and materials, structural design and analysis for architecture
- Applied Technology Studio: preparation of technical drawings and models; design of components for simple building types; options for construction and detailing of simple building types; modelling and testing the behaviour of simple structural members subjected to forces
- History and Theory of Architecture: examines the spatial, formal and structural components of key buildings from Ancient Greece through the Roman, Early Christian, Byzantine, Romanesque and Gothic periods to the Renaissance, Baroque to Post-Modern, reflecting on how these responded to the cultures and societies in which they were produced



## About the Course

The BSc (Honours) Degree in Architecture is jointly offered by Cork Institute of Technology (CIT) and University College Cork (UCC).

This is a studio and project-led course integrating the three pillars of architectural education; design, technology and the humanities. The first year of study provides a foundation in design and the built environment, appropriate to both the discipline of architecture and associated design courses.

The following years of study will become progressively more architecturally focused whilst still allowing and encouraging experimentation and research into associated disciplines. Transferrable skills in communication, team working, computer aided design, and management are also developed.

This exciting and innovative Honours Degree programme has been developed with the support of the local architectural profession and in consultation with the Royal Institute of Architects of Ireland (RIAI).

## Accreditation

Combined with the Master of Architecture, it is accredited by the RIAI. Together with two years' work experience in an architect's office and a Postgraduate Certificate in Architectural Professional Practice and Experience, this will allow you to register as a professional architect.

Registration provides for legal protection of the title of "Architect", as required by the Irish Building Control Act 2007.

## Further Studies

For details, see <http://architecture.cit.ie>

Suitably qualified graduates will be eligible to enter a Master of Architecture programme, which together with a Certificate in Architectural Professional Practice and Practical Experience, will provide the overall education programme geared towards professional accreditation.



## Career Opportunities

The study of Architecture provides opportunities to develop a wide range of transferrable skills. Graduates will have had rich experience of working in teams, working to deadlines, developing abilities in verbal and graphic communication and most importantly, skills in creativity, design and innovation - the essential ingredients of success in the contemporary economy.

Architecture itself provides exciting and widely varied career opportunities. Graduates may specialise in certain types of buildings, or concentrate on a particular area such as design, technology, architectural conservation or project management.

Graduates may work as part of a team in private practice, or in the architectural section of a commercial organisation or a Government Department or Local Authority.

## Contact Information

Katherine Keane  
Department of Architecture, CIT  
T: 021 433 5970  
E: [katherine.keane@cit.ie](mailto:katherine.keane@cit.ie)

Gerry McCarthy  
Cork Centre for Architectural Education  
T: 021 429 8401  
E: [gerrymccarthy@ucc.ie](mailto:gerrymccarthy@ucc.ie)

## Question Time

### How is my time split between CIT and UCC?

This is a joint programme between CIT and UCC. It is housed in the Cork Centre for Architectural Education, in Cork city.

### How much of my time is devoted to studio and project work?

50% is devoted to studio.

### What kind of personal skills do I need?

You need to be a creative, innovative, logical, critical thinker... think outside the box!

### What is the difference between Architectural Technology and Architecture?

Architectural Technology can be described as the technical design of the building while Architecture focuses on the creative aspects of spatial and aesthetic design in the total building.

# Architectural Technology (Honours)

## CR 560 Level 8 Award

» Progression to Postgraduate Programmes

**Application:** CAO  
**Award Title:** Bachelor of Science (Honours) in Architectural Technology  
**Duration:** 4 Years (8 Semesters)  
**Places:** 36 – 40 (between CR 560 and CR 090)  
**Location:** Bishopstown Campus, Cork



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
4	2	O6/H7	O6/H7

### What is Architectural Technology?

The Architectural Technologist is involved with the technical issues of the architectural design process and plays the role of a technical designer. S/he is a team player who provides an expertise in technical design principles and knowledge in the development of the built environment. S/he is an organiser and coordinator of the diverse disciplines involved in the design and construction process.

### Helpful Leaving Certificate Subjects

Art, Mathematics, English, Design and Communication Graphics, and a Science subject.

### Potential Areas of Employment

- Private Practice
- Commercial
- Government Organisation
- Local Authority

### First Year at a Glance

The core of the learning experience takes place in the studio through technical design projects and the application and integration of knowledge and skills explored in lecture modules. The focus of the Year 1 studio is the exploration of simple structures in wood, steel, concrete and masonry and construction detailing.

Lectures include Technology Materials and Structure (wood, steel, concrete, and masonry), Environmental Science and Services (sustainability, climate, resources), while skills developed include teamwork, problem solving, communication, drawing, and basic computer graphics.





## About the Course

This is a studio-led course involving working drawings and other construction related projects, with a range of lectures and site visits designed to contribute to the student's comprehension and to the development of project work.

Students in Year 4 of the programme have the opportunity to pursue specific areas of research critical to the built environment and architectural practice. Students identify individual areas of interest in the architectural process and conduct intensive research leading to expertise. These emerging specialisms are sought by architectural practices and allied disciplines in architecture and construction and provide graduates with competitive skills.

## Accreditation

This course is in the process of accreditation review by the Royal Institute of Architects in Ireland. This course is fully accredited by the Chartered Institute of Building.

## Further Studies

For details, see <http://architecture.cit.ie>

Suitably qualified graduates are eligible to apply for a postgraduate degree at CIT.

- > MSc in Architectural Technical Design

## Career Opportunities

A graduate of Architectural Technology is a critical member of the Design Team, as s/he has an excellent appreciation and knowledge of the other Design Team discipline roles, and is involved in the coordination and development of a project at all stages.

Graduates may specialise in certain building typologies or concentrate on a particular area such as technical design, technology, architectural conservation or project management. Graduates may work as part of a team in private practice, or in the architectural section of a commercial organisation or a Government Department or Local Authority.

## Contact Information

Katherine Keane  
Department of Architecture  
T: 021 433 5970  
E: [katherine.keane@cit.ie](mailto:katherine.keane@cit.ie)

## Question Time

**How much of my time is devoted to studio and project work?**

Approximately 50% of time is devoted to studio and project work.

**How helpful is it to have Design and Communication Graphics at Leaving Certificate level?**

Design and Communication Graphics would provide a solid foundation for this programme.

**What is the difference between Architectural Technology and Architecture?**

Architectural Technology can be described as the technical design of the building while Architecture focuses on the creative aspects of spatial and aesthetic design in the total building.



## Jay Stacy

Architectural Technologist

Upon graduation, Jay began working with Bluett & O'Donoghue Architects - Dublin, after completing a summer internship in the year prior. Jay has worked on multiple projects using a number of computer software packages. Types of projects include student accommodations, apartment complexes, offices, marine based projects, and of course, family homes. Day to day duties often include site visits, preparation of computer drawings, problem solving, and design team meetings. Currently, one of Jay's projects include a €2+ million project on a protected structure and theatre. Later this year, he will undertake a postgraduate programme in Low Energy Design, which will lead onto a Masters in the same field.

"Being a CIT student was some of the most difficult, but best years of my life. The craic was good and the work was tough. But CIT has given me both the academic skills and mental skills needed to give me a head start and be as prepared as I could be for the demands of the real world in the construction industry."

# Architectural Technology

## CR 090 Level 7 Award

► Progression to Level 8 Honours Degree & Postgraduate Programmes

**Application:** CAO

**Award Title:** Bachelor of Science in Architectural Technology

**Duration:** 3 Years (6 Semesters)

**Places:** 36 – 40 (between CR 090 and CR 560)

**Location:** Bishopstown Campus, Cork



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 5 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
5	0	O6/H7	O6/H7

### What is Architectural Technology?

The Architectural Technologist is involved with the technical issues of the architectural design process and plays the role of a technical designer. S/he is a team player who provides an expertise in technical design principles and knowledge in the development of the built environment. S/he is an organiser and coordinator of the diverse disciplines involved in the design and construction process.

### Helpful Leaving Certificate Subjects

Art, Mathematics, English, Design and Communication Graphics, and a Science subject.

### Potential Areas of Employment

- Private Practice
- Commercial
- Government Organisation
- Local Authority

### First Year at a Glance

The core of the learning experience takes place in the studio through technical design projects and the application and integration of knowledge and skills explored in lecture modules. The focus of the Year 1

studio is the exploration of simple structures in wood, steel, concrete and masonry and construction detailing. Lectures include Technology Materials and Structure (wood, steel, concrete, and masonry), Environmental Science and Services (sustainability, climate, resources), while skills developed include teamwork, problem solving, communication, drawing, and basic computer graphics.





## About the Course

This is a studio-led course involving working drawings and other construction related projects, with a range of lectures and site visits designed to contribute to the student's comprehension and to the development of project work. Over the duration of the course, the student develops skills related specifically to Architectural Technology as well as an appreciation of the role and requirements of other members of the building team.

A graduate of Architectural Technology is a critical member of the Design Team, as s/he has an excellent appreciation and knowledge of the other Design Team discipline roles, and is involved in the coordination and development of a project at all stages.

## Accreditation

This course is accredited by The Royal Institute of Architects of Ireland. This course qualifies for exemptions from the Chartered Institute of Building.

## Further Studies

For details, see <http://architecture.cit.ie>

Subject to availability of places, suitably qualified graduates are eligible to apply for entry to Year 4 (final) of > Bachelor of Science (Honours) in Architectural Technology

The course also maintains co-operative links with other construction-related courses within the Institute and in other colleges.

## Career Opportunities

Graduates may specialise in certain building typologies or concentrate on a particular area such as technical design, technology, architectural conservation or project management.

Graduates may work as part of a team in private practice, or in the architectural section of a commercial organisation or a Government Department or Local Authority.

## Contact Information

Katherine Keane  
Department of Architecture  
T: 021 433 5970  
E: [katherine.keane@cit.ie](mailto:katherine.keane@cit.ie)

## Question Time

**How much of my time is devoted to studio and project work?**

Approximately 50% of time is devoted to studio and project work.

**How helpful is it to have Design and Communication Graphics at Leaving Certificate level?**

Design and Communication Graphics would provide a solid foundation for this programme.

**What is the difference between Architectural Technology and Architecture?**

Architectural Technology can be described as the technical design of the building while Architecture focuses on the creative aspects of spatial and aesthetic design in the total building.



## Siobhán Keating

Architectural Technician/Associate

Siobhán is an Associate with O'Riordan Staehli Architects with particular expertise and responsibility for Fire & Safety on all projects.

"My Degree gave me a strong technical foundation with excellent drafting skills, detail design, and architectural appreciation. This is a challenging and interesting career.

I work very closely with all members of the Design Team – Clients, Quantity Surveyors, Engineers and Contractors, ensuring that the full coordination of all the building elements complements the building design."

# Interior Architecture (Honours)

## CR 565 Level 8 Award

### » Progression to Postgraduate Programmes

**Application:** CAO

**Award Title:** Bachelor of Science (Honours) in Interior Architecture

**Duration:** 4 Years (8 Semesters)

**Places:** 36 – 40 (between CR 565 and CR 053)

**Location:** Bishopstown Campus, Cork



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
4	2	O6/H7	O6/H7

### What is Interior Architecture?

Interior Architecture involves the design of interiors of buildings, their layout and space planning, fitting, technical and structural resolution, furnishing and decoration, and the preparation of all technical drawings and written documentation, necessary for the carrying out of the work.

The design work of Interior Architecture includes domestic, commercial, leisure, retail, educational and healthcare interior projects. Interior architectural design encompasses many types of interiors and utilises accompanying skills, innovation, creativity, communication and team work.

### Helpful Leaving Certificate Subjects

Art, English, Mathematics, Design and Communication Graphics, and a Science subject.

### Potential Areas of Employment

- Private Practice
- Commercial
- Government Organisation
- Local Authority

### First Year at a Glance

The core of the learning experience takes place in the studio through architectural design projects and the application and integration of knowledge and skills explored in lecture modules.

The focus of the year 1 studio is simple spatial design and design of domestic scale interior space including the exploration of the processes used to create interior architecture.

Lectures include History (western architecture and design and key buildings), Technology Materials and Structure (wood, steel, concrete, and masonry), while skills developed include communication, graphic techniques, sketching, drawing, model making, problem solving, and teamwork.





## About the Course

Interior Architecture is specific to a building's interior. It stands at the intersection of Architecture, design of the built environment, sustainability, and conservation. Unlike interior design, it is architecture within the confines of an existing building. As such, the course requires a level of technical competence to compare with that of the architect, as the responsibilities to the client and community are similar.

This course examines contemporary practice in interior architecture and teaches you about our architectural heritage, how buildings work, and how to create high quality spatial experiences.

Interior Architecture involves the design of interiors of buildings, their layout, fitting, furnishing and decoration and the preparation of all technical drawings and written documentation necessary for the carrying out of the work.

The design work of the Interior Architect includes domestic, commercial, leisure, retail, educational, and healthcare interior projects. Interior architectural design encompasses many types of interiors and utilises accompanying skills.

At CIT, Interior Architecture covers the spectrum of industry specialisms. It involves the initial design and plan for use to accommodate a changed purpose, or a significantly revised design for adaptive reuse of the building shell. It considers structural adaption, sustainable redevelopment strategies, use of light, air movement, ventilation, horizontal/vertical circulation, and servicing. The practice of Interior Architecture responds to multiple user needs and a wider social responsibility.

The core of this programme is the design studio where skills in design and representation are integrated with mastery of content from other modules. The emphasis is the development of strong commercial design and analytical skills in a studio-based environment.

Modules in the award stage of the Honours Degree will include a comprehensive Design Project, as well as research which will provide the student opportunity to focus and develop an expertise in an area or Building Typology.

## Accreditation

This course is accredited by the European Council of Interior Architects (ECIA).

## Further Studies

For details, see <http://architecture.cit.ie>

Suitably qualified graduates are eligible to apply for a postgraduate degree at CIT.

- > MSc in Interior Architecture

## Career Opportunities

This course qualifies graduates to work in architectural practice, interior design firms, and allied disciplines in the capacity of an Architectural designer with a developed area of focus and expertise or in entry management positions.

The graduate will be proficient in master-planning, spatial design and the materiality of complex interior schemes that involve multiple floors and mixed uses. The graduate is also oriented to commercial architectural practice with a strong understanding of sustainable design. The graduate will be able to develop designs and their attendant working drawings, and will deal with contractors, suppliers, and local authorities. The graduate may also select self-employment after a suitable period of practical experience.

## Contact Information

Anne Rogers  
Department of Architecture  
T: 021 433 5977  
E: [anne.rogers@cit.ie](mailto:anne.rogers@cit.ie)

Katherine Keane  
Department of Architecture  
T: 021 433 5970  
E: [katherine.keane@cit.ie](mailto:katherine.keane@cit.ie)

## Question Time

**How much of your time is devoted to studio/project work?**  
Approximately 50% of time is devoted to studio and project work.

**What is the difference between Interior Architecture and Architectural Technology?**  
Interior Architecture includes aesthetic design of all interior aspects of a building. Architectural Technology can be described as technical design.

**Am I qualified as an Interior Designer?**  
This programme is designed to graduate candidates who will practice in Interior Architecture which includes interior design.



## Alan Kingston

Architectural Designer

When Alan graduated in 2017 he had already secured a job in Dubai with Eire Gulf Contractors. There is a huge amount of construction and development ongoing in the UAE with plenty of opportunity for great experience/ collaboration with the biggest companies in the world. Alan really enjoys the entire experience, both professionally and socially. He applies all the skills he gained throughout the Honours Bachelor's Degree in CIT in everyday work life. His projects include office headquarters, apartments, fit-out, refurbishment, restaurants, and hair salons.

# Interior Architecture

## CR 053 Level 7 Award

► Progression to Level 8 Honours Degree & Postgraduate Programmes

**Application:** CAO

**Award Title:** Bachelor of Science in Interior Architecture

**Duration:** 3 Years (6 Semesters)

**Places:** 36 – 40 (between CR 053 and CR 565)

**Location:** Bishopstown Campus, Cork



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 5 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
5	0	O6/H7	O6/H7

### What is Interior Architecture?

Interior Architecture involves the design of interiors of buildings, their layout and space planning, fitting, technical and structural resolution, furnishing and decoration, and the preparation of all technical drawings and written documentation necessary for the carrying out of the work.

The design work of the Interior Architect includes domestic, commercial, leisure, retail, educational and healthcare interior projects. Interior architectural design encompasses many types of interiors and utilises accompanying skills.

### Helpful Leaving Certificate Subjects

Art, Construction Studies, and Design and Communication Graphics.

### Potential Areas of Employment

- Private Practice
- Commercial
- Government Organisation
- Local Authority

### First Year at a Glance

- Interior Architecture Studio: introduction to simple spatial design; processes that are commonly used to organise and support study; research, analysis and studio design projects
- Graphics: introduces you to the core of communication skills appropriate for a career in interior architecture; construction industry drawing conventions and techniques in order to clearly communicate design proposals
- Technology Materials & Structures: introduction to building technology; site and foundations; construction systems in masonry, wood, components of frame, floor, roof, skin/enclosure openings, windows & doors and relevant building regulations
- Architectural History & Theory: explores the foundations of western architecture examining the spatial, formal and structural components of key buildings from Ancient Greece to the Renaissance



## About the Course

This course qualifies graduates to work in architectural and interior design firms, in junior management positions, and prepares the individual to choose self-employment after a suitable period of practical experience.

This mainly studio based course is taught through formal lectures and tutorials. It has a significant amount of time allocated to studio and project work. There is a high technical input, supplementing the design drawing and presentation content.

This course examines contemporary practice in interior architecture and teaches you about our architectural heritage, how buildings work, and how to create high quality spatial experiences.

## Accreditation

This course is accredited by the European Council of Interior Architects (ECIA).

## Further Studies

For details, see <http://architecture.cit.ie>

Subject to availability of places, suitably qualified graduates are eligible to apply for entry to Year 4 (final) of > Bachelor of Science (Honours) in Interior Architecture

## Career Opportunities

This course qualifies graduates to work in architectural practice, interior design firms, and allied disciplines in Architectural with a broad range of professional skills.

The graduate will be proficient in planning, spatial design and the materiality of interior schemes that involve multiple floors and mixed uses. The graduate is also oriented to commercial architectural practice with a strong understanding of sustainable design. The graduate will be able to develop designs and their attendant working drawings, and will deal with contractors, suppliers, and local authorities. The graduate may also select self-employment after a suitable period of practical experience.

## Contact Information

Anne Rogers  
Department of Architecture  
T: 021 433 5977  
E: [anne.rogers@cit.ie](mailto:anne.rogers@cit.ie)

Katherine Keane  
Department of Architecture  
T: 021 433 5970  
E: [katherine.keane@cit.ie](mailto:katherine.keane@cit.ie)

## Question Time

**How much of your time is devoted to studio/project work?**  
Approximately 50% of time is devoted to studio and project work.

### What is the difference between Interior Architecture and Architectural Technology?

Interior Architecture includes aesthetic design of all interior aspects of a building including technical resolution. Architectural Technology can be described as technical design.

### Am I qualified as an Interior Designer?

This programme is designed to graduate candidates who will practice in Interior Architecture which includes interior design.

### What is the difference between Interior Architecture and Interior Design?

Interior Architecture is specific to a building's interior. It stands at the intersection of Architecture, design of the built environment, sustainability, and conservation. Unlike interior design, it is architecture within the confines of an existing building. As such, the course, requires a level of technical competence to compare with that of the architect, as the responsibilities to the client and community are similar.



## Breeda O'Donoghue

Senior Designer

Breeda works with Houseworks Cork as a Senior Designer. Working exclusively with SieMatic Kitchens, Breeda began work with six months post-qualification training in Dublin, before joining the Cork showrooms as its only designer. Breeda has earned a wealth of experience in dealing with private and commercial projects alike. Her work ranges from presenting the SieMatic range in the showroom to preparing detailed design layouts for prospective clients.

Breeda was awarded Young Designer for Kitchens by the Bathrooms & Kitchens Industry Awards in the UK.

# Mechanical Engineering (Honours)

## CR 108 Level 8 Award

» Progression to Postgraduate Programmes

**Application:** CAO  
**Award Title:** Bachelor of Engineering (Honours) in Mechanical Engineering  
**Duration:** 4 Years (8 Semesters)  
**Places:** 20  
**Location:** Bishopstown Campus, Cork



### Admission

For admission to a programme, standard applicants must score the necessary CAO points and meet the minimum entry requirements.

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
4	2	H4 or (Note 1)	O6/H7

**Note 1:** The requirement for H4 Mathematics may also be satisfied by H4 in Applied Mathematics plus H6 in Mathematics.

**NB:** Please note the H4 grade in Mathematics can also be used to satisfy one of the H5 entry requirements.

### What is Mechanical Engineering?

Mechanical Engineering involves the design, manufacture and operation of products, components or systems incorporating motion. Studying Mechanical Engineering enables students to learn how to systematically design essential machine elements and to devise solutions ranging from R&D or manufacture in automotive, aerospace, power generation and biomedical engineering applications, to the commissioning and maintenance of industrial or pharmaceutical facilities.

### Helpful Leaving Certificate Subjects

Mathematics, Physics, Applied Mathematics, Engineering, Design and Communication Graphics, and Chemistry.

### Work Placement or Project

Formal work placement (minimum of ten weeks) is an integral element of the course and takes place in Year 3.

### Potential Areas of Employment

- Mechanical Engineering Design
- Consulting project engineer

- Manufacturing and Precision Engineering
- Process industries including chemical and biopharmaceutical
- Aerospace
- Project Engineering
- Offshore Oil and Gas
- Biomedical device design and manufacture

### First Year at a Glance

- Engineering Physics: application of physics to engineering problems
- Properties of Materials: appropriate choice of materials to use for a particular engineering/device application
- Engineering Computing: programming for engineering applications using numerical methods
- Thermo/Fluid Mechanics: application of hot and cold fluid systems in engineering
- Mechanics: understanding the performance of engineering materials when subject to external loads and forces
- Engineering Chemistry: application of chemistry to engineering problems
- 3D CAD: computer-aided design (CAD) is similar to the Leaving Certificate subject Design and Communication Graphics
- Workshop: shaping and application of metal components
- Mathematics





## About the Course

Design and project work is a major feature of the course. The Innovative Project Development modules in Year 3 enable students, working in teams, to bring a concept from the idea stage through to a finished prototype, considering the technical performance and commercial potential of their designs. In the final year, each student undertakes an individual project involving research, design, prototype development and experimental verification to meet a real need.

Honours Degree graduates generally gain employment as mechanical, design, manufacturing, production, process, plant, project or maintenance technologists/engineers. They work in fields such as aerospace, automotive, computer and electronic manufacture, machine and plant design, power generation, engine design, contracting and consulting.

Students have the option of undertaking a work placement in industry or in a research laboratory in Ireland or abroad with one of our partner institutions. Examples include ICAM, (France), Einm (France), Uniten (Kuala Lumpur), University of Vigo (Spain), Czech Technical University in Prague, University of Applied Science, Frankfurt.

## Accreditation

This BEng (Honours) course in Mechanical Engineering is fully accredited by Engineers Ireland for Chartered Engineer eligibility. This qualification meets the education standard for Chartered Engineer for graduates on or before 31/12/2012. For graduates after 1/1/2013 further learning is required to meet the education standard for Chartered Engineer. Engineers Ireland represents all engineering disciplines in Ireland and is a member of Federation Europeene d'Associations Nationales d'Ingenieurs (FEANI) through which Irish engineers are recognised in Europe. Engineers Ireland is a signatory to the Washington Accord through which Irish engineers are recognised in USA, Canada, Australia, New Zealand, Hong Kong, South Africa, and UK.

## Further Studies

For details, see [www.cit.ie](http://www.cit.ie)

Suitably qualified graduates are eligible to apply for a postgraduate degree at CIT.

- > MEng in Mechanical Engineering (Taught)
- > MEng (by Research)
- > PhD

## Career Opportunities

Mechanical Engineering is a broad-based discipline offering career opportunities in design, manufacturing, technical support in a wide range of industries including

oil/gas, power generation, plant construction, medical devices, aerospace and automotive. Many mechanical engineers also progress into general management roles where their analytical skills are greatly valued.

## Contact Information

Dr Lorraine Howard  
Department of Mechanical, Biomedical and Manufacturing Engineering  
T: 021 433 5423 E: [lorraine.howard@cit.ie](mailto:lorraine.howard@cit.ie)

## Question Time

### What level of design is involved with Mechanical Engineering?

Design is the main focus of the programme and utilises all the modern computer-aided design tools for 3D solid modelling, stress analysis, system simulation etc.

### Can I progress to further studies?

Yes, many graduates have progressed to Masters (Taught) and to PhD research either in CIT or in other institutions.

### Are there opportunities to travel?

Undergraduates have the opportunity to travel as part of the Work Placement module in Year 3, or indeed to complete a full year of study with one of our partner Universities world wide. Graduates are employed across the world. Though many graduates are based in Ireland their work involves travel to and communication with people and companies across the globe.

### Are there any events I should attend to learn more about Mechanical Engineering?

CIT Bishopstown Campus hosts the Cork Mechanical, Manufacturing & Biomedical Engineering Annual Exhibition every April. Please see [www.cit.ie](http://www.cit.ie) for details.

### Is there a scholarship available for the course?

Yes. The CIT-DePuy Synthes Mechanical Engineering scholarship was launched in 2017 and is worth €3000 per year for the successful candidate. DePuy Synthes (a Johnson & Johnson company) is a major multi-national employer in the Cork region, manufacturing artificial joints in Ringaskiddy in Cork. The support of DePuy Synthes for the scholarship is a major endorsement of the relevance of the course to the Mechanical Engineering industry.



## Myles Murray

Mechanical Engineer

Myles graduated with a BEng (Honours) in Mechanical Engineering in 2011 and set up his company PMD Solutions. PMD Solutions develop innovative and patient friendly technologies to support health provider's early prevention model of patient care. The company development over the past six years has been meteoric. Recently PMD Solutions received €4.2 million in Horizon 2020 funding from the EU and has launched "RespiraSense" - the world's first continuous and accurate discrete sensor that measures the 'mechanics of respiration' internationally.

# Mechanical Engineering

## CR 071 Level 7 Award

- ▶ Progression to Level 8 Honours Degrees & Postgraduate Programmes
- ▲ Higher Certificate Option

**Application:** CAO  
**Award Title:** Bachelor of Engineering in Mechanical Engineering  
**Duration:** 3 Years (6 Semesters)  
**Places:** 80  
**Location:** Bishopstown Campus, Cork



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 5 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
5	0	O6/H7	O6/H7

### What is Mechanical Engineering?

Mechanical Engineers play a crucial role in a wide range of industries, among them air, rail, sea and road. They are involved in high precision processes such as the design and manufacture of prosthetic devices and robotic mechanisms.

The physical scale of their work ranges from nanoscale motors and pumps through to high speed trains, wind turbines, and rocket/vehicles for space exploration. Mechanical Engineering enables students to learn how to systematically design essential machine elements and using three dimensional computer aided design modelling software, to display and test these models.

### Helpful Leaving Certificate Subjects

Mathematics, Physics, Applied Mathematics, Engineering, Design and Communication Graphics, and Chemistry.

### Potential Areas of Employment

- Design Technician/Engineer
- Plant Inspector/Quality Manager
- Manufacturing Technician/Engineer
- Technical Sales Engineer

### First Year at a Glance

- Mechatronics: interaction between mechanical and electronic components
- 3D CAD: computer-aided design (CAD) is similar to the Leaving Certificate subject Design and Communication Graphics
- Properties of Materials: appropriate choice of materials to use for a particular engineering/device application
- Mechanics: understanding the performance of engineering materials when subject to external loads and forces
- Automobile Engineering: analysing automobile engines
- Thermo/Fluid Mechanics: application of hot and cold fluid systems in engineering
- Workshop: shaping and application of metal components
- Mathematics



## About the Course

This course has a strong emphasis on the practical side of mechanical engineering, exposing the student to many "hands on" modules in workshops and laboratories. Modules on the course are grouped into streams that run over the three years: Workshop Practice, Mechatronics, Mechanical Design and Computer Aided Engineering, Mechanics, Thermofluids, Materials, Management, Projects, Mathematics and Elective Options. Graduates are prepared to progress to further study or to take up challenging and varied careers in industry.

Recent Projects have taken place in the following areas:

- Engine Development and Design
- Sports Equipment & Training Aids
- 3D Modelling
- Automation Systems
- Sustainable Engineering

## Further Studies

For details, see [www.cit.ie](http://www.cit.ie)

Suitably qualified graduates are eligible to apply for entry to the one year add-on

- > Bachelor of Engineering (Honours) in Process Plant Technology  
or
- > Bachelor of Engineering (Honours) in Advanced Manufacturing Technology

A limited number of candidates may also be considered for entry to:

- Year 3 (which necessitates two further years of study)
- > Bachelor of Engineering (Honours) in Mechanical Engineering

## Career Opportunities

Mechanical Engineering is a discipline of Engineering that applies the principles of physics and materials science for analysis, design, manufacturing, and maintenance of mechanical systems. It is the branch of engineering that involves the production and usage of heat and mechanical power for the design, production, and operation of machines and tools.

Employment opportunities are in the high-tech manufacturing industries at technician engineer level dealing with design, production, manufacturing, quality,

estimating, planning and the operation and maintenance of high-tech automated manufacturing equipment. Other opportunities are in technical and sales support with contracting, consulting engineers, and servicing companies.

## Contact Information

Bernard O'Callaghan  
 Department of Mechanical, Biomedical and Manufacturing Engineering  
 T: 021 433 5424  
 E: [bernard.ocallaghan@cit.ie](mailto:bernard.ocallaghan@cit.ie)

## Question Time

### What level of design is involved with Mechanical Engineering?

Design is a central theme of the programme and students use the latest 3D modeling software to develop and communicate their ideas.

### Has the course professional accreditation?

This course in Mechanical Engineering is fully accredited by Engineers Ireland for Associate Engineer eligibility.

### Is there much practical work on the course?

Students get hands-on practice in mechanical workshop, welding, computer-aided design, mechatronics, and also have the option of selecting elective modules in automotive engineering. The course is designed to give an overall balance between practical activities and theory.

### Are there any events I should attend to learn more about Mechanical Engineering?

CIT Bishopstown Campus hosts the Cork Mechanical, Manufacturing & Biomedical Engineering Annual Exhibition every April, the largest exhibition of its kind in Ireland. Please see [www.cit.ie](http://www.cit.ie) for details.



## Graham Canty

Mechanical Engineer

Graham graduated with a Level 7 Mechanical Engineering Degree and progressed to an Honours Degree in Mechanical Engineering. He now works for Bord Gáis as a Mechanical Engineer.

Graham managed to merge a very successful academic career with an inspired sporting career. He played Sigerson Football with CIT, U21 and Senior Championship with Cork and captained Ireland on a tour of Australia in the International Rules. He also captained Cork to a Senior All-Ireland Football Championship.

# Biomedical Engineering (Honours)

## CR 520 Level 8 Award

» Progression to Postgraduate Programmes

**Application:** CAO  
**Award Title:** Bachelor of Engineering (Honours) in Biomedical Engineering  
**Duration:** 4 Years (8 Semesters)  
**Places:** 20  
**Location:** Bishopstown Campus, Cork

### Admission

For admission to a programme, standard applicants must score the necessary CAO points and meet the minimum entry requirements.

Entry  
2019

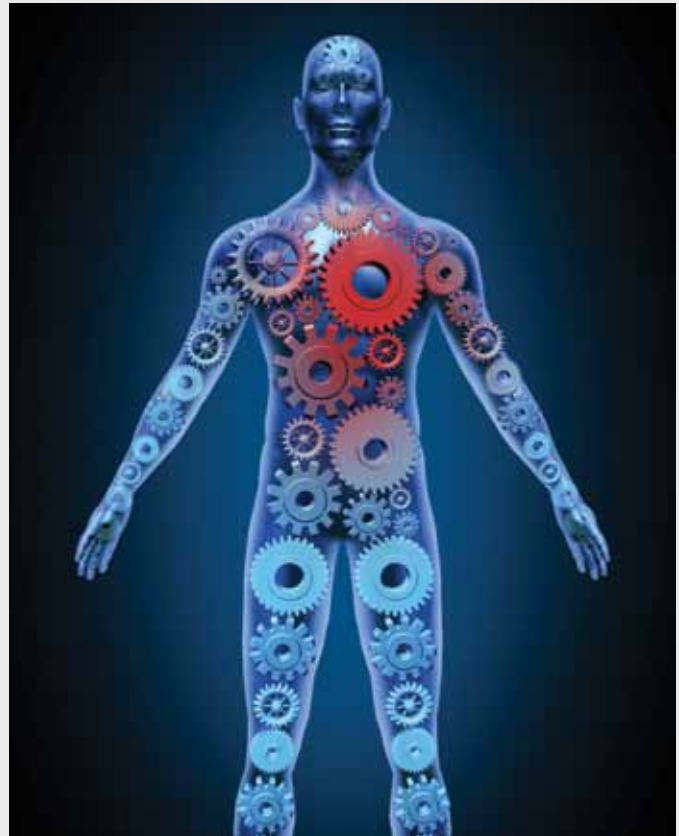
### Minimum Entry Requirements

Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
4	2	H4 or (Note 1)	O6/H7

**Note 1:** The requirement for H4 Mathematics may also be satisfied by H4 in Applied Mathematics plus H6 in Mathematics.

**NB:** Please note the H4 grade in Mathematics can also be used to satisfy one of the H5 entry requirements.



### What is Biomedical Engineering?

Biomedical Engineering combines engineering with an appreciation of the functioning of the human body, whether healthy, injured or diseased. The medical device sector in Ireland is very strong; there are 250 medical technology companies in Ireland, exporting €7.2b worth of product annually and employing 25,000 people (figures from the Irish Medical Device Association). Products include prosthetic devices to provide the disabled with tools to improve their quality of life, disposable plastic and wound care products, and precision implants including pacemakers, microelectronic devices, orthopaedic implants, diagnostics, contact lenses and stents. In the clinical context, biomedical engineers play a key role in designing, sourcing and maintaining equipment, facilities and services within hospitals.

### Helpful Leaving Certificate Subjects

Mathematics, Physics, Biology, and Engineering.

### Work Placement

Formal work placement (minimum of ten weeks) is an integral element of the course and takes place in Year 3.

### Potential Areas of Employment

- Biomedical Device Design and Manufacture
- Research & Development
- Engineering Support within Clinical Environments
- Regulated Industries e.g. Healthcare/Food

### First Year at a Glance

- Engineering Physics: application of physics to engineering problems
- Properties of Materials: appropriate choice of materials to use for a particular engineering/device application
- Biomechanics: analysis of the joint/muscle forces on the body
- Engineering Chemistry: application of chemistry to engineering problems
- Thermo/Fluid Mechanics: application of hot and cold fluid systems in engineering
- CAD: computer-aided design similar to the Leaving Certificate subject Design and Communication Graphics
- Practical Manufacturing of Metal Components
- Anatomy
- Mathematics
- Biology



## About the Course

The course covers topics from the design and development of artificial joints, to equipment for medical diagnosis and treatment, to the implanting of biomaterials or biomedical devices in the human body. Biomedical Engineers are therefore required at all stages from product design, to product manufacture, to technical support and interfacing with medical users in clinical environments. It uses engineering principles to understand and control biological systems and therefore also requires a working knowledge of physiology, anatomy, and biological science.

This course integrates the study of biological systems, biomedical devices and clinical engineering with traditional mechanical, electrical and manufacturing engineering. Projects are carried out in conjunction with industry, with medical practitioners, and with the Biomedical Engineering unit of Cork University Hospital.

Students have the option of work placement in industry in Ireland or abroad or in a research laboratory in Ireland or with one of our partner institutions abroad (France, Germany, Italy, UK, etc.).

## Further Studies

For details, see [www.cit.ie/bioeng](http://www.cit.ie/bioeng) and [www.medic.ie](http://www.medic.ie)

Suitably qualified graduates are eligible to progress to the taught Masters' programmes or to research at either Master's or PhD level. CIT has also set up the Medical Engineering Design and Innovation Centre (MEDIC) as a vehicle for Biomedical Device research.

## Career Opportunities

Graduates can look forward to careers in the medical device industry, in the design and manufacture of medical devices, in research roles within industry or in academic research. Graduates can also enter the hospital or clinical environment to work as clinical engineers.

## Contact Information

Dr Keith Bryan  
Department of Mechanical, Biomedical and Manufacturing Engineering  
T: 021 433 5423  
E: [keith.bryan@cit.ie](mailto:keith.bryan@cit.ie)  
W: [www.cit.ie/bioeng](http://www.cit.ie/bioeng)

## Question Time

### What is the difference between Biomedical Science and Biomedical Engineering?

Biomedical Engineering combines engineering principles with an appreciation of the functioning of the human body, whether healthy, injured or diseased in order to design and manufacture products or provide technical support. Biomedical engineers can work in hospitals, in manufacturing plants, and in the research and development environment.

Biomedical scientists investigate into samples of tissue and body fluids in order to diagnose disease and monitor the treatment of patients, therefore, it is largely laboratory based.

### What does a Biomedical Engineer produce?

Solutions to problems! Design of devices, instrumentation or processes in a clinical, manufacturing or research environment.

### Is there a scholarship available for the course?

Yes. The CIT-DePuy Synthes Biomedical Engineering scholarship was launched in 2012 and is worth €3000 per year for the successful candidate. DePuy Synthes (a Johnson & Johnson company) is a major multi-national employer in the Cork region, manufacturing artificial joints in Ringaskiddy in Cork. The support of DePuy Synthes for the scholarship is a major endorsement of the relevance of the course to the Biomedical Engineering industry.

### Has the course professional accreditation?

This BEng (Honours) course in Biomedical Engineering is fully accredited by Engineers Ireland for Chartered Engineer eligibility. This qualification meets the education standard for Chartered Engineer for graduates on or before 31/12/2012.

For graduates after 1/1/2013 further learning is required to meet the education standard for Chartered Engineer. Engineers Ireland represents all engineering disciplines in Ireland and is a member of Federation Europeene d'Associations Nationales d'Ingenieurs (FEANI) through which Irish engineers are recognised in Europe. Engineers Ireland is a signatory to the Washington Accord through which Irish engineers are recognised in USA, Canada, Australia, New Zealand, Hong Kong, South Africa, and UK.

### Are there any events I should attend to learn more about Biomedical Engineering?

CIT Bishopstown Campus hosts the Cork Mechanical, Manufacturing & Biomedical Engineering Annual Exhibition in April, it is the largest exhibition of its kind in Ireland. Please see [www.cit.ie](http://www.cit.ie) for details.



## Lucy O'Sullivan

Biomedical Engineer

"After graduation, I spent six months on a graduate internship with Teleflex (a worldwide biomedical company) in both Athlone and Malaysia, three months each in the Quality department and in R&D.

When I returned, I was employed by DePuy Synthes Ireland in its manufacturing plant in Ringaskiddy, Cork. I work on the quality aspects of products being transferred into the Cork plant from DePuy Synthes plants in other countries."

# Biomedical Engineering

## CR 075 Level 7 Award

- ▶ Progression to Level 8 Honours Degrees & Postgraduate Programmes
- ▲ Higher Certificate Option

**Application:** CAO  
**Award Title:** Bachelor of Engineering in Biomedical Engineering  
**Duration:** 3 Years (6 Semesters)  
**Places:** 40  
**Location:** Bishopstown Campus, Cork



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 5 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
5	0	O6/H7	O6/H7

### What is Biomedical Engineering?

Biomedical Engineering combines engineering with an appreciation of the functioning of the human body, whether healthy, injured or diseased. In the clinical context, biomedical engineers play a key role in designing, sourcing and maintaining equipment, facilities and services within hospitals. Products include prosthetic devices to provide the disabled with tools to improve their quality of life, disposable plastic and wound care products, and precision metal implants including pacemakers, microelectronic devices, orthopaedic implants, diagnostics, contact lenses and stents.

### Helpful Leaving Certificate Subjects

Mathematics, Physics, Biology, and Engineering.

### Potential Areas of Employment

- Biomedical Device Design and Manufacturing
- Clinical Environment
- Research & Development
- Engineering Support within Clinical Environments
- Regulated Industries e.g. Healthcare/Food

### First Year at a Glance

- Material Science: understanding the nature and properties of engineering materials
- Mechanics: understanding the performance of engineering materials when subject to external loads and forces
- Thermo/Fluid Mechanics: application of hot and cold fluid systems in engineering
- CAD: computer-aided design similar to the Leaving Certificate subject Design and Communication Graphics
- Instrumentation: understanding the operation and behaviour of medical equipment and devices
- Anatomy
- Mathematics
- Biology





## About the Course

The course is delivered through formal lectures, tutorials, practical and project work. There are a number of dedicated Biomedical Engineering laboratories containing leading edge technology. These facilitate teaching and research both at undergraduate and postgraduate level and include:

- Gait Analysis Lab
- Biomaterial Lab
- Hurley Helmet Testing Rig
- Instron Dynamic Testing Machine
- Non-Contact 3D Light Scanner
- Rapid Prototyping Machine

Projects are carried out in conjunction with industry, with medical practitioners and with the Biomedical Engineering Unit of Cork University Hospital.

## Further Studies

For details, see [www.cit.ie/bioeng](http://www.cit.ie/bioeng)

Subject to availability of places, suitably qualified graduates may apply to Year 3 of

> Bachelor of Engineering (Honours) in Biomedical Engineering

or the one year add-on

> Bachelor of Engineering (Honours) in Advanced Manufacturing Technology

## Career Opportunities

Graduates will be qualified to work as biomedical engineering technologists within the healthcare, medical device industries, in research and development facilities, and also in clinical/hospital environments.

## Contact Information

Dr Hugh O'Donnell  
Department of Mechanical, Biomedical and Manufacturing Engineering  
T: 021 433 5949  
E: [hugh.odonnell@cit.ie](mailto:hugh.odonnell@cit.ie)  
W: [www.cit.ie/bioeng](http://www.cit.ie/bioeng)

## Question Time

**What does a Biomedical Engineer produce?**

Medical devices, instrumentation, or processes in a clinical or manufacturing environment.

**What is the difference between Biomedical Science and Biomedical Engineering?**

Biomedical Engineering combines engineering principles with an appreciation of the functioning of the human body, whether healthy, injured or diseased in order to design and manufacture products or provide technical support. Biomedical engineers can work in hospitals, in manufacturing plants and in research and development environment.

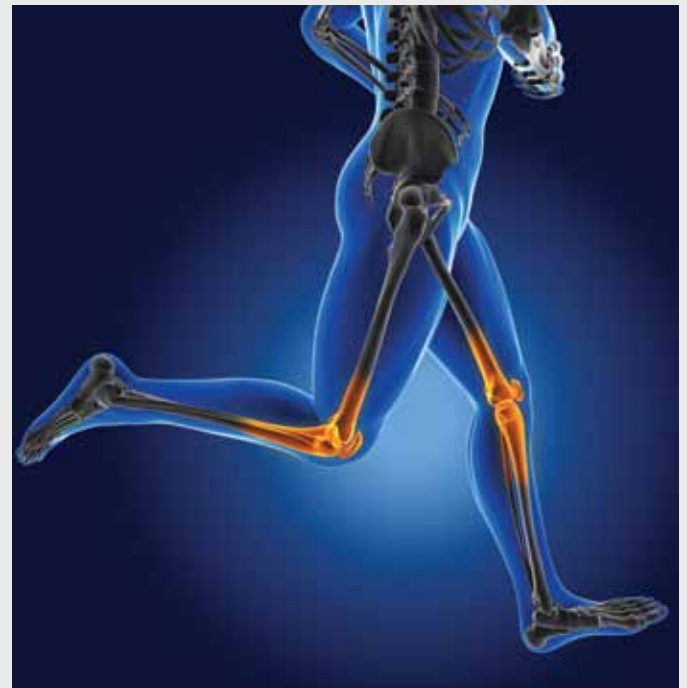
Biomedical scientists investigate into samples of tissue and body fluids in order to diagnose disease and monitor the treatment of patients. Therefore, it is largely laboratory based.

**Has the course professional accreditation?**

This course in Biomedical Engineering is fully accredited by Engineers Ireland for Associate Engineer eligibility.

**Are there any events I should attend to learn more about Biomedical Engineering?**

CIT Bishopstown Campus hosts the Cork Mechanical, Manufacturing & Biomedical Engineering Annual Exhibition in April, it is the largest exhibition of its kind in Ireland. Please see [www.cit.ie](http://www.cit.ie) for details.



## Denise Cronnelly

Quality Engineer

Denise undertook a MEng in Biomedical Engineering before commencing employment as a Quality Engineer with Boston Scientific in Clonmel where it manufactures implantable pacemakers and defibrillators.

Denise's role as a Quality Engineer is varied and encompasses elements such as process optimisation, equipment validation, and aspects of regulatory compliance.

# Electronic Engineering (Honours)

## CR 590 Level 8 Award

» Progression to Postgraduate Programmes

**Application:** CAO  
**Award Title:** Bachelor of Engineering (Honours) in Electronic Engineering  
**Duration:** 4 Years (8 Semesters)  
**Places:** 40 (between CR 590 and CR 061)  
**Location:** Bishopstown Campus, Cork

### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
4	2	O6/H7	O6/H7



### What is Electronic Engineering?

Small, lightweight, portable devices like Smartphones and tablets combine wireless technology with processing power to provide internet, communications and leisure functionality while on the move. They are now driving how we live, work and play. Combining low power consumption with microchip design, telecommunication and control circuitry (hardware) and the operating system software, they are the ultimate electronic system. CIT's CR 590 programme is designed to equip engineers to work at this level.

### Helpful Leaving Certificate Subjects

Engineering, and Physics.

### Potential Areas of Employment

- Test/Development/Design in Electronic Systems
- Telecomms Network Software/Hardware Design/Support
- IT Software Development
- R&D in Product Development

### First Year at a Glance

Year 1 is a good mix of practice and theory, so on average that's about 12 hours in the class and 12 hours in the laboratory

- Theory: about how basic electronic circuits work, e.g. resistors, transistors, digital gates
- Software: how to write software
- Mathematics: this is required as everything in engineering has a formula which tells you how it works
- Laboratory work: you will build and test circuits. You will learn how to present your work, written and verbally







### About the Course

Electronic systems are used for the collection, processing and transmission of information. From the most sophisticated machines in industry, to cars, to household appliances and to personal items, all have the same thing in common: they are "intelligent". On a printed circuit board (PCB), surrounded by analogue and digital circuitry, there is a microprocessor, or maybe several, which has a clock (heartbeat). On every cycle the microprocessor executes an instruction from whatever programming it is running (software) – this ability is what makes the system intelligent. Intelligence, control and communications, theory and practice form the core material of this course.

### Further Studies

For details, see <http://e-eng.cit.ie>

Suitably qualified graduates are eligible to apply for a postgraduate degree at CIT:

- > MEng in Embedded Systems Engineering (Taught)
- > MEng (by Research)
- > PhD

### Career Opportunities

An expert report on education in Science, Technology, Engineering and Maths (STEM) in Irish schools was released in Nov 2016. Its aim is to make Ireland a world-leader in STEM education at both 2nd and 3rd level. Ireland's economy depends ever more on producing high quality STEM graduates. The report encourages education providers like CIT to better market its STEM programmes and to highlight career possibilities as there is a gap in awareness out there. Providers are also asked to encourage

and to improve gender balances particularly in engineering – CIT's Department of Electrical & Electronic Engineering fully supports this.

For a snapshot of ICT in the greater Cork area, visit [www.ceia.ie](http://www.ceia.ie)

### Contact Information

Michael Murray  
Department of Electrical & Electronic Engineering  
T: 021 433 5463  
E: [michael.murray@cit.ie](mailto:michael.murray@cit.ie)

### Question Time

#### What level of Mathematics is required?

Grade 06/H7 in the Leaving Certificate exam is the minimum requirement, however, a higher grade is recommended.

#### Can you give me examples of the type of work I will be able to do?

Test, develop, design electronic circuits or microchips (hardware), write programmes (software) for products, computer packages, games, mobile phone networks, provide technical support for products.

#### Will I be working in a factory?

The majority of electronic engineers work in nice offices! A huge amount of work is actually done on computers. However, if it's hardware then it will need building and testing in a lab. Mostly, the product will then be outsourced to other parts of the world for manufacture.



## Ciara Murphy

Transmission Engineer

"After graduation, I worked with Surecom Network Solutions in Dublin. My projects include planning radio links in the UK and planning sites in Australia to support their telecoms network.

The work involves equipment specification, installation and operation. On other projects, I have worked in conjunction with 3 and Vodafone.

It is very interesting and I have already gained so much experience. My Degree was a great foundation in many ways."

# Electronic Engineering

## CR 061 Level 7 Award

- ▶ Progression to Level 8 Honours Degree & Postgraduate Programmes
- ▲ Higher Certificate Option

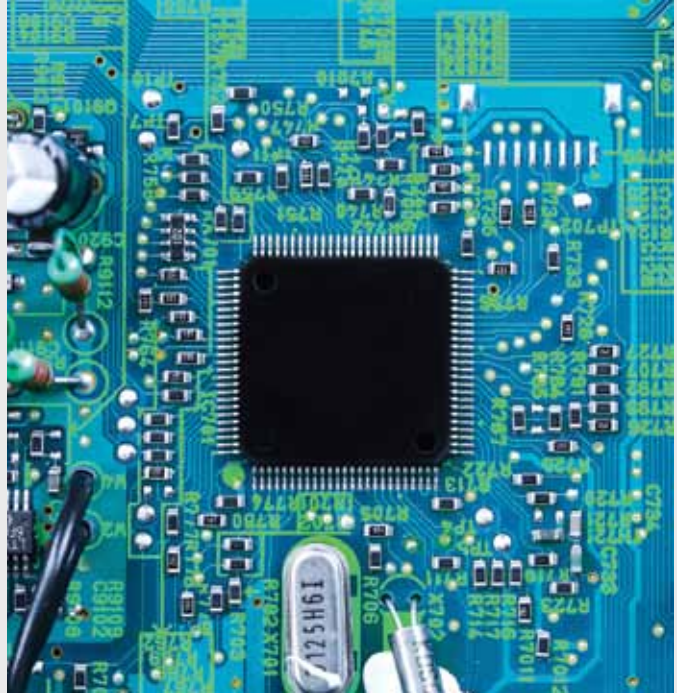
**Application:** CAO

**Award Title:** Bachelor of Engineering in Electronic Engineering

**Duration:** 3 Years (6 Semesters)

**Places:** 40 (between CR 061 and CR 590)

**Location:** Bishopstown Campus, Cork



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 5 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
5	0	O6/H7	O6/H7

### What is Electronic Engineering?

Small, lightweight, portable devices like Smartphones and tablets combine wireless technology with processing power to provide internet, communications and leisure functionality while on the move. They are now driving how we live, work and play. Combining low power consumption with microchip design, telecommunication and control circuitry (hardware) and the operating system software, they are the ultimate electronic system. CIT's CR 061 course is designed to equip technologists to work at this level.

### Helpful Leaving Certificate Subjects

Engineering, and Physics.

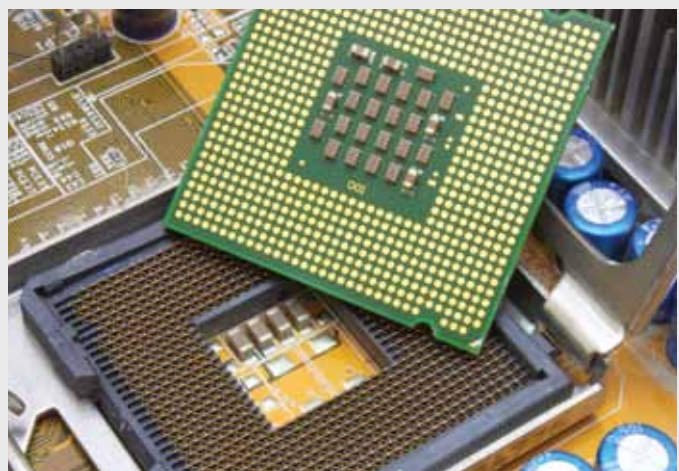
### Potential Areas of Employment

- Test/Development/Design in Electronic Systems
- Telecomms Network Software/Hardware Design/Support
- IT Software Development
- R&D in Product Development

### First Year at a Glance

Year 1 is a good mix of practice and theory, so on average that's about 12 hours in the class and 12 hours in the laboratory

- Theory: about how basic electronic circuits work, e.g. resistors, transistors, digital gates
- Software: how to write software
- Mathematics: this is required as everything in engineering has a formula which tells you how it works
- Laboratory work: you will build and test circuits. You will learn how to present your work, written and verbally





## About the Course

Electronic engineering is used for the collection, processing, and transmission of information. From the most sophisticated machines in industry, to cars, to household appliances, to personal items, all have the same thing in common: they are “intelligent”. On a printed circuit board (PCB), surrounded by analogue and digital circuitry, there is a microprocessor, or maybe several, which has a clock (heartbeat). On every cycle the microprocessor executes an instruction from whatever programming it is running (software) – this ability is what makes the system intelligent. Intelligence, control and communications, theory and practice form the core material of this course.

## Further Studies

For details, see <http://e-eng.cit.ie>

Suitably qualified graduates are eligible to apply for entry to Year 4 (final) of

- > Bachelor of Engineering (Honours) in Electronic Engineering

## Career Opportunities

An expert report on education in Science, Technology, Engineering and Maths (STEM) in Irish schools was released in Nov 2016. Its aim is to make Ireland a world-leader in STEM education at both 2nd and 3rd level. Ireland's economy depends ever more on producing high quality STEM graduates. The report encourages education providers like CIT to better market its STEM programmes and to highlight career possibilities as there is a gap in

awareness out there. Providers are also asked to encourage and to improve gender balances particularly in engineering – CIT's Department of Electrical & Electronic Engineering fully supports this.

For a snapshot of ICT in the greater Cork area, visit [www.ceia.ie](http://www.ceia.ie)

## Contact Information

Michael Murray  
Department of Electrical & Electronic Engineering  
T: 021 433 5463  
E: [michael.murray@cit.ie](mailto:michael.murray@cit.ie)

## Question Time

### What is the difference between Electronic Engineering and Electrical Engineering?

Electronic Engineering is small scale, low voltage, component level, microchips and programming.

Electrical Engineering is high power, mains electricity, generation, power lines, transformers, motor/generators and automation.

### Has the course professional accreditation?

Yes. The Level 7 in Electronic Engineering is accredited by Engineers Ireland for Associate Membership.

### What level of Mathematics is required?

Grade 06/H7 in the Leaving Certificate exam is the minimum requirement, however, a higher grade is recommended.



## Seán O'Sullivan

Product Support

“I graduated in 2011 with a Level 7 Degree and I am currently working in the iOS department of Apple Inc. My job is providing technical support for iPods, iPads and iPhones. It is a great place to work and the salary is excellent.

I am working very much in the area that I studied and it has equipped me very well. I can thoroughly recommend the BEng in Electronic Engineering.”

# Electrical Engineering (Honours)

## CR 580 Level 8 Award

» Progression to Postgraduate Programmes

**Application:** CAO  
**Award Title:** Bachelor of Engineering (Honours) in Electrical Engineering  
**Duration:** 4 Years (8 Semesters)  
**Places:** 40 (between CR 580 and CR 062)  
**Location:** Bishopstown Campus, Cork



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 5 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
4	2	O6/H7	O6/H7

### What is Electrical Engineering?

Providing electrical power in a modern economy is about generation, distribution and usage in a safe, economic and sustainable way. Fossil fuel energy now combines with solar, wind and tidal energy to create “embedded” generation which needs a “smart grid” to automatically switch users and suppliers in and out while maintaining the quality of the supply. CIT’s Electrical Engineering course is designed to equip engineers for this environment.



### Helpful Leaving Certificate Subjects

Engineering, and Physics.

### Potential Areas of Employment

- Energy Generation/Transmission
- Building Supply/Installation/Services/Maintenance
- Consultancy/Contract Management
- Process/Automation Industry

### First Year at a Glance

Year 1 is a good mix of practice and theory, so on average that's about 12 hours in the class and 12 hours in the laboratory

- Theory: how electricity is generated, transmitted and distributed and there are also classes in electronic circuits, writing programmes and CAD
- Mathematics: this is required as everything in engineering has a formula which tells you how it works
- Laboratory work: you will build, test and do measurements and also you will learn how to present your work, written and verbally



## About the Course

The general fields of study are Renewable Generation, Transmission and Distribution, Plant Automation, Motor Control, Power Systems Planning, and Industrial Management and Services. The syllabus is designed to prepare graduates for work in electrical power and automation systems. The high academic standard of the course is complemented by a strong emphasis on applications and project work. State-of-the-art lab equipment and software prepares graduates for the work environment. Class work is supplemented by field trips to major employers within the greater locality.

## Further Studies

For details, see <http://e-eng.cit.ie>

Suitably qualified graduates are eligible to apply for a postgraduate degree at CIT.

- > MEng (by Research)
- > PhD

## Career Opportunities

Graduates will have acquired both the knowledge and the competence to work as engineers in generation and distribution of electrical energy, in the control of automated production systems, with particular emphasis on power drives and aspects of robotic control, in the design and maintenance of Combined Heat and Power (CHP) units and in embedded generation systems. Also design/application/maintenance of renewable sources of electrical energy such as wind energy and fuel cells. Graduates can expect to find employment in the energy generation, transmission and grid control section of the market, directly or through consultancy, plus in the area of automation as utilised in modern processes.

## Contact Information

Dr Joe Connell  
Department of Electrical & Electronic Engineering  
T: 021 433 5475  
E: [joe.connell@cit.ie](mailto:joe.connell@cit.ie)

## Question Time

### Can I become an electrician?

No. An electrician is a well-established trade which has its own development programme and its own target job market. Third level programmes are designed to equip graduates to work at design/development level and then to liaise with skilled trades for implementation.

### What is the difference between Electronic Engineering and Electrical Engineering?

Electronic Engineering is small scale, low voltage, component level, microchips and programming.

Electrical Engineering is high power, mains electricity, generation, power lines, transformers, motor/generators and automation.

### What elements of renewable energy are covered in the course?

Modules dealing with all current renewable areas are dealt with on a mandatory basis because of their relevance. There is also an opportunity to explore these areas further through elective modules.

### What level of Mathematics is required?

Grade 06/H7 in the Leaving Certificate exam is the minimum requirement, however, a higher grade is recommended.



## Martin Desmond

Managing Director, PVGeneration Ltd.

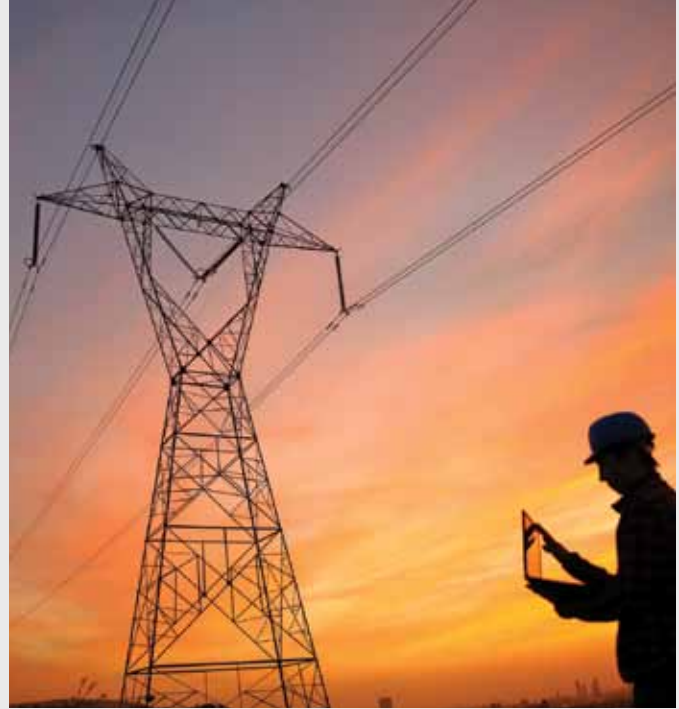
"At CIT I was given the opportunity to learn across such a wide knowledge base of electrical engineering that an equally wide range of opportunities arose from degree. The Sustainable Energy modules gave me the insight I needed to set up my Solar PV specialist company PV Generation Ltd. The project management, business focussed land entrepreneurial learning gave me the skills to develop this young company successfully. CIT develops degrees which prepare you for all possibilities in your field of interest, with today and tomorrows' world in mind; all you have to do is show up and work hard to succeed."

# Electrical Engineering

## CR 062 Level 7 Award

- ▶ Progression to Level 8 Honours Degree & Postgraduate Programmes
- ▲ Higher Certificate Option

**Application:** CAO  
**Award Title:** Bachelor of Engineering in Electrical Engineering  
**Duration:** 3 Years (6 Semesters)  
**Places:** 40 (between CR 062 and CR 580)  
**Location:** Bishopstown Campus, Cork



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 5 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
5	0	O6/H7	O6/H7

### What is Electrical Engineering?

Providing electrical power in a modern economy is about generation, distribution and usage in a safe, economic and sustainable way. Fossil fuel energy now combines with solar, wind and tidal energy to create "embedded" generation which needs a "smart grid" to automatically switch users and suppliers in and out while maintaining the quality of the supply. CIT's Electrical Engineering course is designed to equip technologists for this environment.

### Helpful Leaving Certificate Subjects

Engineering, and Physics.

### Potential Areas of Employment

- Energy Generation/Transmission
- Building Supply/Installation/Services/Maintenance
- Commissioning
- Process/Automation Industry

### First Year at a Glance

Year 1 is a good mix of practice and theory, so on average that's about 12 hours in the class and 12 hours in the laboratory

- Theory: how electricity is generated, transmitted and distributed and there are also classes in electronic circuits, writing programmes and CAD
- Mathematics: This is required as everything in engineering has a formula which tells you how it works
- Laboratory work: you will build, test and do measurements and also you will learn how to present your work, written and verbally





## About the Course

The general fields of study are Renewable Generation, Transmission and Distribution, Plant Automation, Motor Control, Power Systems Planning, and Industrial Management and Services. The syllabus is designed to prepare graduates for work in electrical power and automation systems. The high academic standard of the course is complemented by a strong emphasis on applications and project work. State-of-the-art lab equipment and software prepares graduates for the work environment. Class work is supplemented by field trips to major employers within the greater locality.

## Further Studies

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Suitably qualified graduates are eligible to apply for entry to Year 4 (final) of  
> Bachelor of Engineering (Honours) in Electrical Engineering

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Graduates will have acquired both the knowledge and the competence to work in generation and distribution of electrical energy, in the control of automated production systems with particular emphasis on power drives and aspects of robotic control, in the maintenance of Combined Heat and Power (CHP) and in embedded generation systems. Graduates will also have acquired the competence to work in the application and maintenance of renewable sources of electrical energy such as wind energy and fuel cells. Graduates can expect to find employment in the energy generation, transmission and grid control section of the market plus in the area of automation as utilised in modern processes.

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## Question Time

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### Has the course professional accreditation?

The Level 7 in Electrical Engineering is accredited by Engineers Ireland for Associate membership.

### Can I become an electrician?

No. An electrician is a well-established trade which has its own development programme and its own target job market. Third level programmes are designed to equip graduates to deal with projects at design/development level and when approved/ agreed, the work is implemented by skilled trades.

### What elements of renewable energy are covered in the course?

Modules dealing with current renewable areas are dealt with on a mandatory basis because of their relevance. There is also an opportunity to explore these areas further through elective modules.

### What level of Mathematics is required?

Grade 06/H7 in the Leaving Certificate exam is the minimum requirement, however, a higher grade is recommended.



## Harry O'Farrell

Energy Consultant

"I completed my Level 7 in 2009 and Level 8 in 2010. I then joined Energy Services Ltd. In Cork who are energy consultants specialising in energy procurement, supply/demand side management internationally.

My projects so far include embedded generation, power transmission/ distribution, including wind farms, and consumption monitoring and assessment at home, in Europe and as far away as Central Asia.

My training as an electrician plus my undergraduate programmes have prepared me well for this work. Power/ electrical engineering is an excellent career and there is significant demand for it."

# Chemical & Biopharmaceutical Engineering (Honours)

## CR 105 Level 8 Award

» Progression to Postgraduate Programmes

**Application:** CAO  
**Award Title:** Bachelor of Engineering (Honours) in Chemical & Biopharmaceutical Engineering  
**Duration:** 4 Years (8 Semesters)  
**Places:** 30  
**Location:** Bishopstown Campus, Cork

### Admission

For admission to a programme, standard applicants must score the necessary CAO points and meet the minimum entry requirements.

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
4	2	H4 or (Note 1)	O6/H7

**Note 1:** The requirement for H4 Mathematics may also be satisfied by H4 in Applied Mathematics plus H6 in Mathematics.

**NB:** Please note the H4 grade in Mathematics can also be used to satisfy one of the H5 entry requirements.



### What is Chemical & Biopharmaceutical Engineering?

Chemical Engineering is all about change; creating life enhancing products and services by applying scientific and mathematical understanding to design, control and improve processes that change raw materials into useful products. Chemical Engineers are world leaders in producing medicines, clean energy and water, and other key products in a cost effective, safe and environmentally-friendly manner.

### Helpful Leaving Certificate Subjects

Mathematics, Chemistry, Biology, Physics, and Applied Mathematics. We recommend that you have two of the three science subjects.

### Work Placement

A salaried placement is undertaken, starting at the end of Year 3 and continuing into the second semester of Year 4, and is spent either in industry or with a consultancy (subject to availability).

### Potential Areas of Employment

- Pharmaceuticals & Biopharmaceuticals
- Food & Beverages
- Oil & Gas
- Energy & Environment
- Building Products
- Consultancy

### First Year at a Glance

Learners of this programme are exposed to a broad range of mathematical, scientific, engineering and technological knowledge, methods and techniques that allow them to research, critique, derive and apply relevant solutions from their studies and practical work.

- **Mathematics:** is the language of engineering, students will use mathematics to model, analyse, predict and control the behaviour of complex chemical and pharmaceutical systems
- **Communications:** students need to communicate effectively on complex engineering activities with the engineering community and with society at large
- **Engineering Science:** students will learn the fundamentals of physics, chemistry and biology to allow them to understand the scientific basis of chemical engineering

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## First Year at a Glance (continued)

- Engineering Laboratory Practices: students will learn how to operate items of chemical and biopharmaceutical process equipment in a professional and safe manner, supporting theory learning
- Principles of Process Engineering: students are introduced to material and energy balances on reactive processes and unreactive processes
- Cellular Microbiology: students will learn how cells can be used to produce useful biotechnology products

## About the Course

Chemical Engineering is ideally suited to students with ability in mathematics and science, who enjoy problem solving and aspire to well-paid, satisfying jobs at home and abroad. With 35 years' experience, we have demonstrated that fulfilling, world-class, careers can be achieved by graduates.

Lectures are supplemented by laboratory sessions, project work and team exercises. The course is comprehensive, addressing sectors from heavy chemicals like oil and gas to high value products like pharmaceuticals, as well as issues like energy efficiency, waste minimisation and environmental protection, all in the context of safe and sustainable operations.

## Accreditation

The Institution of Chemical Engineers (IChemE) has accredited the Chemical & Biopharmaceutical Engineering degree at Master level. Accreditation is for a period of 5 years at Master Level, effective from the academic year intake 2015/16 up to and including academic year 2019/20.

When these graduates seek Chartered Chemical Engineer status with IChemE, their CIT degree means they will fully satisfy the academic requirements, without the need to demonstrate further learning to Master level. They will have demonstrated that they have the chemical engineering knowledge and understanding required for a Chartered Member of IChemE.

The programme is also accredited by Engineers Ireland, which represents all engineering disciplines in Ireland and is a member of Federation Europeene d'Associations Nationales d'Ingenieurs (FEANI) through which Irish engineers are recognised in Europe. Engineers Ireland is a signatory to the Washington Accord through which Irish engineers are recognised in USA, Canada, Australia, New Zealand, Hong Kong, South Africa, and UK.

## Contact Information

Noel Duffy  
Department of Process, Energy and Transport Engineering  
T: 021 433 5882 E: noel.duffy@cit.ie



## Erin Reidy

Graduate Engineer

"Based in MSD Brinny, I am currently involved in production support engineering and clean utilities. This involves work on various projects to reduce costs and improve the processes. These projects take me to all areas of the site from sterile manufacturing to environmental engineering. MSD Brinny Biopharmaceuticals treat cancers, arthritis, Hepatitis C, and Crohn's disease. They are made on-site through biotech fermentation, purification, sterile filling and packaging, and released to 90 countries.

This degree prepared me for my career in industry where I use technical, practical and team-work based skills every day."

## Further Studies

For details, see [www.cit.ie/chemeng](http://www.cit.ie/chemeng)

Suitably qualified graduates are eligible to apply for a postgraduate degree at CIT:

- > MEng in Chemical and Biopharmaceutical Engineering (Taught)
- > MEng (by Research)
- > PhD

## Career Opportunities

With over 35 years of graduates, alumni may be found in North America, Australia, and the Far East, at levels from vice-president of corporations to recent hires. Many of the graduates remain in technical support roles, others develop into managerial positions as production, engineering, human resources, and general managers. The 'typical' graduate is engaged in the region, in the greater Munster area, in the pharmaceutical and biopharmaceutical sector. Starting salary for chemical engineers is usually the highest of all engineers, reflecting the world-wide demand for their skills.

## Question Time

### How proficient at Mathematics should I be?

As with all engineering programmes, Mathematics is used as a tool to communicate ideas and to solve problems so you should be comfortable with Mathematics.

### Can I pursue a career in pharmaceuticals?

Many graduates pursue careers in the fine chemical, pharmaceutical and biopharmaceutical industries where they are involved with plant design, commissioning, operations and optimisation.

### Who will be teaching me?

The lecturers are Chemical Engineers and most have spent significant amounts of time working in the Process Industry, and as a result can bring real life experiences to the theory of the classroom.

# Sustainable Energy Engineering (Honours)

## CR 510 Level 8 Award

» Progression to Postgraduate Programmes

**Application:** CAO  
**Award Title:** Bachelor of Engineering (Honours) in Sustainable Energy Engineering  
**Duration:** 4 Years (8 Semesters)  
**Places:** 30  
**Location:** Bishopstown Campus, Cork



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
4	2	O6/H7	O6/H7

### What is Sustainable Energy Engineering?

Sustainable Energy Engineering involves the understanding and application of the engineering and technological principles of energy conversion and use. Energy is one of the driving forces behind civilization and the future challenge is to source this energy in a sustainable fashion. Renewable energy has saved Ireland over €1 billion fossil fuel imports in past five years.

### Helpful Leaving Certificate Subjects

Mathematics, Physics, Engineering, Construction Studies, Design and Communication Graphics, and Applied Mathematics.

### Work Placement

There is work placement for a minimum period of 10 weeks in Year 3. Companies have included; ESB, Bord Gáis, GSK, Boston Scientific, Dairygold, Jones Engineering, PM, Openhydro, Tyndall, EMC, Enercon, Novartis, EPS, and GE Healthcare.

### Potential Areas of Employment

- Energy Management
- Energy Systems Design
- Energy Project Management
- R&D Energy Engineer
- Process Engineer
- Design Engineer
- Engineering Consultant

### First Year at a Glance

- Sustainable Energy: study of energy resources and the necessity for energy sustainable sources
- The Science of Energy: the theory behind energy conversion processes
- Electrical Principles: fundamentals of electrical and electronic circuits
- Computer Control Applications: use of sensors, microprocessors & programming to control processes
- Mathematics: developing mathematical tools which underlie sustainable energy engineering
- Mechanics: basic principles of forces and movements that are fundamental to engineering design
- Engineering Chemistry: applying science of chemistry to engineering principles
- 3D CAD: CAD allows engineers to communicate their ideas graphically
- Sustainable Energy and Climate Change: study of energy



## About the Course

Attention is given to component scale and systems design along with efficient management, control and measurement of energy supply systems. The first two years of the course introduce and develop the fundamental components of an engineering discipline. The third and fourth years extend the specialist nature of the course.

Modules are delivered by staff from many different disciplines, allowing the student to gain understanding of the roles of a range of engineering disciplines involved in the energy and sustainability field. Site visits are organised which have included: wind farms, hydroelectric power stations, and solar installations. Visiting speakers provide industry input to the programme and have included GSK, Phillips 66, OpenHydro, Arups, Kingspan, Stryker, and Abbotts. Most of these companies now employ graduates from the programme.

A major individual research project is undertaken by each student in the final year. In most cases, this project has been brought back from the work placement and has real industry relevance. The results of the project are presented to the public and industry at the Cork Mechanical, Manufacturing & Biomedical Engineering Annual Exhibition held in CIT Bishopstown Campus in April.

Some of the Final Year projects will be based on the CIT ZERO2020 Building Project ([www.zero2020energy.com](http://www.zero2020energy.com)) which aims to have net zero energy use once fully retrofitted with a new low energy façade and 25kW of solar photovoltaics linked to a 2kW wind turbine.

Other Final Year projects will be based on the €1 million NSBET microgrid project (National Sustainable Building Energy Testbed) (<http://nimbus.cit.ie/tec>) a collaboration between CIT and UTRC which provides a micro heat and power grid to the Nimbus Research Building, and allows research on smart grids, supply and demand side energy management technologies, and new product research and development. Nimbus is located at the CIT Bishopstown Campus.

There is a mandatory work placement module for a minimum of 10 weeks at the end of the third year, however, in most instances the company will extend this over the summer up to 6 months in total. The student will be placed in an energy related industry, consultancy, government agency (SEAI), or research group. The placement will be assessed by means of presentations, reports and research project development. There are opportunities for students to spend this period abroad on a European exchange.

## Accreditation

The course is professionally accredited by the Energy Institute to undergraduate level, further learning at Masters level is required to meet the education standard for Chartered Engineer. The Energy Institute operates under the Engineering Council in the UK, which is a member of Federation Europeene d'Associations Nationales d'Ingenieurs (FEANI) through which graduate engineers are recognised in Europe. The Engineering Council, is also a signatory to the Washington Accord through which graduate engineers are recognised in USA, Canada, Australia, New Zealand, Hong Kong, South Africa, and UK.

## Further Studies

For details, see [www.cit.ie/energyeng](http://www.cit.ie/energyeng)

Honours Degree holders who achieve the specified level of academic performance are eligible to apply for a postgraduate course of study, both at CIT and at other third level colleges in Ireland and abroad.

## Career Opportunities

Graduates over the past 5 years have been employed as process engineers, design engineers and energy analysts. All major industry now requires that its energy use be minimised, and so energy graduates are working in all sectors of industry, including, biopharmaceutical, biomedical devices, energy supply utilities, and manufacturers of energy systems.

## Contact Information

Chris Gibbons  
Department of Process, Energy and Transport Engineering  
T: 021 433 5428 E: [chris.gibbons@cit.ie](mailto:chris.gibbons@cit.ie)

## Question Time

### How proficient in mathematics should I be?

Mathematics is used in all engineering disciplines and provides the tools for complex problems to be understood and solved. You would need to be comfortable with mathematics.

### What kinds of Energy Systems are available at CIT?

- 2.4kW Wind Turbine
- Wind Monitoring Masts
- Solar Thermal Collectors
- Artificial Sky Unit
- EV Charging Point
- Zero Energy Building Retrofit
- 4 Wheel Rolling Road and Engine Test Bed
- CIT/UTRC Low Energy Building Test Bed (<http://nimbus.cit.ie/tec>)



## Éanna Farrell

Technical Sales Engineer

In Sept 2012, Éanna travelled extensively on the Graduate Development Programme of Kingspan Environmental. He worked as a Design Engineer on solar systems for universities in the USA, rainwater harvesting systems for UK Hospitals, and ASHP systems for Australian Hotels. "As a Technical Sales Engineer, I now work with engineering consultancies, architects, and contractors to provide solutions from the Environmental technology range. My years in CIT were brilliant, and I'm delighted that my BEng (Honours) degree gave rise to a job that I absolutely love."

# Automotive Technology & Management

## CR 046 Level 7 Award

- ▶ Progression to Level 8 Honours Degree & Postgraduate Programmes
- ▲ Higher Certificate Option

**Application:** CAO

**Award Title:** Bachelor of Science in Automotive Technology & Management

**Duration:** 3 Years (6 Semesters)

**Places:** 40

**Location:** CIT Bishopstown Campus, Cork



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 5 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
5	0	O6/H7	O6/H7

### What is Automotive Technology and Management?

Motor vehicle technology and the motor industry in general have undergone dramatic changes in recent times. Technological advances have made vehicles more efficient, more environmentally friendly, and safer, whilst at the same time strict standards are being enforced by manufacturers, distributors and retailers.

The motor and transport industries require highly qualified people at supervisory and management level. This course is designed to take account of these advances and it prepares graduates for employment within such a dynamic industry.

### Helpful Leaving Certificate Subjects

Technology, Physics, and Business.

### Potential Areas of Employment

- Motor Dealerships: Sales and After-Sales Departments
- Transport and Logistics Companies
- Motor Vehicle Distributor Organisations
- Motor Vehicle Assessors

### First Year at a Glance

- Engine Technology: classroom based instruction on engine construction and operating principles
- Automotive Science: scientific principles relating to automobile design and operation
- Automobile Electrical Systems: the electrical and electronic systems which are used to provide comfort, safety & efficiency in modern vehicles
- Garage Practice: practical knowledge and workshop experience of modern motor vehicles
- Automotive Administration: management of the service system using computer systems for e.g. parts ordering and tracking, monitoring, billing for the service operation
- Vehicle Dynamics: Classroom based instruction on vehicle transmission and running gear construction and operating principles
- Automotive Mathematics: Fundamental Mathematical calculations and problem solving for automotive applications



### About the Course

The course has a unique combination of theoretical and applied areas of study in conjunction with relevant business subjects. In short, the course provides the basis for a successful career within the motor and transport industries.

The course is taught through a combination of lectures, practical work and assignments related to practical aspects, e.g. motor vehicle technology, garage practice, automobile electronics, advanced diagnostics, CAD/vehicle design, etc.

Work placement is incorporated for those who progress to the Bachelor of Science (Honours) in Transport Management.

### Further Studies

For details, see [www.cit.ie](http://www.cit.ie)

Degree holders who achieve the specified level of academic performance are eligible to apply to > Bachelor of Science (Honours) in Transport Management

### Career Opportunities

This Degree provides varied and rewarding career opportunities in many types of enterprise throughout the industry ranging from motor dealerships to vehicle manufacturing and transport companies. Employment opportunities include supervisory, management and technical positions within sales and after-sales sectors of the motor, transport, and fleet industries. The Degree lends itself towards a career within vehicle distributors/manufacturers along with vehicle assessing. Business start-up opportunities are also possible.

### Contact Information

Clive Atkinson  
Department of Process, Energy and Transport Engineering  
T: 021 433 5944  
E: [clive.atkinson@cit.ie](mailto:clive.atkinson@cit.ie)

### Question Time

**Can I become a motor mechanic from the course?**  
No, to become a motor mechanic requires registration with Solas and completing an apprenticeship.

**Is there work placement during the course?**  
Work placement is incorporated for those who progress to the Bachelor of Science (Honours) in Transport Management programme.



## Thomas Allen

Fleet Business Specialist

"Following my graduation, I immediately gained employment with Ford Ireland where I am currently working as a Fleet Business Specialist. My responsibilities involve liaising with high profile fleet clients on a daily basis, overseeing the fleet maintenance system and conducting dealer audits. The knowledge I gained during the course gave me the required skills needed to work for a leading manufacturer in a fast paced environment."



## Muireann Hayes

Transport Planner

After completing the degree in Automotive Technology and Management, I progressed into the honours degree in Transport Management. During this time, I undertook my work placement in Prompto Despatch Ltd, where I subsequently secured full time employment as a transport planner. Both the Level 7 and Level 8 degree programmes were great preparation for my current role.

# National Maritime College of Ireland

at a glance

## CAO Courses

### Level 7

- CR 094 BSc in Nautical Science 110
- CR 095 BEng in Marine Engineering 112
- CR 805 BEng in Marine Electrotechnology 114

## Follow on Honours Degrees

### Level 8

- BSc (Honours) in Nautical Science



# National Maritime College of Ireland

The National Maritime College of Ireland (NMCI) is located on a 10 acre campus in Ringaskiddy, Co. Cork and provides training and education for the Merchant Marine, and the non-military needs of the Irish Naval Service (INS).

The NMCI provides education services of the highest quality. Specialist spaces including survival facilities, seamanship and shipwrights' workshops, fire-fighting/damage control, jetty and lifeboat facilities, and engine room are provided. The College also provides specialised simulation equipment in the areas of navigation, bridge training, communications, engineering machinery operations, liquid cargo handling/damage control and vessel traffic systems. These facilities fully comply with the most up-to-date international standards and requirements. A multipurpose hall, sporting facilities, and an all-weather pitch, are also included in the College. The College also undertakes refresher and short courses for STCW re-validation. See website for further details on these courses [www.nmci.ie](http://www.nmci.ie).



## Careers at Sea

Life at sea has always appealed to people who want to combine travel with a challenging career offering exciting future prospects within the associated marine industries. This is the life for those who relish the challenge of working with the sea.

Ships carry 95% of world trade and seaborne traffic is forecast to increase significantly. This is generating a great demand for high-quality personnel to manage and operate today's technically sophisticated ships. Apart from seagoing duties, the maritime industry also involves shipbuilding and ship repair, marine equipment companies, ports, surveying, administration services, insurance, and law.

This major industry is looking for capable and enthusiastic people who are ready for responsibility and hard work, and who enjoy using the latest technology. You will become a key member of a highly qualified team, whether on a giant supertanker, a container ship, a cross-channel ferry, a cruise liner, a specialised vessel servicing the offshore oil industry or on a cargo ship. Opportunities at a senior level in management, marine administration,

and many other marine related areas are plentiful and experienced marine personnel are always sought for such positions.

**The NMCI is the designated National Centre for education and training for careers in the maritime sector.**

In addition to theoretical studies, students gain practical experience in safety, personal survival, first aid, and firefighting. All students train with experienced seafarers at the NMCI and aboard merchant vessels worldwide. Whether the choice is Nautical Science, Marine Engineering, or Marine Electrotechnology, the student will experience the most modern resources in the world of seafarer training. There are also opportunities to advance to higher postgraduate degrees.



See video: [www.nmci.ie/video](http://www.nmci.ie/video)





## Student Life

Students are at the heart of any college. Here at NMCI it's no different. Due to the nature of life at sea, our students come from very diverse backgrounds and have a very broad age profile. Most come directly from second level schools and colleges, however, many are seasoned seafarers returning to gain further qualifications so that they can advance in their careers at sea.

## General Facilities

There is a cafeteria where breakfast, lunch, and hot meals are served. NMCI has a hall for indoor sports, an all-weather pitch, and a gym equipped for weight training. NMCI students registered with Cork Institute of Technology (CIT) are entitled to avail of facilities and sports clubs on the main campus in Bishopstown. There are very active diving and sailing clubs which use the facilities at NMCI, as well as soccer and rugby clubs.

The Learning Resource Centre (LRC) is a focal point for students outside the classroom environment. Students can use the open access computers, read at individual study spaces and browse in the library. Currently, the library has a book stock of approximately 4,000 volumes and this collection will be developed on an ongoing basis with support from CIT and the Irish Naval Service as well as donations of funds and materials from external organisations. The library has a maritime focus and subjects covered range from law, meteorology and marine engineering to seamanship and navigation.

As a constituent college of CIT, NMCI students can request materials from other CIT Libraries and can access online databases.

## Student Accommodation

Some student accommodation is available locally. For information on nearby accommodation, please contact CIT's Accommodation Officer at accommodation@cit.ie or Telephone +353 21 4335750.

## Admission

CR 094 Nautical Science  
CR 095 Marine Engineering  
CR 805 Marine Electrotechnology

For admission to a programme, standard applicants must score the necessary CAO points, meet the minimum entry Leaving Certificate requirements, and note the following:

**Note 1:** The programme is normally available only to Irish citizens and EU citizens who are ordinarily resident in Ireland.

**Note 2:** Applicants must pass the approved medical fitness and eyesight tests as specified by the Maritime Safety Directorate of the Department of Transport, Tourism and Sport and are recommended to attend a career advisory session. Offer of a place on the course will be subject to passing the Medical and Eyesight Tests at the time of offer.

**Note 3:** Applicants, other than those indicated in Note 1, will need to be sponsored by an approved internationally trading shipping company, provide an IELTS score of 6.5, and also meet the medical and eyesight requirements for a sea going career.

**Note 4:** Applicants should note that in order to qualify for an Officer of the Watch Certificate of Competency (CoC), the Department of Transport, Tourism and Sport has set additional criteria with respect to minimum pass marks, academic progression, and students with dyslexia. See Marine Notice No. 65 of 2013. [www.dttas.ie/content/clarification-dyslexia-policy-examination-and-assessment-procedures-0](http://www.dttas.ie/content/clarification-dyslexia-policy-examination-and-assessment-procedures-0)

**Note 5:** Applicants who are non-Irish citizens should ensure that they qualify for the issue of a Seafarers Discharge Book in their home country.

## Courses for Professional Seafarers

### Certificates of Competency

(Post Degree)

Certificates of Competency are required under the Merchant Shipping Acts for personnel in positions of responsibility on board ships. NMCI offers preparatory courses for the mandatory certification examinations which are conducted by CIT on behalf of the Department of Transport, Tourism and Sport. Courses for senior or post degree personnel and other short courses are available for those who wish to progress from the Officer of the Watch level to the Chief Engineer or Master level of Certificate of Competency.

# Nautical Science

## CR 094 Level 7 Award

► Progression to Level 8 Honours Degree & Master Mariner

**Application:** CAO  
**Award Title:** Bachelor of Science in Nautical Science  
**Duration:** 3 and a half Years including seetime  
**Places:** Up to 48  
**Location:** National Maritime College of Ireland, Ringaskiddy, Co. Cork.

### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 5 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
5	0	O6/H7	O6/H7

Applicants must pass the approved medical fitness and eyesight tests as specified by the Maritime Safety Directorate of the Department of Transport, Tourism and Sport and are recommended to attend a career advisory session.

See Page 109 for further admission information.



### What is Nautical Science?

Nautical Science has three main elements: Navigation, Cargo Operations, and Ship Handling. In other words, the conning and control of a ship; the safe operation of a ship, including the protection of life and the environment; Shipboard administration, and the handling, loading and care of cargoes which may be as diverse as petroleum products, general cargo, or thousands of new cars or passengers.

### Helpful Leaving Certificate Subjects

Mathematics, Physics, English, and Engineering.

### Work Placement

There is a mandatory work placement of 12-15 months seetime in Year 2.

### Potential Areas of Employment

- Ship's Officer (from Junior Ranks to Captain)
- Harbour Master/Pilot
- Marine Surveyor
- Maritime Studies Lecturer

### First Year at a Glance

- Navigation & Meteorology: an introduction to both celestial and terrestrial navigation, together with an understanding of meteorology, as it relates to the seafarer
- General Ship Knowledge: elements of ship construction, stability and cargo operations
- Applied Nautical Science: the application of science and physics as it relates to the marine environment
- Seamanship: the theory and practice of seamanship, having regard to safe working practices
- Introduction to Shipboard Safety: includes short-course elements relating to fire-fighting, sea survival, and first aid training
- Bridge Watchkeeping: an introduction to the theory and practice of keeping a safe navigational watch, having regard to the International Regulations for the Prevention of Collisions at Sea



## About the Course

This course is designed for those who wish to pursue a career as a Deck Officer aboard ship. It provides a comprehensive education in navigation and other ship board activities. Students who successfully complete Year 1 can expect to be placed on a series of commercial ships in Year 2, gaining fifteen months seetime for practical training experience, and to gain the necessary 'seetime' for the Department of Transport, Tourism and Sport Certificate of Competency. In addition, students must complete a comprehensive workplace training programme including training records, journals and other documents associated with the training programme, as specified from time to time.

**It should be noted that while every endeavour will be made to secure suitable sea training placement, this is outside the control of CIT/NMCI and the College cannot accept responsibility for difficulties in securing such placement.**

## Further Studies

BSc (Ordinary) degree Level 7 - suitably qualified Nautical Science graduates may continue their studies and obtain the BSc (Honours) Nautical Science degree and Chief Mate professional qualification, as an add-on year.

## Career Opportunities

Graduates first become Officer of the Watch on a vessel after graduating and passing relevant examinations. They can advance to Chief Mate or Ship's Captain with further study, examinations, and seetime. Careers exist on all different type of ocean going vessels: bulk carriers, oil

tankers, container ships, cruise and ferry vessels. There are also careers on specialist vessels, such as seismic and exploration ships, pilot vessels, tugs, and mega yachts.

## Contact Information

Capt. Sinéad Reen,  
Department of Maritime Studies,  
National Maritime College of Ireland,  
Ringaskiddy, Co. Cork.  
T: +353 (0) 21 433 5612  
E: admissions@nmci.ie

## Question Time

**How successful is the College at securing work placement?**  
Very successful. Suitable qualified personnel with relevant qualifications are always in demand in the industry.

**How do I go about getting a training berth to sponsor me while I am in College?**  
The College endeavours to place all students on vessels. To date it has been successful.

**Do I have to work for the training berth once I graduate?**  
The commitment from the sponsoring companies usually ends upon graduation. However, a significant number of graduates go on to work as an officer with their sponsors.

**How much sea going experience do I need before I can apply to sit for a Master's Certificate of Competency?**  
A minimum of 36 months sea service is required to progress to Ship's Captain. With leave and further study requirements, this sea service takes six to seven years to complete.



## Catriona Dowling

Harbour Master

Catriona is a graduate of both the Level 7 and Level 8 BSc in Nautical Science programmes. During her seagoing career, Catriona sailed on a wide variety of vessels including a survey vessel, lighthouse tender, general cargo vessel, passenger/RO/RO vessel, ferries, and cruise ships. After graduating with the Level 8 Honours Degree, Catriona obtained her MCA Master Mariner (Master Unlimited) Certificate of Competency qualifying her to command her own vessel as Captain/Master Mariner.

On coming ashore Catriona began working as an Assistant Harbour Master and was later promoted to Deputy Harbour Master in Belfast Harbour before taking up her newest role as Harbour Master in Warrenpoint Harbour. Catriona is the first female Harbour Master of a large commercial port in the history of the Island of Ireland.

Catriona is the recipient of the 6th CIT Faculty of Engineering & Science STEM Graduate Achievement Award.

# Marine Engineering

## CR 095 Level 7 Award

► Progression to Chief Engineer Officer

**Application:** CAO  
**Award Title:** Bachelor of Engineering in Marine Engineering  
**Duration:** 4 Years including 1 year work placement  
**Places:** 40  
**Location:** National Maritime College of Ireland, Ringaskiddy, Co. Cork.



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 5 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
5	0	O6/H7	O6/H7

Applicants must pass the approved medical fitness and eyesight tests as specified by the Maritime Safety Directorate of the Department of Transport, Tourism and Sport and are recommended to attend a career advisory session.

See Page 109 for further admission information.

### What is Marine Engineering?

The function of the Marine Engineer is to operate and maintain the engines, boilers, generators and other systems of ships. Most of the mechanical equipment aboard ship is operated and maintained by Marine Engineers. This course aims to provide a sound knowledge base of Marine Engineering.

### Helpful Leaving Certificate Subjects

Mathematics, Physics, Engineering, and English.

### Work Placement

On completion of Year 2, students partake in work placement at sea for a minimum of 9 months in a 14 month period.

### Potential Areas of Employment

- Ship's Officer (from Junior Ranks to Chief Engineer)
- Marine Superintendent
- Marine Consultant/Surveyor
- Power Plant Engineer

### First Year at a Glance

- Introduction to Marine Engineering: The principles and practical aspects of Marine Engineering systems found on board ship
- Physics for Marine Engineers: Giving an enhanced understanding of the physics principles underlying all engineering practice
- Mechanics 1: Basic principles of forces and movements that are fundamental to engineering design
- Mechanical Workshop 1: A practical workshop module which gives a fundamental understanding of materials and the fabrication of designed components
- Technological Mathematics - offers great support to students in the first year of the engineering programme



## About the Course

As well as lectures, training is provided in marine, electrical, welding and mechanical workshops, supplemented with practical work in the College engine room, and simulation exercises in the machinery and cargo-handling simulation suites.

Students who successfully complete Year 1 and 2 are expected to be placed in a commercial ship, for practical training experience, and to gain the necessary 'seaside' for the Department of Transport, Tourism and Sport Certificate of Competency, in their third year. In addition while at sea, students must complete a comprehensive workplace training programme including training records, journals and other documents associated with the training programme, as specified from time to time.

**It should be noted that while every endeavour will be made to secure suitable sea training placement, this is outside the control of CIT/NMCI and the College cannot accept responsibility for difficulties in securing such placement.**

## Further Studies

For details, see [www.cit.ie](http://www.cit.ie) and [www.nmci.ie](http://www.nmci.ie)

There are opportunities for further study in order that cadets will progress from the Officer of the Watch Level on to the Second Engineer Officer Certificate of Competency (CoC) and in due course to the Chief Engineer Officer Certificate of Competency with a combination of sea service, further study and examinations.

## Career Opportunities

Graduates first become Officer of the Watch on a vessel after graduating and passing relevant examinations. They can advance to Second Engineer or Chief Engineer with further study, examinations, and sea service. Careers exist on all different type of ocean going vessels: bulk carriers, oil tankers, container ships, cruise ships, and ferry vessels.

## Contact Information

Capt. Sinéad Reen,  
Department of Maritime Studies,  
National Maritime College of Ireland,  
Ringaskiddy, Co. Cork.  
T: +353 (0) 21 433 5612  
E: [admissions@nmci.ie](mailto:admissions@nmci.ie)

## Question Time

**How do I go about getting a Shipping Company to sponsor me while I am in College?**

The College endeavours to place students with shipping companies and has been successful to date.

**Do I have to work for the Shipping Company once I graduate?**

The commitment from the sponsoring companies usually ends upon graduation. However, a significant number of graduates go on to work as an officer with their sponsors.

**How much sea going experience do I need before I can apply to sit for a Chief Engineer's Certificate of Competency?**

The minimum is approximately three years on suitable vessels and voyages.



## Eoin O'Sullivan

Senior Marine Engineer

Eoin graduated in Marine & Plant Engineering (now titled Marine Engineering). He is currently serving as a Chief Engineer on a speciality vessel (FPSO) in the production and storage area of exploration off the coast of Brazil, working one month on and off.

Eoin obtained the Chief Engineering Certificate of Competency. Eoin found the College facilities excellent. "Most of the lecturers have spent time at sea and use their experience to teach their skills. The standard of education is very high."

# Marine Electrotechnology

## CR 805 Level 7 Award

► Progression to Electro Technical Officer on ocean-going vessels

**Application:** CAO

**Award Title:** Bachelor of Engineering in Marine Electrotechnology

**Duration:** 3 Years + approximately 1 Year work placement

**Places:** 20

**Location:** National Maritime College of Ireland, Ringaskiddy, Co. Cork.



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 5 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
5	0	O6/H7	O6/H7

Applicants must pass the approved medical fitness and eyesight tests as specified by the Maritime Safety Directorate of the Department of Transport, Tourism and Sport and are recommended to attend a career advisory session.

See Page 109 for further admission information.

### What is Marine Electrotechnology

An Electro-technical Officer (ETO) operates, maintains and calibrates all electrical, electronic and ship's equipment. The ETO's role is not restricted to the engine room and may also work on complex systems located throughout any vessel.

### Helpful Leaving Certificate Subjects

Mathematics, Physics, Engineering, and English.

### Work Placement

On completion of Year 2, students partake in work placement at sea for a minimum of 9 months.

### Potential Areas of Employment

- Electro-technical Officers
- Marine Electronic Maintenance

### Fundamental Modules of First and Second Year

- The Marine Electrotechnology Degree shares all but one of its first year modules with the Marine Engineering Degree as graduates will be part of a vessel's Engineering Department and must understand the basics of Marine Engineering.
- Shipboard Management for ETOs: Introduces the student to the work based practices of an ETO and gives an understanding of maintenance systems, legislation and safe working practices
- Electrical and Electronic Principles: Gives students an understanding of the theoretical and practical principles of basic electrical and electronic components and circuits
- Marine Power Systems: This module gives students an understanding of ships power generation and distribution systems as well as a practical understanding of wiring basic control systems



## About the Course

This is an exciting programme to cater for the growing need on board ship for a specialist in electrical/electronic/networking systems. There is currently a shortage of these professionals and large shipping companies sponsor our students early in their programmes to meet the shipping company's manning requirements.

The course shares its first two semesters with the CR 095 BEng in Marine Engineering. Having completed Year 1, Marine Electrotechnology students begin specialist electrical and electronic training. As well as lectures, training is provided in a variety of workshops and laboratories. This practical work is given to enhance the students' learning experience. Practical knowledge of fundamental theory is gained in electrical, electronic, communications, and control laboratories. A broad understanding of ships and ships' systems is delivered in electrical workshops and in the College's own engine room.

Students who successfully complete Year 1 and 2 are expected to be placed on a commercial ship, for practical training experience, and to gain the necessary 'seaservice' for an internationally recognised Certificate of Competency. While at sea they must complete a comprehensive workplace training programme.

**It should be noted that while every endeavour will be made to secure suitable sea training placement, this is outside the control of CIT/NMCI, and the College cannot accept responsibility for difficulties in securing such placement.**

## Further Studies

For details, see [www.cit.ie](http://www.cit.ie) and [www.nmci.ie](http://www.nmci.ie)

There are opportunities for further study in related fields at the Honours Degree level. Graduates will be well placed to pursue further studies in either electrical or electronic engineering.

## Career Opportunities

Electro-technical Officers of a high standard are particularly sought after within the cruise line industry. There are also a number of opportunities ashore in a wide variety of fields including marine electronic maintenance and aviation instrumentation maintenance industries.

## Contact Information

Capt. Sinéad Reen,  
Department of Maritime Studies,  
National Maritime College of Ireland,  
Ringaskiddy, Co. Cork.  
T: +353 (0) 21 433 5612  
E: [admissions@nmci.ie](mailto:admissions@nmci.ie)

## Question Time

**How successful is the College at securing work placement?**  
The College endeavours to place students with shipping companies and has been highly successful to date.

**If I graduate with this Level 7 degree, can I further my studies in CIT as an Electronic or Electrical Engineer at Level 8?**

CIT has a Recognition of Prior Learning System, detailed information at [www.cit.ie/rpl](http://www.cit.ie/rpl). Applicants may be exempted from modules in courses which are similar.



## Sinéad Reynolds

Electro-technical Officer

"I graduated from the NMCI in June 2015 with a BEng in Marine Electrotechnology after four years of study, including nine months sea going experience as an ETO cadet. For the final two years of my degree I was sponsored by Northern Marine Manning Services, who placed me on both oil tankers and passenger ships. After graduating from the NMCI I completed my Certificate of Competency exam with the Dept of Transport, Tourism and Sport, and began working for Stena Line as a Junior ETO. I have since been promoted to ETO and have been working for Stena Line ever since."

Sinéad has the proud distinction of being the first female to graduate from the BEng in Marine Electrotechnology Programme at NMCI.

# Science & Informatics at a glance

## CAO Courses

### Level 8

- CR 305 Physical Sciences (Honours) (Common Entry) 118
- CK 409 BSc (Honours) in Industrial Physics (Joint CIT/UCC Degree) 120
- CR 340 BSc (Honours) in Analytical Chemistry with Quality Assurance 122
- CR 360 BSc (Honours) in Instrument Engineering 126
- CR 365 BSc (Honours) in Environmental Science & Sustainable Technology 128
- CR 335 Biological Sciences (Honours) (Common Entry) 132
- CR 320 BSc (Honours) in Biomedical Science (Joint CIT/UCC Degree) 136
- CR 370 BSc (Honours) in Agri-Biosciences 138
- CR 333 BSc (Honours) in Nutrition & Health Science 140
- CR 325 BSc (Honours) in Pharmaceutical Biotechnology 142
- CR 106 BSc (Honours) in Software Development 144
- CR 312 BSc (Honours) in Web Development 146
- CR 116 BSc (Honours) in Computer Systems 148
- CR 310 BSc (Honours) in IT Management 150

### Level 7

- CR 300 Physical Sciences (Common Entry) 118
- CR 007 BSc in Analytical & Pharmaceutical Chemistry 124
- CR 001 BSc in Applied Physics & Instrumentation 130
- CR 006 Applied Biosciences 134  
Degree Award options:  
BSc in Food & Health Science or  
BSc in Applied Biosciences and  
Biotechnology
- CR 016 BSc in Software Development 152
- CR 888 BSc in Information Technology 154

## Follow on (Honours) Degrees

### Level 8

- BSc (Honours) in Applied Physics & Instrumentation

## Postgraduate Programmes

- Higher Diploma in Science in Cloud Computing
- MSc in Cloud Computing
- MSc in Information Security
- MSc in Information Design & Development
- MSc in Software Architecture & Design
- MSc in Artificial Intelligence
- MSc (by Research)
- PhD





# Physical Sciences (Common Entry)

**CR 305** Level 8 Award

**CR 300** Level 7 Award

**Application:** CAO

**Award Title:** Dependent on chosen specialisation.

**Duration:** Common Semester 1, students then select a course in either Chemistry or Physics with which to continue.

**Places:** 20 (Level 8) / 20 (Level 7)

**Location:** Bishopstown Campus, Cork

## Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements for CR 305

Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
4	2	O6/H7	O6/H7

Entry  
2019

### Minimum Entry Requirements for CR 300

Leaving Certificate in 5 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
5	0	O6/H7	O6/H7



## What is Science?

Science refers to a system of acquiring knowledge. This system uses observation and experimentation to describe and explain natural phenomena. Science is an excellent career choice for those interested in understanding how the chemicals, foods and other products that we encounter in everyday life are designed and produced. From cures for life threatening illnesses, to environmental protection, to the design of new foods and space science, careers in science are varied and interesting.

## Helpful Leaving Certificate Subjects

Mathematics, Physics, and Chemistry

## First Year at a Glance

- Biology: study of fundamental building blocks of life
- Chemical Principles: study of general chemical interactions
- Physics: study of fundamental basis of energy, light and heat
- Laboratory Skills: understanding the basis for good laboratory practice in a chemistry laboratory
- Mathematics: fundamental mathematical concepts and skills required to understand and solve problems in the modern world



## About the Courses

The Physical Sciences (Common Entry) courses are designed for applicants who wish to enter Chemical or Physical Science in CIT but are undecided about or wish to postpone selecting a designated Chemistry or Physics qualification until after they have had an opportunity to experience both disciplines.

**Common Semester 1:** The common Semester 1 programme includes modules in Physics, Chemistry, Biology, Mathematics, and Computing so that students will have completed an introduction to general science by the end of Semester 1.

At the end of Semester 1, students choose the Chemistry or Physics degree course that they wish to pursue in Semester 2.

**Students on the Level 8 Physical Sciences Common Entry Programme CR 305** can apply to progress to one of the three Level 8 science courses:

- > CR 360 BSc (Honours) in Instrument Engineering
- > CR 365 BSc (Honours) in Environmental Science and Sustainable Technology
- > CR 340 BSc (Honours) in Analytical Chemistry with Quality Assurance

**Students on the Level 7 Physical Sciences Common Entry Programme CR 300** can apply to progress to one of the two Level 7 science courses:

- > CR 001 BSc in Applied Physics and Instrumentation
- > CR 007 BSc in Analytical & Pharmaceutical Chemistry

Applicants are advised to visit each of the course sites for detailed descriptions at [www.cit.ie](http://www.cit.ie)

## Contact Information

Dr Donagh O'Mahony  
Department of Physical Sciences  
T: 021 433 5595  
E: [donagh.omahony@cit.ie](mailto:donagh.omahony@cit.ie)

## Question Time

### What are the advantages of taking the Physical Sciences (Common Entry) route?

Students have an opportunity to take introductory modules in both Chemistry and Physics (in addition to other areas of general science) before choosing the discipline they wish to follow.

### Do I need to have studied at least one of the science subjects at Leaving Certificate to apply for these courses?

No – the fundamentals of the three Leaving Certificate science subjects are delivered in Semester 1.

### What is the difference between choosing Physical Sciences (Common Entry) at Level 8 to Physical Sciences (Common Entry) at Level 7?

Students commencing on the Level 7 route will have completed their ordinary BSc Degree in 3 years, while those who choose the Level 8 route will take 4 years to complete their Honours BSc Degree, with significant additional material being delivered in the fourth year to achieve the higher level award.

## Progression from Physical Sciences (Common Entry)

### CR 305 Level 8

BSc (Honours) in Instrument Engineering

BSc (Honours) in Environmental Science and Sustainable Technology

BSc (Honours) in Analytical Chemistry with Quality Assurance

### CR 300 Level 7

BSc in Applied Physics & Instrumentation

BSc in Analytical & Pharmaceutical Chemistry

# Industrial Physics

## CK 409 Level 8 Award

### ► Progression to Postgraduate Programmes

**Application:** CAO  
**Award Title:** Bachelor of Science (Honours) in Industrial Physics  
**Duration:** 4 Years (8 Semesters)  
**Places:** 20  
**Location:** CIT Bishopstown Campus, and University College Cork



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English and Irish Grade	Science Grade
4	2	H4	O6/H7	H4 (Note 1)

**Note 1:** A H4 must be obtained in a Laboratory Science Subject (from Biology, Chemistry, Physics, Physics with Chemistry, or Agricultural Science).

**NB:** Please note the H4 grade can also be used to satisfy the H5 requirements.

### What is Industrial Physics?

Industrial physicists are problem solvers, able to solve problems quickly and in a wide range of industrial settings, devising and using unconventional techniques. Advanced, high-precision manufacturing is the core of Ireland's industrial output.

### Helpful Leaving Certificate Subjects

Physics, Chemistry, Mathematics, Physics and Chemistry, and Applied Mathematics.

### Potential Areas of Employment

- Biopharmaceutical engineering
- Advanced scientific instrumentation
- Advanced manufacturing
- Oil & gas/renewable energy

### Work Placement

All BSc Industrial Physics students are offered a minimum 10-week placement either directly in industry or in a university or research centre laboratory performing industrially related research and development. The placements are most frequently hosted in Ireland, though may also be carried out abroad following prior arrangement between CIT/UCC and our collaborating industrial or academic partners.

### First Year at a Glance

- Introduction to Modern Physics: An overview of physics underlying modern technologies such as electromagnetism, optics, mechanics, etc.
- Mathematical Methods: fundamental mathematical concepts and skills required to understand and solve problems in the modern world
- Chemistry for Physicists and Mathematicians: the basic chemistry skills
- Introduction to Environmental Science: Overview of fundamental concepts of environmental monitoring, sensors, pH, gas detection, etc
- Instrument Measurement: fundamentals of measurement accuracy, precision, instrument response, sensitivity, range, etc
- Industrial Automation: programmable logic controllers, automation software tools, CAD



## Electives

- Programming in C
- Computer Applications with Visual Basic
- Programming in Python

## About the Course

This Honours Degree course is offered jointly by Cork Institute of Technology and University College Cork. The degree combines fundamental physics with hands-on industrial training, targeting careers in some of the most exciting and innovative industries in Ireland and abroad. The first two years of the degree focus mainly on fundamental physics, and the second two years place emphasis on industrial control technology.

This degree is ideal for students who wish to gain deep insight into the physics of modern technologies, and who enjoy applying this knowledge in problem solving in real-world environments. With strong employer demand for qualified graduates, this ever-expanding field offers career paths for graduates who wish to use their skills in technical settings and equally those seeking a corporate management path.

## Further Studies

As a major Level 8 award, the degree in Industrial Physics qualifies the graduate for entry to many Masters and Doctorate programmes in Applied Physics and Engineering, as well as conversion courses into other numerate disciplines such as actuarial studies. There are additionally Industrial PhD programmes that cater to graduates wishing to carry out their doctorate while remaining with their employer, which would be highly suitable.

## Career Opportunities

An Honours Degree in Industrial Physics can lead to rewarding roles in many sectors such as Pharmaceutical and Bio-pharmaceuticals; medical devices; food/drinks manufacturing, and consultancy.

## Contact Information

Dr Stephen Hegarty  
Department of Physical Sciences  
T: 021 433 5391  
E: stephen.hegarty@cit.ie

## Question Time

### What topics are studied in this programme?

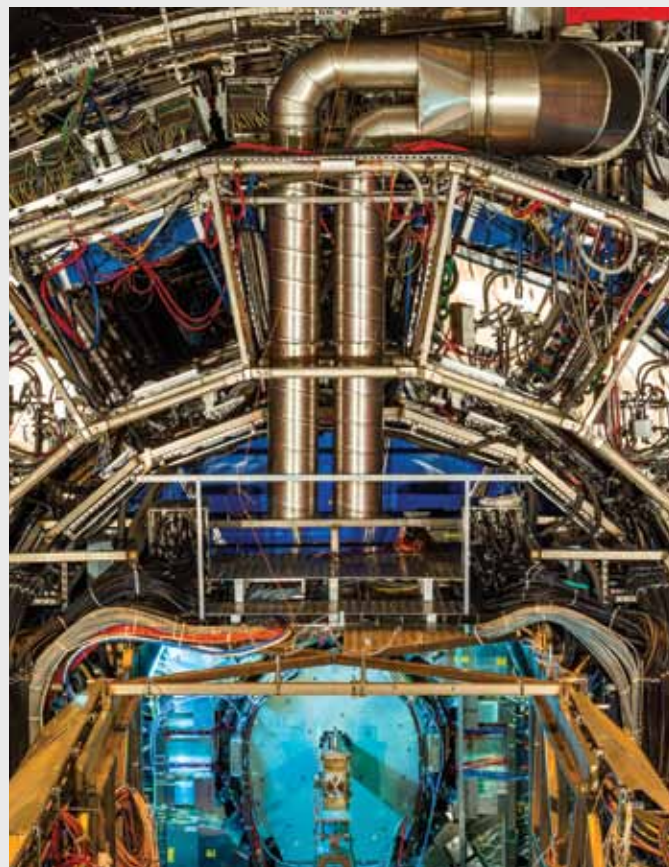
- Classical physics, quantum mechanics, special relativity, thermodynamics, electro- and magneto-statics, electromagnetism, computational physics, optics, experimental methods, condensed matter physics, lasers and photonics.
- Chemistry fundamentals.
- Textual programming language, VB, ladder logic programming, SCADA.
- Signal processing, Process Analytical Technology, process control.
- Air quality monitoring, Gas Analysis Instrumentation, Water Quality Instrumentation.

### Why study Industrial Physics?

- The course provides an excellent grounding in the fundamentals of physics but also the tools to apply these immediately upon graduation
- Work at the heart of Ireland's large and growing advanced manufacturing sector
- Joint degree blending particular strengths of two institutions
- Long established extended placement scheme with potential employers
- High employer demand for graduates

### What is the time divide between CIT and UCC?

Overall, the course is split 50/50 between UCC and CIT. In years 1 & 2, 75% of the modules are in UCC, 25% in CIT. In years 3 & 4, this is reversed with 75% of the modules in CIT, 25% in UCC.



# Analytical Chemistry with Quality Assurance (Honours)

## CR 340 Level 8 Award

» Progression to Postgraduate Programmes

**Application:** CAO  
**Award Title:** Bachelor of Science (Honours) in Analytical Chemistry with Quality Assurance  
**Duration:** 4 Years (8 Semesters)  
**Places:** 20  
**Location:** Bishopstown Campus, Cork



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
4	2	O6/H7	O6/H7

### What is Analytical Chemistry?

Chemists analyse and understand everyday materials to determine efficient and safe ways of transforming them into useful products, develop new products and materials, and monitor production processes to ensure the quality of finished products.

Analytical Chemistry is the speciality dealing with devising, selecting, and using methods for determining the identity and quantity of chemical composition of samples such as drugs, medicines, food and beverage, water, air etc. These have key components that are present at very low levels or concentrations, and many sophisticated techniques have been developed for their detection and analysis.

### Helpful Leaving Certificate Subjects

Chemistry, Physics, Mathematics, and Biology.

### Work Placement

A mandatory work placement takes place in Year 3.

### Potential Areas of Employment

- Laboratory Analyst
- Quality Management, Regulatory Compliance
- Research
- Teaching
- Pharmaceutical Production

### First Year at a Glance

- Chemical Principles: study of general chemical interactions
- Physics: study of fundamental basis of energy, light and heat
- Laboratory Skills: understanding the basis for good laboratory practice in a chemistry laboratory
- Biology: study of fundamental building blocks of life
- Mathematics: students use maths to problem solve



## About the Course

The BSc (Honours) in Analytical Chemistry with Quality Assurance (ACQUA) prepares students for careers in the pharmaceutical industries and other areas such as Environmental Monitoring, Food/Beverage, Oil and Gas etc. Graduates identify and solve analytical problems by the selection and use of a wide range of methods and techniques – from the mainstream areas of spectroscopy, chromatography, and electrochemistry, to more specialised areas such as particle size analysis or immunoassay techniques.

The Honours BSc ACQUA also focuses on quality assurance, which is of vital importance to the pharmaceutical, chemical and allied industries. The course is examined using a combination of continuous assessment of both theory and practical work, and end of year examinations.

## Professional Recognition

The Honours BSc ACQUA is recognised by the Institute of Chemistry of Ireland for membership (MICI); graduates are also eligible to apply for Associate Membership of the Royal Society of Chemistry (AMRSC).

## Teaching

After obtaining the Honours Degree (Level 8) in Analytical Chemistry with Quality Assurance, graduates may apply for a 2 year, full time, post graduate study in Initial Teacher Education (120 ECTS credits). On completion, graduates are eligible for registration with the Teaching Council.

## Further Studies

For details, see [www.cit.ie](http://www.cit.ie)

Graduates achieving a First Class or Second Class (Grade 1) Honours Degree may proceed to postgraduate research programmes in Chemistry (MSc, PhD) at CIT. Such graduates will be eligible for consideration for a limited number of Postgraduate Research RISAM Scholarships offered by CIT each year. Holders of the Honours BSc ACQUA may also embark on postgraduate programmes at Irish and UK universities.

## Career Opportunities

Graduates are prepared for laboratory careers in the BioPharmaChem industries and other industries. They are qualified in areas such as Quality Standards, Good Manufacturing Practice, Total Quality Management, and Regulatory Compliance. They may take up leadership roles in areas such as method design and implementation, process validation, and management of quality systems.

## Contact Information

Dr Lee Doherty  
Department of Physical Sciences  
T: 021 433 5865  
E: [william.doherty@cit.ie](mailto:william.doherty@cit.ie)

## Question Time

**If I didn't study Chemistry for the Leaving Certificate, am I at a disadvantage?**

No – the fundamentals of the three Leaving Certificate science subjects are delivered during the first semester, with chemistry being further developed as the course progresses.

**What is the difference between CR 340 and CR 007?**

Students commencing on the CR 007 route will have completed the ordinary BSc Degree in 3 years, while those starting on CR 340 will take 4 years to complete the Honours BSc Degree, with significant additional material being delivered in the fourth year to achieve the higher level award.

**What personal skills are most suited to the course and subsequent careers?**

Numeracy, accuracy, precision; good practical and manipulative skills; an analytical approach to problem-solving, i.e. the ability to relate a numerical answer to the physical reality that it represents.



## John O'Sullivan

Analytical Chemist

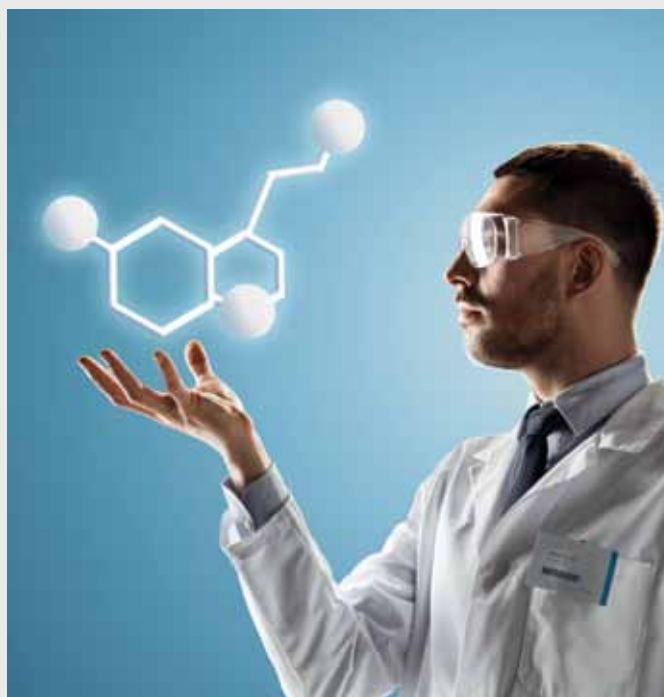
The practical chemistry laboratories were very 'hands-on' and I found the lecturers very helpful and approachable. In 3rd year I did my work placement in a pharmaceutical company in the Cork region which gave me valuable experience of both Good Manufacturing Practices (GMP) and regulatory Quality compliance in industry. I successfully completed my Level 8 BSc (Hons) and was awarded with first class honours. I am currently completing an MSc in Molecular Biology (UCC). The methodology, statistical calculations, trouble-shooting and analytical expertise I've gained by completing my Chemistry degree at CIT was extremely relevant to my Master's project as these skills are very important in all aspects of science. The CIT Chemistry programme has equipped me with the skills and has given me the confidence necessary to carry out successful research. Due to my high BSc (Hons) grade, I was the chosen candidate for a Science Foundation Ireland (SFI) PhD scholarship in Bio-photonics in DCU which I am looking forward to starting in October 2018. I would advise anyone who has an interest in working in the BioPharmaceutical sector or in academic research to consider studying the Level 8 BSc (Hons) in Analytical Chemistry with Quality Assurance in the Department of Physical Sciences at CIT.

# Analytical & Pharmaceutical Chemistry

## CR 007 Level 7 Award

- ▶ Progression to Level 8 Honours Degree & Postgraduate Programmes
- ▲ Higher Certificate Option

**Application:** CAO  
**Award Title:** Bachelor of Science in Analytical & Pharmaceutical Chemistry  
**Duration:** 3 Years (6 Semesters)  
**Places:** 20  
**Location:** Bishopstown Campus, Cork



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 5 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
5	0	O6/H7	O6/H7

### What is Analytical and Pharmaceutical Chemistry?

Chemistry is the fundamental science that deals with the "three Cs" – the composition of matter, the changes that transform matter, and the conditions under which those changes occur. The study of fundamental Chemistry allows us to increase our total knowledge and understanding of our universe, our environment, and indeed life itself. Applied Chemistry uses our understanding of fundamental Chemistry to improve the way in which we live, work, and develop.

Analytical Chemistry deals with the great variety of methods used to identify and quantify the chemical components of materials, while pharmaceutical chemistry focuses on aspects of drug design, synthesis, and manufacture.

### Helpful Leaving Certificate Subjects

Chemistry, Physics, Mathematics, and Biology.

### Work Placement

A mandatory work placement takes place in Year 3.

### Potential Areas of Employment

- Chemical Laboratory Technician
- Laboratory Quality Assurance
- Product Development
- Pharmaceutical Production

### First Year at a Glance

- Chemical Principles: study of general chemical interactions
- Physics: study of fundamental basis of energy (light and heat)
- Laboratory Skills: understanding the basis for good laboratory practice in a chemistry laboratory
- Biology: study of fundamental building blocks of life
- Mathematics: students use mathematics to problem solve





## About the Course

Courses in Chemistry at CIT have provided many of the highly skilled personnel at various levels required by the industry. School leavers are offered a flexible and attractive route through an extremely diverse science. The BSc in Analytical and Pharmaceutical Chemistry prepares students for laboratory-based careers; activities include preparation of chemicals and samples for use, analysis of raw materials and products of chemical processes, set-up/maintenance/use of chemical instrumentation. Computerised instruments and information technology are important in this work, and graduates may work in quality assurance, analysis, research, development, and production.

The course aims to give students the knowledge and skills to practice chemistry in the laboratory environment.

## Further Studies

For details, see [www.cit.ie](http://www.cit.ie)

Graduates of the Bachelor of Science in Analytical and Pharmaceutical Chemistry who have attained a minimum final average mark of 50% may proceed to Year 4 of > Bachelor of Science (Honours) in Analytical Chemistry with Quality Assurance (ACQUA)

This in turn may lead to the option to proceed to postgraduate studies (MSc or PhD) in Chemistry at CIT or other colleges in Ireland or abroad.

After obtaining the Honours Degree (Level 8) in Analytical Chemistry with Quality Assurance, graduates may apply for a 2 year, full time, postgraduate study in Initial Teacher Education (120 ECTS credits). On completion, graduates are eligible for registration with the Teaching Council.

## Career Opportunities

Career opportunities exist not only in the BioPharmaChem industry, but also in such diverse areas as electronics, metallurgy, and food/beverage processing.

Graduates have become senior technicians, analysts, laboratory managers, and quality control supervisors. Some have progressed into company management positions over the years, and some have started and managed their own companies.

## Contact Information

Dr Lee Doherty  
Department of Physical Sciences  
T: 021 433 5865  
E: [william.doherty@cit.ie](mailto:william.doherty@cit.ie)

## Question Time

### I didn't study Chemistry for the Leaving Certificate, am I at a disadvantage?

No – the fundamentals of the three Leaving Certificate science subjects are delivered during the first semester, with chemistry being further developed as the course progresses.

### What is the difference between CR 340 and CR 007?

Students commencing on the CR 007 route will have completed the ordinary BSc Degree in 3 years, while those starting on CR 340 will take 4 years to complete the Honours BSc Degree, with significant additional material being delivered in the fourth year to achieve the higher level award.

### What personal skills are most suited to the course and subsequent careers?

Numeracy, accuracy, precision; good practical and manipulative skills; an analytical approach to problem-solving, i.e. the ability to relate a numerical answer to the physical reality that it represents.



## Aileen Cremin

Quality Control Specialist

"I graduated with the BSc in Analytical & Pharmaceutical Chemistry, and then completed the BSc (Honours) in Analytical Chemistry with Quality Assurance the following year. I currently work for Pfizer Ireland Pharmaceuticals, based in the Quality Control Laboratory as part of the finished products team.

The position of a quality control specialist has plenty of variety and challenges, with many opportunities to get involved in different areas within the pharmaceutical manufacturing industry. I use a lot of what I learned in my Degree when dealing with my daily workload, but I appreciate it even more when troubleshooting the problems that arise from time to time."

# Instrument Engineering (Honours)

## CR 360 Level 8 Award

► Progression to Postgraduate Programmes

**Application:** CAO

**Award Title:** Bachelor of Science (Honours) in Instrument Engineering

**Duration:** 4 Years (8 Semesters)

**Places:** 20

**Location:** Bishopstown Campus, Cork



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
4	2	O6/H7	O6/H7

### What is Instrument Engineering?

Instrument Engineering is the multidisciplinary specialisation centred on the principles of operation and applications of the diverse instrumentation used to measure, control and automate processes and systems throughout industry and society. Within process industries such as pharmaceuticals, biotechnology, food, beverages and water, instrument engineering contributes significantly to quality, safety, productivity, and efficiency.

### Helpful Leaving Certificate Subjects

Physics, Engineering, Technology, Chemistry, and Mathematics.

### Work Placement

A mandatory work placement of a minimum of 10 weeks takes place in Year 3.

### Potential Areas of Employment

- Instrument Engineering
- Automation Engineering
- Control Engineering
- System Integration
- Engineering Consultancy

### First Year at a Glance

- Computing: enabling students to use technology for instrumentation
- Mathematics: developing the tools for instrument calibration and automation
- Chemical Principles: physical sciences to the fundamentals of atomic theory, chemical bonding, the periodic table, physical states of matter, and stoichiometric calculations
- Fundamental Physics: an introductory course comprising foundation physics topics relevant to all fields of science
- Sensors and Systems: the components of measurement systems using a variety of sensors
- Measurement and Calibration of sensors used for industry



## About the Course

This multidisciplinary course provides a comprehensive foundation of physical science, mathematics, electronics, measurement technology and information technology on which a range of specialist instrument engineering modules are developed. There is a continual emphasis throughout the course on the design standards and best practice relevant to instrument engineering.

During the placement in Year 3, students will gain direct experience in the practice of instrument engineering within an industry, organisation or research group. It may be possible for the placement to be in an international location.

In the final year of the course there is a major project in the area of instrument engineering. Graduates will be able to design, develop and implement measurement and control systems. Graduates will also be able to manage, evaluate and critically analyse complex instrumentation and process control installations. The course is presented through a mix of formal lectures and practical sessions.

## Accreditation

This Honours Degree is recognised by the Institute of Physics. Graduates of recognised Degrees qualify for Associate Membership upon graduation and may apply for full Membership after appropriate work experience.

The Institute of Physics provides routes for suitably qualified and experienced Members to become Chartered Physicists and Chartered Engineers. Further details can be found on the Institute of Physics website.

## Further Studies

For details, see [www.cit.ie](http://www.cit.ie)

Graduates are eligible to apply for a postgraduate degree by research at CIT at Master's (MSc) or Doctoral (PhD) levels.

## Career Opportunities

Graduates typically work as Instrument Engineers, Automation Engineers or Control Engineers within chemical, pharmaceutical, biotechnology, oil/gas, food, beverage and water treatment companies that use instrumentation to improve productivity, safety, reliability, quality, etc.

Significant employment opportunities exist for graduates in the many companies that design, manufacture and supply instrumentation to the above industries. Opportunities are also available within the engineering consultancies and systems integrators who provide such industries with turn-key solutions to their manufacturing challenges.

## Contact Information

Dr Donagh O'Mahony  
Department of Physical Sciences  
T: 021 433 5595  
E: [donagh.omahony@cit.ie](mailto:donagh.omahony@cit.ie)

## Question Time

### Is this a Science course or an Engineering Course?

This is a multidisciplinary course with a mix of science and engineering modules. This broad base provides graduates with a skill set that provides a wide range of employment opportunities and the ability to adapt to rapidly changing technologies.

### What level of Mathematics is recommended?

Honours Mathematics is not required, but as with all physical science and engineering courses numeracy is essential and you need to be comfortable with Mathematics.

### What personal skills are most suited to the course and subsequent careers?

Motivation, initiative, dependability, commitment, and analytical ability.

### What should my interests be?

How things work, problem-solving and meeting technical challenges.

### Where am I likely to work?

There are excellent employment opportunities locally, nationally and internationally for graduates. These opportunities are in pharma/chem, biotech and other process industries. Employment is either directly with these companies or in the systems integrators and engineering consultancies that support these companies.



# Environmental Science & Sustainable Technology (Honours)

## CR 365 Level 8 Award

► Progression to Postgraduate Programmes

**Application:** CAO  
**Award Title:** Bachelor of Science (Honours) in Environmental Science & Sustainable Technology  
**Duration:** 4 Years (8 Semesters)  
**Places:** 20  
**Location:** Bishopstown Campus, Cork

### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
4	2	O6/H7	O6/H7



### What is Environmental Science & Sustainable Technology?

The accurate and comprehensive monitoring of waste emissions is required to ensure minimal impact of industry and agriculture on water and air quality. The measurement of specific environmental parameters is vital to sustain the future growth of Irish Industry e.g. the Agrifood and Pharmachem sectors, as well as ensuring compliance with European environmental legislation. The aim of this course is to produce graduate scientists with specialist skills and knowledge in the areas of water quality, air quality, and waste management.

### Helpful Leaving Certificate Subjects

Physics, Chemistry, Technology, Mathematics and Geography

### Work Placement

A mandatory work placement of a minimum of 10 weeks takes place in Year 3.

### Potential Areas of Employment

- Air and Water Quality Monitoring
- Environmental Consultancy
- Wastewater and Air Emissions Reduction
- Green Auditing
- Data Analytics

### First Year at a Glance

- Environmental Instrumentation: Measurement and calibration of sensors used for environmental monitoring
- Mathematics: Developing the tools for analysing scientific data
- Chemical Principles
- Fundamental Physics
- Climate Change: Introduction to issues contributing to Climate Change
- Green Team: Introduction to Sustainability and team work



## About the Course

Most of the modules taught have a significant laboratory element and students can expect to spend 50% of their contact time working with modern laboratory instrumentation. The emphasis is on making scientific measurements and analysing the results, as well as calibrating and operating technical equipment. To assist in this, the students receive a comprehensive foundation in physics and chemistry together with specialist modules in electronics, statistics, instrumentation, environmental GIS, smart sensors and the internet of things. There is a continual green ethos throughout the course; the provision of green technical and managerial modules aim to stimulate graduates to become champions of sustainability. There are modules that deal with waste management, water and air quality, as well as green auditing to ensure that graduates are fully up-to-date with the legal, economic and technical aspects of environmental monitoring.

In addition to the scientific and technical modules, there are a number of modules designed to develop competencies in communication skills, report writing and presentation skills, and research methods along with an emphasis on teamwork.

In Year 3, students are placed within an industry or research group for work placement. It may be possible for the work placement to be in an international location.

In the final year of the course, there is a major technical project in the area of environmental monitoring.

## Further Studies

For details, see [www.cit.ie](http://www.cit.ie)

Suitable qualified graduates are eligible to apply for a postgraduate degree by research at CIT at Master's (MSc) or Doctoral (PhD) levels.

## Career Opportunities

As graduates of a STEM programme with an emphasis on technical skills, employment opportunities are excellent. The main employment areas are water quality analysis, air emissions monitoring, waste reduction, environmental consulting and management, green auditing, carbon footprint reduction as well as related research & development. Graduates can expect to work in a variety of situations such as working in an environmental

testing laboratory or in waste management in a modern pharma/chem plant; they could be office based or out in the field collecting and analysing environmental samples.

## Contact Information

Eamonn Butler  
Department of Physical Sciences  
T: 021 433 5965  
E: [eamonn.butler@cit.ie](mailto:eamonn.butler@cit.ie)

## Question Time

### What is the difference between this course and other environmental courses?

The mix of physical science, modern analytical instruments and green management is unique and quite different to traditional environmental science courses. There is a strong focus on lab based technical skills and the use of modern instrumentation to measure environmental parameters. Students learn how to operate and calibrate sophisticated computer controlled equipment as well as how to critically analyse and validate their data.

### How comfortable do I need to be with science subjects?

Physics and chemistry at Leaving Certificate level is helpful but not essential, as the key content in both subjects are covered in year one of the course.

### What should my interests be?

A strong interest in technology and the environment, specifically the use of modern computer controlled measuring instruments that contribute to the protection of the environment and enable the development of sustainable solutions for industries and society in general.

### Where am I likely to work?

You could be working for the Environmental Protection Agency or Local authorities ensuring environmental license compliance for example by monitoring the quality of air in our cities and towns. Opportunities exist in industry in particular in the pharma/chem, manufacturing and agri-food sectors where technical specialists are required to monitor a range of environmental parameters and present solutions where issues arise.



## Alan Setter

Environmental Consultant

"Since graduating from the BSc (Hons) in Environmental Science & Sustainable Technology, I have worked as an Environmental Consultant for Environet Solutions on a diverse range of sustainability and environmental projects, for both local and multinational clients. Having since spent a number of years working in industry, I can safely say that this course provided me with both a strong technical background and the skills required to succeed in a variety of multidisciplinary teams. I found the lecturers were knowledgeable and that the course content was relevant, interesting and comprehensive; whilst maintaining a nice balance between academic and industry focus. The smaller classes provided the opportunity to discuss and debate topics from the lectures and to develop my communication and presentation skills. My degree also helped me develop strong research and writing skills that are invaluable in my professional career."

# Applied Physics & Instrumentation

## CR 001 Level 7 Award

- ▶ Progression to Level 8 Honours Degrees & Postgraduate Programmes
- ▲ Higher Certificate Option

**Application:** CAO  
**Award Title:** Bachelor of Science in Applied Physics & Instrumentation  
**Duration:** 3 Years (6 Semesters)  
**Places:** 20  
**Location:** Bishopstown Campus, Cork



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 5 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
5	0	O6/H7	O6/H7

### What is Applied Physics and Instrumentation?

As the science which deals with fundamental physical concepts, such as energy, force and time, physics is at the heart of everything in the natural world such as gravity, heat and light. Applied Physics is the term used when we apply these concepts, and thus Applied Physics is at the heart of everything in the man-made world. Instrumentation is the specific technology that allows us to measure and control a wide range of physical and other quantities that are essential to life today.

Safety, reliability, productivity, efficiency, sustainability and economy, for example, are underpinned by instrumentation. Communications, healthcare, oil & gas exploration, energy generation, transportation, food safety, and research & development are examples of sectors that are increasingly dependent on instrumentation. Quite simply, instrumentation makes things happen!

### Helpful Leaving Certificate Subjects

Physics, Engineering, Technology, Chemistry, and Mathematics.

### Work Placement

A mandatory work placement of a minimum of 10 weeks takes place in Year 3.

### Potential Areas of Employment

- Calibration
- Instrument/Automation/Control Engineering
- Research and Development
- Metrology

### First Year at a Glance

- Mathematics: developing the tools for instrument calibration and automation
- Chemical Principles: physical sciences to the fundamentals of atomic theory, chemical bonding, the periodic table, physical states of matter, and stoichiometric calculations
- Fundamental Physics: an introductory course comprising foundation physics topics relevant to all fields of Science
- Sensors and Systems: the components of measurement systems using a variety of sensors
- Measurement and Calibration of sensors used for industry



## About the Course

The aim of this course is to prepare graduates for a range of technical positions within the multidisciplinary field of Applied Physics and Instrumentation. Whilst there is particular emphasis on employment within process industries, such as chemical, pharmaceutical, biotechnology, food, beverage and water, graduates are well equipped for employment in other sectors such as computers, medical devices and microelectronics, as well as in hospitals and in research and development.

The course is examined using a combination of continuous assessment of both theory and practical work, and end of year examinations.

In Year 3, students are placed in an applied physics and/or instrumentation role within an industry, organisation or research group. It may be possible for the placement to be in an international location.

Graduates will acquire comprehensive knowledge of process control, quality and safety systems in the context of the operations of process industries and the nature of their products. They will also be able to diagnose problems and implement solutions for a wide range of instrumentation systems used to measure and control technical processes.

## Accreditation

This Degree is recognised by the Institute of Physics. Graduates of recognised Degrees qualify for Associate Membership upon graduation and may apply for full Membership after appropriate work experience.

The Institute of Physics provides routes for suitably qualified and experienced Members to become Chartered Physicists and Chartered Engineers. Further details can be found on the Institute of Physics website.

## Further Studies

For details, see [www.cit.ie](http://www.cit.ie)

Suitably qualified graduates are eligible to apply for entry to Year 4 (final) of

- > Bachelor of Science (Honours) in Instrument Engineering or the one year add-on
- > Bachelor of Science (Honours) in Applied Physics and Instrumentation

## Teaching

The Honours Degree in Applied Physics & Instrumentation that follows the Bachelor of Science in Applied Physics & Instrumentation satisfies the degree requirements of the Teaching Council. As with other recognised degrees, a postgraduate programme of Initial Teacher Education, accredited by the Teaching Council, consisting of two years full-time study or 120 ECTS credits must subsequently be completed to be eligible for registration with the Teaching Council.

## Career Opportunities

Whilst many of the graduates of this course progress to an Honours Degree, there are many immediate employment opportunities locally, nationally and internationally. Graduates typically work as junior instrument, control or automation engineers, metrology specialists, calibration specialists and research and development technologists.

## Contact Information

Dr Donagh O'Mahony  
Department of Physical Sciences  
T: 021 433 5595  
E: [donagh.omahony@cit.ie](mailto:donagh.omahony@cit.ie)

## Question Time

### How helpful is it to have Physics at Leaving Certificate level?

Whilst Physics at Leaving Certificate level is helpful, it is not essential as the key content in Physics is covered in Year 1 of the course.

### What personal skills are most suited to the course and subsequent careers?

Ability to communicate with scientists, engineers and production teams.

### What should my interests be?

How things work, problem-solving and meeting technical challenges.

### Where am I likely to work?

There are excellent employment opportunities locally, nationally and internationally for graduates in Applied Physics and Instrumentation. Whilst many of these opportunities are in pharma, biotech and other process industries, graduates have found employment in other manufacturing sectors such as computers, medical devices and microelectronics, as well as in hospitals, and in research and development.



## Colin Horgan

Automation Engineer

"I completed the BSc in Applied Physics & Instrumentation in 2010 and progressed to the final year of the BSc (Honours) in Applied Physics & Instrumentation where I specialised in Instrument Engineering. Within three weeks of completing my Honours Degree I had three offers of employment. In July 2011, I joined Rockwell Automation Ireland as an Automation Engineer and have been working on automation projects for different clients with particular emphasis on programmable logic controllers (PLCs). I also work on distributed control systems (DCSs). While I found myself on a steep learning curve in industry, the familiarisation with the hardware and software of PLCs and DCSs provided by the course proved invaluable and very much eased my transition from college to industry."

# Biological Sciences

(Honours) (Common Entry)

**CR 335 Level 8 Award**

► Progression to Postgraduate Programmes

**Application:** CAO

**Award Title:** Depends on specialisation. Choose from:

- BSc (Honours) in Agri-Biosciences
- BSc (Honours) in Pharmaceutical Biotechnology
- BSc (Honours) in Nutrition and Health Science

**Duration:** 4 Years (8 Semesters)

**Places:** 20

**Location:** Bishopstown Campus, Cork



## Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
4	2	O6/H7	O6/H7

## What is Biological Sciences?

Biological Sciences is an exciting and rapidly developing subject area, with many applications in the pharmaceutical, food and healthcare, and natural product industries.

## Helpful Leaving Certificate Subjects

Biology, and Chemistry.

## Work Placement

A mandatory work placement of a minimum of 16 weeks takes place in Year 3.

## Potential Areas of Employment

Depends on specialisation:

- Biopharmaceutical & Biotechnology Industries
- Food and Healthcare Industries
- Natural Product Ingredient Manufacture
- Agri-food sector

## First Year at a Glance

As well as learning the main core science subjects in first year, students will be exposed to the following:

- Evaluating the role of food in health, wellness, and nutrition space
- Making biological medicines: learn the basics of how cells can be used to make modern medicines
- Understanding the natural products industry from functional foods to medicinal, healthcare, and cosmetics products
- Perform experimental laboratory procedures





## About the Course

The Common Biological Sciences programme is a two-year course designed for students interested in Biological Sciences as a career, but who may be unsure of which discipline to follow.

The scheme gives students the opportunity to see the three disciplines, first hand, through the various modules on offer, interaction with lecturers, and industrial site visits. This allows the student to make an informed decision on their discipline of study.

On successfully completing this 2-year programme, students can enter the third year programme from any of the following Honours Biological Science Degrees:

- CR 370 BSc (Honours) in Agri-Biosciences
- CR 333 BSc (Honours) in Nutrition and Health Science
- CR 325 BSc (Honours) in Pharmaceutical Biotechnology

## Contact Information

Dr Karen Finn  
Department of Biological Sciences  
T: 021 433 6136  
E: karen.finn@cit.ie

## Question Time

**Am I guaranteed my choice of study at the end of Year 2?**

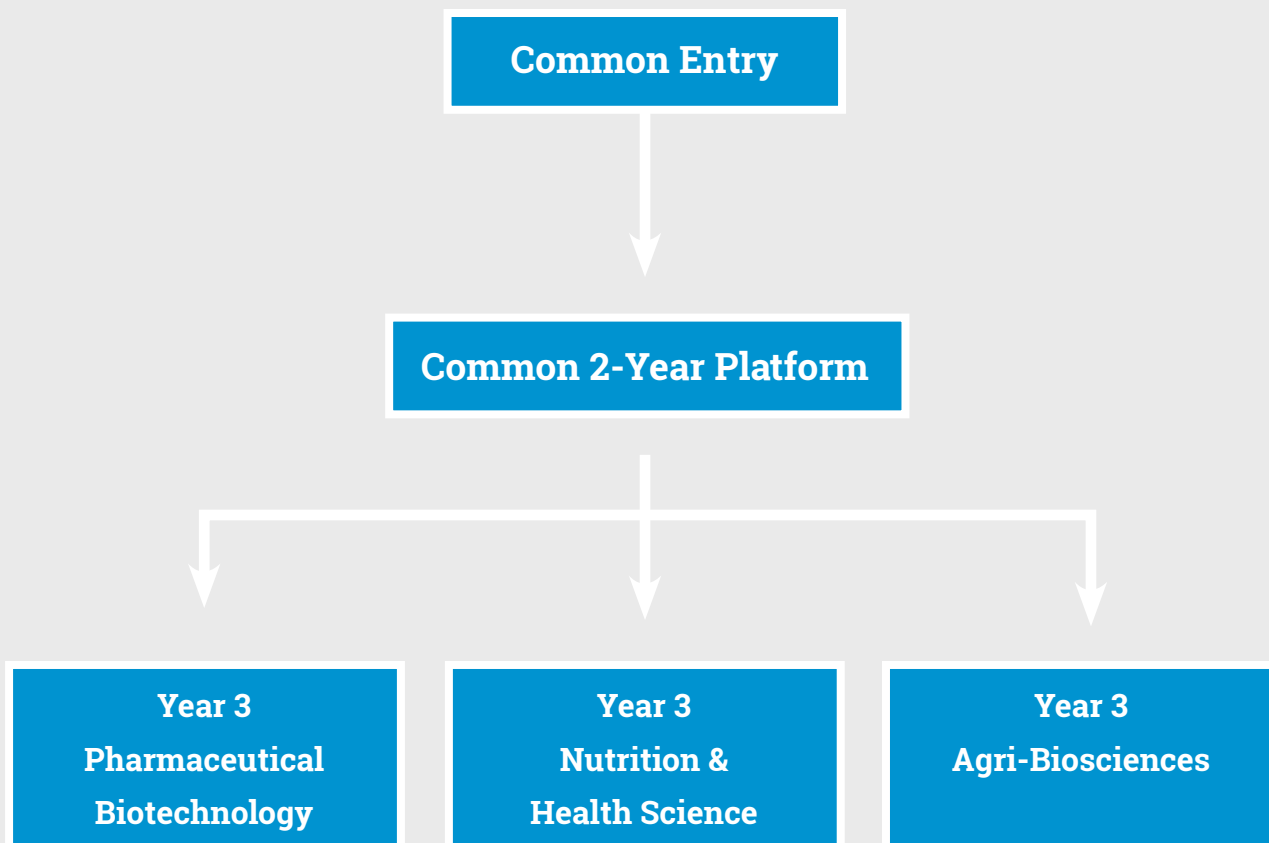
Yes. Successful completion of the Common Entry Biological Sciences programme ensures guaranteed entry to Year 3 of the BSc (Honours) programme of choice from the list given.

**Do I need to have studied Chemistry at Leaving Certificate to apply for this course?**

No. Students study Biological Chemistry 1 and Biological Chemistry 2 modules in first year; these modules are designed for students who do not have Chemistry as a Leaving Certificate subject.

In addition, the CIT Academic Learning Centre provides free tutorial support for first year Chemistry modules.

## Schematic Representation of Common Entry Route



# Applied Biosciences

## CR 006 Level 7 Award

- ▶ Progression to Level 8 Honours Degrees & Postgraduate Programmes
- ▲ Higher Certificate Option

**Application:** CAO

**Award Title:** Depends on specialisation. Choose from:

- Bachelor of Science in Food & Health Science
- Bachelor of Science in Applied Biosciences & Biotechnology

**Duration:** 3 Years (6 Semesters)

**Places:** 40

**Location:** Bishopstown Campus, Cork



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 5 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
5	0	O6/H7	O6/H7

### What is Applied Biosciences?

Applied Biosciences is the study of complex biological systems, and how they work, for example how bacteria generate energy from the breakdown of sugars. Applied Biosciences also involves the use of living organisms and bioprocesses in engineering, technology, medicine and agriculture – in other words, the application of scientific and technical advances in the life sciences to develop commercial products.

### Helpful Leaving Certificate Subjects

Chemistry, Biology, Physics, and Mathematics.

### Work Placement

A mandatory work placement of a minimum of 16 weeks takes place in Year 3.

### Potential Areas of Employment

- Pharmaceutical Industry
- Food and Healthcare Industries

### First Year at a Glance

As well as learning the main core science subjects in first year, students will also be exposed to modules in Biotechnology, and Food and Healthcare. The student will have the opportunity to study the different aspects of the following areas:

- Biotechnology: the application of biological systems to produce useful products.
- Food Science: the science relating to the production of high quality, safe and nutritious food.

There is a very significant emphasis placed on the practical laboratory aspect of the modules studied in first year, where the students are expected to perform experimental investigations under supervision, collate data, interpret results, and write scientific reports.



## About the Course

In CR 006 Applied Biosciences, Years 1 and 2 are common. Students will not be required to choose their preferred qualification (Food & Health Science or Applied Biosciences and Biotechnology) until the beginning of Year 3.

Knowledge of environmental science, analytical techniques, quality management and bioprocessing are seen as key requirements and these disciplines are studied in detail. Laboratory work forms a substantial part of the course. The development of high-level laboratory skills and the ability to use them in the service of advanced industrial biology are key aims of the course. Opportunities currently exist for a number of students on courses to participate in EU funded exchange programmes involving colleges and enterprises in Europe.

**The Bachelor of Science in Applied Biosciences and Biotechnology** meets the demands of biotechnology, food and pharmaceutical industries for technologists and analysts. In addition, the requirements of the services and research laboratories for staff trained in advanced biologically based analytical techniques are met by graduates of the course.

**The Bachelor of Science in Food & Health Science** meets the changing needs of the Food, Pharmaceutical and Biotechnology industries for technicians and analysts. Graduates are in great demand from multinational pharmaceutical companies, as well as the traditional employers in the food and drink sectors.

Advanced manufacturing in the food, healthcare, cosmetic, pharmaceutical and chemical industries have been employment destinations for graduates of this course as well as state and local authority laboratories.

## Further Studies

For details, see <http://biologicalsciences.cit.ie>

Suitably qualified graduates of the BSc in Food & Health Science may apply for entry to Year 4 of

- > BSc (Honours) in Nutrition & Health Science

Suitably qualified graduates of the BSc in Applied Biosciences & Biotechnology may apply for entry to Year 4 of

- > BSc (Honours) in Pharmaceutical Biotechnology

## Career Opportunities

Graduates from this course have traditionally gained employment in the Pharmaceutical, and Food and Healthcare industries, where graduates function in a variety of roles including; quality analysts, microbiologists, purification specialists, researchers and technicians. Graduates also have the option to progress to further academic studies at Level 8 within the Department of Biological Sciences.

## Contact Information

Anna Murphy  
Department of Biological Sciences  
T: 021 433 5293  
E: [anna.murphy@cit.ie](mailto:anna.murphy@cit.ie)

## Question Time

### Do I need to have Chemistry and Physics at Leaving Certificate level coming into the course?

No, the Chemistry and Physics modules taught in first year are designed for students who enter the programme without prior knowledge of these subjects. In addition, the CIT Academic Learning Centre provides additional free tutorial support for both these modules.

### What personal skills are most suited to the course and subsequent careers?

The best students and professional biotechnologists all possess a keen interest in biology and a desire to understand how complex biological processes work.



## Dr Mark Fenton

Bioprocess Scientist

"I completed the BSc (Hons) in Applied Biosciences in 2006 and qualified for a research grant from Science Foundation Ireland. I joined the research group in CIT's Department of Biological Sciences. Here, I undertook research into the purification, characterisation and therapeutic applications of a novel cloned protein for the control of antibiotic resistant bacteria, namely MRSA.

In 2011, on completion of my PhD, I began work as a Bioprocess Scientist at Eli Lilly. This role involves technical support and writing to support the development, validation, and commercialisation of novel biomedicines for the treatment of a range of diseases from diabetes to cancer.

I had encountered and gained valuable practical experience to many of these topics during both my undergraduate and postgraduate studies in CIT."

# Biomedical Science (Honours)

## CR 320 Level 8 Award

### ► Progression to Postgraduate Programmes

**Application:** CAO  
**Award Title:** Bachelor of Science (Honours) in Biomedical Science  
**Duration:** 4 Years (8 Semesters)  
**Places:** 30  
**Location:** CIT Bishopstown Campus, and University College Cork.

### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

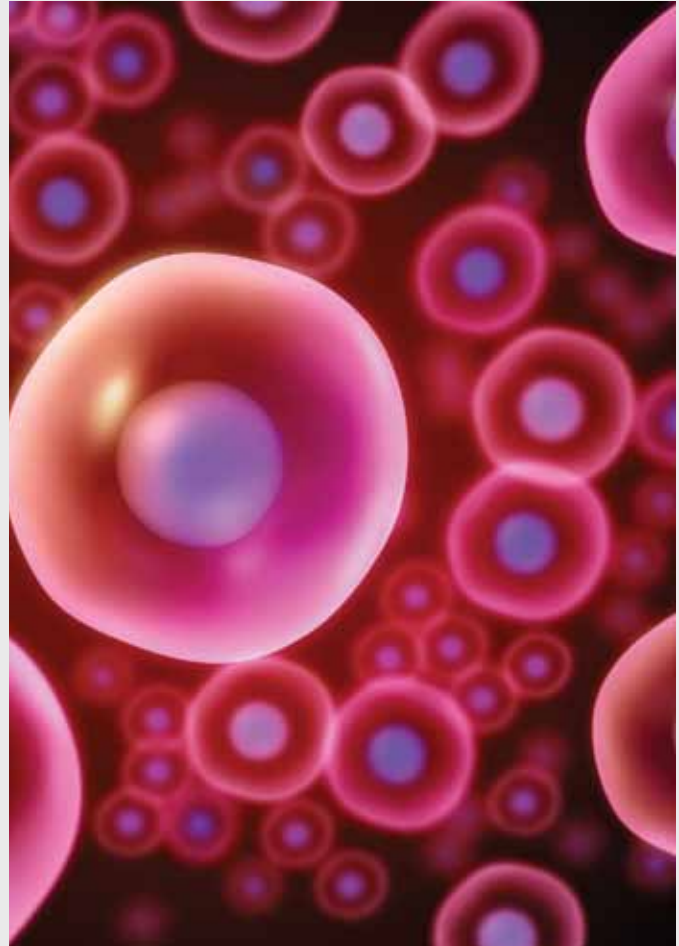
Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Science Grade	Maths Grade	English and Irish Grade
4	2	H4 (Note 1)	O6/H7	O6/H7

**Note 1:** A H4 must be obtained in a Laboratory Science Subject (from Chemistry, Physics, Biology, or Physics & Chemistry (joint)).

**NB:** Please note the H4 grade in a relevant science subject can also be used to satisfy one of the H5 entry requirements.

**NB:** Agricultural Science is accepted as a subject and attracts CAO points, but does not meet the requirement for the Laboratory Science subject.



### What is Biomedical Science?

Biomedical Science is the term for the investigations carried out by Biomedical Scientists on samples of tissue and body fluids to diagnose disease and monitor the treatment of patients.

### Helpful Leaving Certificate Subjects

Chemistry, Biology, Physics, Mathematics, and English.

### Work Placement

This work placement (clinical placement) is offered postgradually and is optional. However, in order for graduates to be eligible to work as Medical Scientists in hospitals in Ireland, they must have completed a clinical placement training which takes a full academic year.

### Potential Areas of Employment

- Medical Scientist in Hospitals
- Biopharmaceutical & Biotechnology Industries
- Public Health
- Sales & Marketing of Medical Products

### First Year at a Glance

As well as learning the main core science subjects in first year, students will also be exposed to the following disciplines:

- **Clinical Biochemistry:** study of the chemical profiles of body fluids in normal and diseased states
- **Haematology:** study of blood cells in the normal and diseased individual
- **Histology/Histopathology:** study of cells and cellular arrangement in normal and cancerous tissue
- **Diagnostic Microbiology:** study of microorganisms encountered in infectious diseases
- **Transfusion Science:** the science relating to transfusing fluid (i.e. blood) into a vein or artery
- **Health Science:** introduction to a selection of "hot topics" relating to health



## About the Course

This Honours Degree course is offered jointly by Cork Institute of Technology and University College Cork. Biomedical scientists work in partnership with doctors and other healthcare professionals to perform many different roles in medical laboratories. Biomedical Science is a continually changing dynamic profession and involves study of the diverse areas of medical science including Biochemistry, Microbiology, Cellular Pathology, Haematology and Transfusion Science. It provides training in state-of-the-art technologies to facilitate investigation of disease and medical research.

## Accreditation

This Honours Degree course with clinical placement is fully accredited by the Academy of Clinical Science and Laboratory Medicine.

## Further Studies

For details, see <http://biologicalsciences.cit.ie>

The CIT/UCC joint BSc (Honours) Degree in Biomedical Science is one of only three Honours Degrees in the Republic of Ireland which are recognised by the Academy of Clinical Science and Laboratory Medicine (professional body) as enabling graduates to practise in hospitals in the State.

**However, this BSc (Honours) must be accompanied by clinical placement training. Graduates will be offered the opportunity to complete this placement in a designated hospital laboratory.**

Suitably qualified graduates are eligible to apply for a postgraduate degree at CIT:

- > MSc in Computational Biology (Taught)
- > MSc (by Research)
- > PhD

## Career Opportunities

Biomedical Science prepares the student for a career in laboratory medicine and related areas in the health-care industry and biopharmaceutical industry. Biomedical Science graduates work as Medical Scientists in hospitals, and in research, the biopharmaceutical and biotechnology industries, public health and sales and marketing of medical products.

## Contact Information

Mr Michael Healy  
Department of Biological Sciences  
T: 021 433 5407  
E: michael.healy@cit.ie

## Question Time

### What do you need to work as a Biomedical Scientist in Ireland?

Graduates with a BSc (Honours) in Biomedical Science from CIT/UCC, GMIT, or DIT, who have completed clinical placement are eligible for membership of the Academy of Clinical Science and Laboratory Medicine, which qualifies the graduate to practise as a Biomedical Scientist.

### Is it an advantage to have Chemistry and Physics coming into the course?

It is always an advantage to have Chemistry and Physics coming into a course such as Biomedical Science. However, it is feasible to take up one or both of these subjects on entry to the course, and the first year programme is tailored to support students who enter the programme without prior knowledge of these subjects.

### What kind of person should you be?

This profession requires scientists who are mindful of their responsibility when dealing with human health. It also means that they are often privy to information concerning patients that they cannot divulge for ethical reasons other than in the course of their work.

### What is the time divide between CIT and UCC?

The programme for the BSc (Honours) in Biomedical Science is taught equally by CIT and UCC, so this means that the students will expect to spend some days in one institution or the other. The timetable is arranged to minimise travel between the two colleges.



## Dr Annmarie Burns

Lecturer

Having completed the BSc (Honours) in Biomedical Science in Cork, Annmarie began work as a Medical Scientist in the Microbiology Department of St. James's Hospital in Dublin until she embarked on a postgraduate research scholarship at CIT in 2008.

During the intervening period, until her graduation in October 2011 with a PhD in Molecular Biology, Annmarie also undertook short part-time locum positions as a Medical Scientist in the Irish Blood Transfusion Service (IBTS) in Cork, and in the Microbiology Department of the Bon Secours Hospital in Cork. She is currently employed as a lecturer in the CIT Department of Biological Sciences.

# Agri-Biosciences (Honours)

## CR 370 Level 8 Award

► Progression to Postgraduate Programmes

**Application:** CAO  
**Award Title:** Bachelor of Science (Honours) in Agri-Biosciences  
**Duration:** 4 Years (8 Semesters)  
**Places:** 20  
**Location:** Bishopstown Campus

### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
4	2	O6/H7	O6/H7



### What is Agri-Biosciences?

Modern agriculture utilises biological tools to increase production and sustainability in the agri-food industry. Some of these tools include using genetics to determine breeding and health traits in animal and crop production, applications of bacteria and fungi in agri-food systems, and the use of biomolecules to increase the nutritional value of animal feedstuff. The agri-food industry is Ireland's largest homegrown industry, and this biosciences course is designed to meet the growing need for scientists who have excellent technical competency and knowledge application in agri-biosciences. Graduates will be equipped with dynamic skillsets to occupy roles across a variety of agri-food sectors and further develop biotechnologies.

### Helpful Leaving Certificate Subjects

Biology, Chemistry, and Agricultural Science

### Work Placement

Students undertake a mandatory work placement for the second semester in Year 3 and can be hosted either in Ireland or abroad.

### Potential Areas of Employment

- Research Scientist
- Laboratory Technician
- Animal Feed Production
- Diagnostic Testing
- Quality Control Analyst
- Animal and Crop Breeding
- Research and Development

### First Year at a Glance

As well as learning the main core science subjects in first year, students will also be exposed to the following:

- Cellular systems in animals and plants and their effect on growth and function
- The main components of agri-food products such as meat, milk and vegetables
- The prevalence of biotechnology in the Irish agri-food industry
- Different techniques used to bring agricultural outputs from farm to fork
- Modern laboratory methods used to analyse different cell and food types



## About the Course

The course content is designed in collaboration with industry partners to meet the needs of the ever-evolving agri-food industry. Topics covered are contemporary and relevant both nationally and internationally. The lectures are supplemented with relevant examples, case studies, projects, assignments, site visits, web tools, and interactive media. There is a strong focus in agri-biosciences on practical techniques and approximately 50% of contact time is spent in the laboratory gaining in-depth technical experience.

Year 1 and 2 of the course provide a strong foundation in biological science modules such as microbiology, biotechnology and biochemistry. Additionally, students engage with agri-specific modules gaining skills and knowledge in agricultural biotechnology, animal and plant physiology, and soil science. Year 3 and 4 of the programme provide further specialisation in the agri-biosciences, with students covering core topics such as agri-food microbiology, animal breeding, food quality, animal immunology and disease, crop biotechnology, bioinformatics and food analysis.

The mandatory work placement in Year 3 is an integral and exciting element of the course programme in which the student joins the workforce of a relevant organisation. The students develop first-hand knowledge of organisational structure, modern analytical techniques used in the organisation, expand their knowledge of the agri-food industry, and further develop both professional and personal skills.

## Further Studies

For details, see <http://biologicalsciences.cit.ie>

This course is an excellent platform for further studies, both in terms of short add-on courses, and more structured postgraduate degrees such as Master of Science and PhD programmes.

## Career Opportunities

Comprehensive training in biotechnology, microbiology, animal and crop physiology, quality systems and food analysis will allow graduates to gain employment both nationally and internationally, as key players across a variety of sectors within the agri-food industry. Some potential career routes include animal and food production, veterinary diagnostics, food composition analysis, animal feed production, and research and development.

## Contact Information

Dr Craig Murphy  
Department of Biological Sciences  
T: 021 433 5890  
E: [craig.murphy@cit.ie](mailto:craig.murphy@cit.ie)

## Question Time

### How does this course differ from a traditional Agricultural Science course?

The Agri-Biosciences degree programme is specifically tailored to train students in biological tools which can be applied to the agri-food industry to increase production and promote sustainability. Biological applications are central to the future of agri-food through advancements in genomics, crop biotechnology, veterinary diagnostics, animal breeding and animal feed production.

### What personal skills are most suited to the course and subsequent careers?

Those pursuing careers in Agri-Biosciences should be logical, analytically minded, detail oriented, team players, good communicators, motivated, and able to show initiative.

### Is the agri-food industry secure?

The agri-food sector is Ireland's largest indigenous industry, providing employment to 8.4% of the working population. In 2016, Irish Agri-Food and drink exports increased by approximately 2% to €11 billion and gross agricultural output was valued at €7 billion. Further growth opportunities have been identified by the Department of Agriculture, Food and the Marine which aim to position Ireland as a world leader in sustainable Agri-Food production, through an emphasis on utilising research-led practices and novel biotechnologies.

# Nutrition & Health Science

## (Honours)

### CR 333 Level 8 Award

► Progression to Postgraduate Programmes

**Application:** CAO  
**Award Title:** Bachelor of Science (Honours) in Nutrition & Health Science  
**Duration:** 4 Years (8 Semesters)  
**Places:** 40  
**Location:** Bishopstown Campus, Cork



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
4	2	O6/H7	O6/H7

### What is Nutrition & Health Science?

This course is designed to meet the need for scientists with technical competency in the design, development, production, analysis and upgrading of products that are involved in the maintenance, restoration and promotion of human health and wellbeing. Graduates will be able to apply their understanding of human nutrition and its role in health and disease to various sectors of the food and health industry and identify and address nutrition-related problems in individuals and populations.

### Helpful Leaving Certificate Subjects

Biology, and Chemistry.

### Work Placement

A mandatory work placement of a minimum of 16 weeks takes place in Year 3.

### Potential Areas of Employment

- Research scientist in food and related healthcare industries
- New product development, production and marketing in food and related healthcare industries
- Food safety and food regulation in food industry and governmental agencies
- Nutrition communication in food information organisations
- Quality assurance

### First Year at a Glance

As well as learning the main core science subjects in first year, students will also be exposed to the following:

- Studying the different groups of food and healthcare products produced in industry
- Evaluating the role of food in health
- Describing the basic principles of sports and exercise nutrition
- Performing experimental laboratory procedures on different food and healthcare products





## About the Course

First and second year modules provide the student with a strong foundation in biological science modules such as microbiology, biochemistry, biotechnology, as well as nutrition modules including fundamentals of human nutrition, nutritional analysis methodologies and food and health science.

Third and fourth year cover more specialised topics such as nutrition communication, nutritional epidemiology, clinical nutrition, functional foods, food regulation and innovation and food and healthcare chemistry, toxicology and microbiology. The lectures are supplemented with relevant case studies, projects, assignments and there is a strong focus on gaining in depth practical experience in the laboratory.

The work placement module is an integral and essential part of the course programme in which the student is introduced to a structured work environment. The student develops an understanding of the organisation, practices and procedures current in the organisation and the area of activity in which it is involved.

## Further Studies

For details, see <http://biologicalsciences.cit.ie>

This course is an excellent platform for further studies, both in terms of short add-on courses, and more structured postgraduate degrees such as Master of Science and PhD programmes. Nutrition & Health Science Degree graduates have many opportunities to engage in continued education and training (e.g. Dietetics).

## Career Opportunities

A graduate of this course will be employable in Food, Nutrition, Healthcare and Animal Feed industries, in sectors including research, new product development, production, nutritional analysis, quality assurance, food/nutrition communication and marketing.

## Contact Information

Dr Aoife McCarthy  
Department of Biological Sciences  
T: 021 4326135  
E: [aoife.mccarthy@cit.ie](mailto:aoife.mccarthy@cit.ie)

## Question Time

### Can I become a Dietician from CR 333?

Completion of the BSc (Honours) in Nutrition & Health Science does not qualify the graduate to practice as a Dietician. However, graduates of the course CR 333 can undertake further studies in other third-level institutes to pursue a career as a Dietician.

### What personal skills are most suited to the course and subsequent careers?

Individuals pursuing a career in Nutrition & Health Science should be dedicated, logical, analytically minded, good with people, a team player, have good attention to detail, and excellent organisational skills.



## Emma Walshe

Product Development Specialist, Nestlé

"I graduated from the BSc (Hons) in Nutrition and Health Science at CIT in 2014. The programme covered a range of Biological Sciences subjects, with a focus on nutrition and food in relation to health. In third year, I completed my work placement at the Nestlé Development Centre, which advanced my analytical techniques learned in CIT and provided me with invaluable industry exposure.

During my final year, I was accepted onto the Dairygold Graduate Programme, where I worked as an R&D graduate for 6 months. I then secured a position as a Research Officer with the Nestlé Development Centre and within 3 years, I got a permanent position as Product Development Specialist with Nestlé, where my role is focused on new product development of Infant Formula, Follow-On Formulas, Growing-Up Milks and Maternal Milks. Working with Nestlé, the largest food company in the world, provides me with the opportunity to travel to Nestlé centres globally and network with cross-disciplinary project teams."

# Pharmaceutical Biotechnology

## (Honours)

### CR 325 Level 8 Award

» Progression to Postgraduate Programmes

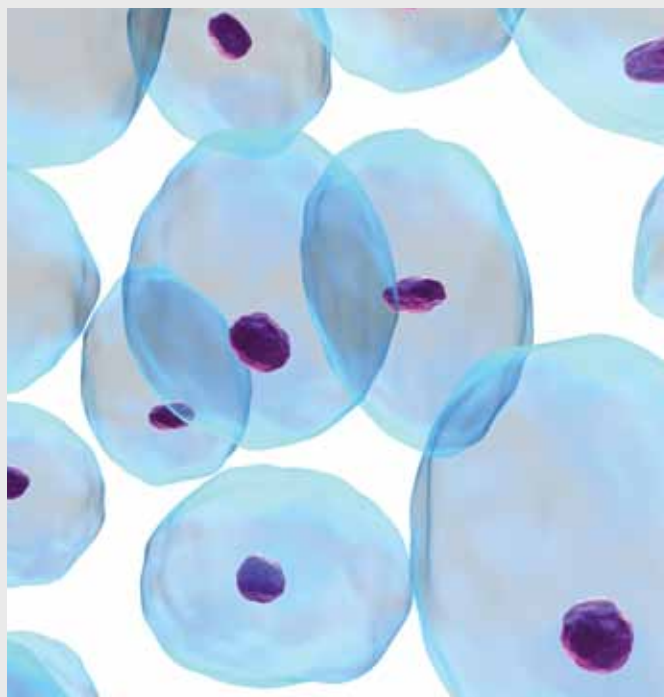
**Application:** CAO

**Award Title:** Bachelor of Science (Honours) in Pharmaceutical Biotechnology

**Duration:** 4 Years (8 Semesters)

**Places:** 40

**Location:** Bishopstown Campus, Cork



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
4	2	O6/H7	O6/H7

### What is Pharmaceutical Biotechnology?

Many modern medicines such as vaccines, hormones, and anticancer drugs are now made using biological cells. Insulin for example, which is used by diabetic patients worldwide is made using living cells as opposed to more traditional chemical synthesis based methods. This means there is a strong demand for biologists who can design innovative new medicines using biological approaches, and who have the skills to work with cells and the bio-active compounds they produce. This biotechnology course will teach students how to grow and engineer biological cells in order to make safe and effective medicines using the most up-to-date information and technologies available.

### Helpful Leaving Certificate Subjects

Biology, and Chemistry.

### Work Placement

A mandatory work placement of a minimum of 16 weeks takes place in Year 3.

### Potential Areas of Employment

- Quality Control Analyst
- Microbiologist
- Bio-assay Specialist
- Research and Development

### First Year at a Glance

As well as learning the main core science subjects in first year, students will also be exposed to the following:

- Growing biological cells: what makes biological cells healthy and how are they grown in a laboratory
- How do cells work: what structures are needed by cells to stay alive
- Working with DNA: what is DNA and how can we use it in biotechnology
- Making biological medicines: learn the basics of how cells can be used to make modern medicines
- Laboratory studies: use the latest equipment and technologies in a modern laboratory facility
- Experimental analysis: carry out your own experiments in a laboratory setting and learn how to create and analyse your own data



## About the Course

The course content is specifically designed to meet the needs of the many relevant employers both nationally and internationally, and contains topical, cutting edge, industry specific material. The lectures are supplemented with in-depth analysis of relevant case studies, projects, assignments, interactive videos, web tools and site visits. At least 50% of the contact time is spent in the laboratory gaining practical experience.

Work Placement is a mandatory part of this course. In Year 3, students will spend a minimum of 16 weeks in a local, national or internationally approved work environment.

Many of the world's top Biotechnology companies have a strong presence in Ireland. In general, the industry is moving towards a more "bio-based" approach to pharmaceutical manufacture. Consequently, there is a greater need to produce highly trained graduates who possess Pharmaceutical Biotechnology related skills. This course is designed to specifically meet this need.

## Further Studies

For details, see <http://biologicalsciences.cit.ie>

This course is an excellent platform for further studies, both in terms of short add-on courses, and more structured postgraduate degrees such as Master of Science and PhD programmes.

## Career Opportunities

This course is very broad and is specifically designed to train students in all aspects of modern biotechnology. Graduates from this course are qualified to work in a number of areas within the biotechnology industry with many attaining employment immediately after graduating.

## Contact Information

Dr Rosemary Rea  
Department of Biological Sciences  
T: 021 433 5295  
E: [rosemary.rea@cit.ie](mailto:rosemary.rea@cit.ie)

## Question Time

### Does this course qualify me as a Pharmacist?

No. It trains you to work in the biotechnology industry where modern bio-medicines are discovered and made such as vaccines, hormones, antibodies, and therapeutic enzymes.

### What personal skills are most suited to the course and subsequent careers?

Good organisational skills, technical ability, team-working and ability to work to deadlines.

### Is the biotechnology industry secure?

Pharmaceutical exports from Ireland typically exceed €24 billion per year. Approximately 25% of all US biotechnology based imports come from Ireland. Despite the current economic situation, biotechnology is still very vibrant and remains one of the biggest national employers.



## Colm O'Shea

Quality Control Analyst

"I completed a BSc (Honours) in Pharmaceutical Biotechnology at CIT. The course content and quality of lecturing were of a high scientific standard and I was much sought after by many of the multinationals here in Ireland.

The work placement aspect of this course was invaluable in preparing me for the real working environment and provided a useful practical knowledge base. With the support, and the quality of the lectures at CIT, I was well equipped with the scientific knowledge and technical ability for a successful career.

Shortly after graduating, I secured employment as a Cell Culture Scientist at Pfizer Biotechnology facility in Dublin. I have since moved to Janssen Biologics where I have a full-time position as a Quality Control Analyst in the Pharmaceutical Development and Manufacturing Science Department."

# Software Development (Honours)

## CR 106 Level 8 Award

» Progression to Postgraduate Programmes

**Application:** CAO  
**Award Title:** Bachelor of Science (Honours) in Software Development  
**Duration:** 4 Years (8 Semesters)  
**Places:** 40  
**Location:** Bishopstown Campus, Cork



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
4	2	O3/H7	O6/H7

### Programme Overview

The BSc (Hons) in Software Development is a four-year Level 8 degree programme that provides students with the theoretical knowledge and practical competencies necessary to support a career in the software development industry.

More specifically, the programme provides students with an in-depth knowledge of modern software development languages, techniques, tools, methodologies and their application to real-world problems. Students will become proficient in the application of state-of-the-art technologies in areas such as cloud computing, machine learning, big data and data analytics. Students will also be equipped with research skills that will enable them to become independent self-learners.

On successful completion of this degree programme, there are further taught postgraduate study options in the Department of Computer Science as well as research and PhD programmes.

### Helpful Leaving Certificate Subjects

English, Science, Mathematics, and Engineering.

### Work Placement

Work placement starts in January of Year 3 and can last from four to nine months.

### Potential Areas of Employment

- Application Developer
- Applications Engineer
- Software Engineer
- Software Developer
- Java Developer
- Mobile App Developer
- Full-Stack Developer
- Software Project Manager

### First Year at a Glance

The first year curriculum is a common curriculum for all students and focuses on the fundamentals of Computer Science. Modules include:

- Programming Fundamentals
- Web Development Fundamentals
- Computer Architecture
- Computer Security Principles
- Maths for Computer Science
- Modular Programming
- Introduction to Databases
- Operating Systems in Practice
- Networking Fundamentals
- Physical Computing
- Discrete Mathematics



## Computer Science Choices

The first year curriculum is common for all degrees in the Department of Computer Science. All first year students study the same modules and this means that students can transfer to another programme in the Department in year two if they meet the CAO entry requirements for that programme when they enter CIT. This offers great flexibility for qualifying students who may wish to change programmes after year one. This flexibility allows a student to make a more informed decision one year into his/her studies.

### Programme Details

Software Development is a Level 8 programme that will give you the skills and knowledge you need to design and build applications that people use every day, for the desktop computer, for the web and for mobile devices (such as smart phones and tablets). As a Software Developer, you will be involved in all stages of the application from start to finish. You will be taught how to take a concept/idea from a description and develop it to make a fully working application. You will develop problem solving and programming skills to solve simple (and eventually complex) real-world problems using computers.

One of the benefits of this Honours Degree is that it has a broad range of modules. The main focus of the degree is programming, so you will learn languages such as Python, Java, C, JavaScript and PHP. You will also learn about databases (where and how data is stored), operating systems, object-oriented programming, application development, software testing, data analytics and many more topics. You can also take elective modules in a selection of areas. You will complete projects on your own and in groups throughout the degree, which will prepare you for working in industry.

In Year 3, students go on work placement from January. Placements for students are organised on a country-wide basis with a particular focus on Cork and Dublin. Students have also obtained placement in other countries such as France, Germany, Sweden and the USA.

### Further Studies

For details, see <http://cs.cit.ie>

Suitably qualified graduates may also apply for: postgraduate research degrees at Masters (MSc) or Doctoral (PhD) level where further specialisation in your preferred area of Computer Science is possible. Suitably qualified graduates may also apply for these taught programmes:

- > MSc in Software Architecture & Design
- > MSc in Information Security
- > MSc in Information Design & Development
- > MSc in Cloud Computing
- > MSc in Artificial Intelligence

### Career Opportunities

You will have career opportunities in Cork, Ireland and abroad, with large multinationals (such as IBM, EMC,

McAfee, Johnson Controls), and also with smaller Irish companies. Graduates have also found employment within large IT departments in companies within the Chemical, Pharmaceutical or Food Industry. Graduates have also moved into roles in System Administration and Software Testing. A percentage of graduates from the programme chose to take up jobs in the Software Industry abroad. Software Development graduates work in a diverse range of roles.

### Contact Information

Dr Ted Scully  
Department of Computer Science  
T: 021 433 6140  
E: ted.scully@cit.ie

### Question Time

#### What makes CR 106 different from the other Computer Science Honours Degrees at CIT?

The focus is on acquiring the skills and knowledge required to become a software developer.

#### Is there a scholarship available for the programme?

Yes, registered students who successfully complete Year 2 of this programme may apply for the Alejandro de la Flor Memorial Scholarship which is funded by McAfee. McAfee delivers proactive and proven security solutions and services for systems, networks, and mobile devices around the world.

#### What level of Programming is contained in the programme?

Programming modules are core in all semesters of the Degree. The students develop applications using a range of languages such as Java, C, PHP, and Python. They develop applications for the desktop, the web and for mobile devices. A key goal is to bring the students to a level where they are familiar with the tools and work practices used within the software industry today.

#### Can I design and develop websites from this programme?

Several modules are included which focus specifically on building websites. Other specialised modules are available as electives.

#### Will I be designing Apps?

Yes, the Programming Mobile Devices module is a mandatory module in Year 3. Also, Android mobile app development frequently features in the third year group project module.

#### Can I go on to specialise in Cloud Computing?

Yes, having graduated with a BSc (Honours) in Software Development, it is possible to apply for entry to the taught Master of Science in Cloud Computing

#### Can I work in the Games Development Industry with this programme?

Yes, the games industry requires interdisciplinary teams when developing new products. A graduate with good software development skills and in particular, programming skills would be a major asset to such a team.

We also offer a Games Development elective module.

# Web Development (Honours)

## CR 312 Level 8 Award

### ► Progression to Postgraduate Programmes

**Application:** CAO  
**Award Title:** Bachelor of Science (Honours) in Web Development  
**Duration:** 4 Years (8 Semesters)  
**Places:** 20  
**Location:** Bishopstown Campus, Cork



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
4	2	O6/H7	O6/H7

### Programme Overview

The World Wide Web is the single most important content and software distribution platform in the world today. Graduates pursuing a career involving Web Development can expect to work on many aspects of the web whether it's creating front-end interfaces, back-end software, or a combination of the two. A developer, with an understanding of all aspects of web development from the data layer to the visual interface that a user interacts with and the logic that connects the two, is of particular value.

### Helpful Leaving Certificate Subjects

English, Science, and Mathematics.

### Work Placement

Work placement starts in January of Year 3 and can last from four to nine months.

### Potential Areas of Employment

- Web Developer
- Full Stack Developer
- UI/UX Engineer
- Mobile App Developer
- Front End Developer
- Back End Developer
- Software Developer

### First Year at a Glance

The first year curriculum is a common curriculum for all students and focuses on the fundamentals of Computer Science. Modules include:

- Programming Fundamentals
- Web Development Fundamentals
- Computer Architecture
- Computer Security Principles
- Maths for Computer Science
- Modular Programming
- Introduction to Databases
- Operating Systems in Practice
- Networking Fundamentals
- Physical Computing

### Computer Science Choices

The first year curriculum is common for all degrees in the Department of Computer Science. All first year students study the same modules and this means that students can transfer to another programme in the Department in year two if they meet the CAO entry requirements for that programme when they enter CIT. This offers great flexibility for qualifying students who may wish to change programmes after year one. This flexibility allows a student to make a more informed decision one year into his/her studies.



## Programme Details

The programme is designed to provide students with the skills necessary to develop software primarily for the World Wide Web. It also provides students with a broad overview of Computer Science fundamentals. This results in graduates who are competent developers in multiple modern programming languages and have a strong understanding of the theoretical concerns that underpin Computer Science such as Operating Systems, Software Engineering, Computer Architecture, Security and Database Systems.

As a result, the Honours Degree prepares students for a career in a fast paced and continually evolving industry. Specialised modules outline the design and development methodologies necessary for providing complex front-end behaviour and scalable back-end solutions. Not only are students exposed to state-of-the-art technologies and practices currently in use, they also acquire the skills necessary to keep up to date with changes in the industry, and learn how to adapt to new technologies and paradigms as they arise. As students progress through the programme they gain an appreciation for the nuances in the design and development of web applications. This is enhanced by modules concerned with human computer interaction, user experience and visual design. As such, students attain a rich appreciation for the design process and a greater understanding of how complex user requirements are fulfilled in a simple and elegant manner.

In Year 3, students can study at a foreign university or spend a minimum of 13 weeks on work placement. The Department has links to many third level institutes in Europe and will advise students where study places may be found where the medium of instruction is English. Movement within the EU may be supported by the EU Erasmus programme.

## Further Studies

Suitably qualified graduates may also apply for: postgraduate research degrees at Masters (MSc) or Doctoral (PhD) level where further specialisation in your preferred area of Computer Science is possible. Suitably qualified graduates may also apply for these taught programmes:

- > MSc in Information Security
- > MSc in Information Design & Development
- > MSc in Cloud Computing
- > MSc in Software Architecture & Design
- > MSc in Artificial Intelligence



## Robert Gabriel

Website Product Lead & Software Engineer

"CIT is by far one of the best colleges for Computer Science in Ireland. CIT gave me the support, knowledge, and skills I needed to work in industry. By the end of my time, I had multiple offers from several major tech companies, all thanks to the staff and classes in CIT. When I graduated, I began work as a software engineer at Teamwork.com where I have worked as both a Front-end and a Back-end engineer and use my knowledge daily, which I gained during my time in CIT, to address some of the UX and UI issues the company faces. Within 7 months of Teamwork.com, I was promoted to lead a team within the company because of my skills and experience. I would highly recommend CIT's BSc (Honours) in Web Development as the software engineering skills you will learn in this programme will give you the flexibility and the knowledge to work in both Front-end and Back-end design or Dev-Ops. The 9 month work placement will also give you a jump-start when looking for work after college."

## Career Opportunities

You will have career opportunities in Cork, Ireland and abroad, with large multinationals (such as Johnson Controls, Dell EMC, Qualcomm). There are a large number of Irish companies (such as Teamwork.com) for the Internet to developing web based applications. Web applications can be deployed on desktops, laptops, or mobile devices i.e. any device that can run a browser. Therefore, the trend in software is towards web based systems and the demand for qualified developers in the space is strong and growing.

## Contact Information

Dr Ruairí O'Reilly  
Department of Computer Science  
T: 021 433 6161  
E: ruairi.oreilly@cit.ie

## Question Time

### What makes CR 312 different from the other Computer Science Honours Degrees at CIT?

The BSc (Honours) in Web Development is a specialised Degree. The programme develops these skills in unison, encouraging students to develop complete solutions from start to finish utilising the abilities they have attained throughout the programme. This produces a graduate who has the capacity to take a project from the initial concept/design stage right through to delivering the final product.

### Can I design and develop websites from this programme?

Yes, you will learn the latest development approaches, web standards (HTML, CSS, Javascript) and technologies used in developing software for the web. You will learn how to programme and, in particular, how to use your programming skills to design, develop and deploy complex websites and web applications.

### Can I work in the Games Development Industry with this programme?

Yes, the games industry requires interdisciplinary teams when developing new products. A graduate with good software development skills and in particular, programming skills would be a major asset to such a team.

We also offer a Games Development elective module.

# Computer Systems (Honours)

## CR 116 Level 8 Award

► Progression to Postgraduate Programmes

**Application:** CAO  
**Award Title:** Bachelor of Science (Honours) in Computer Systems  
**Duration:** 4 Years (8 Semesters)  
**Places:** 20  
**Location:** Bishopstown Campus, Cork



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
4	2	O3/H7	O6/H7

### Programme Overview

The BSc (Hons) in Computer Systems is a four-year level 8 degree programme designed for students who have a keen interest in computer system, embedded systems and software development. With the advent of the Internet of Things (IoT), computer systems engineering is a fast growing sector of the international computing industry. Embedded systems have become widespread and can be found in almost all modern consumer devices, from washing machines to modern cars. A computer systems engineer is someone who combines knowledge of computer science, engineering, and mathematical analysis to develop, test and evaluate software for personal computers and more.

Students will gain an understanding of the fundamental principles of computer systems, embedded systems, systems programming and real time systems, along with knowledge and understanding of modern computer architectures. Students are encouraged to use initiative and confidence in approaching problems, investigating solutions using a blend of analytical and practical skills.

On successful completion of this degree programme, there are also further taught postgraduate study options in the Department of Computer Science as well as research to PhD level.

### Helpful Leaving Certificate Subjects

English, Science, Mathematics, and Engineering.

### Work Placement

Work placement starts in January of Year 3 and can last from four to nine months.

### Potential Areas of Employment

- Software Developer
- Network Engineering
- Network Specialist
- Internet of Things (IoT) Specialist
- Embedded Systems Programmer
- Systems Engineer

### First Year at a Glance

The first year curriculum is a common curriculum for all students and focuses on the fundamentals of Computer Science. Modules include:

- Programming Fundamentals
- Web Development Fundamentals
- Computer Architecture
- Computer Security Principles
- Maths for Computer Science
- Modular Programming
- Introduction to Databases
- Operating Systems in Practice
- Networking Fundamentals
- Physical Computing





## Computer Science Choices

The first year curriculum is common for all degrees in the Department of Computer Science. All first year students study the same modules and this means that students can transfer to another programme in the Department in year two if they meet the CAO entry requirements for that programme when they enter CIT. This offers great flexibility for qualifying students who may wish to change programmes after year one. This flexibility allows a student to make a more informed decision one year into his/her studies.

### Programme Details

You will become a software developer who has the programming, analysis and design skills combined with the hardware knowledge to create network/Internet/cloud-based applications. You will understand how devices (such as smart devices, desktop computers and tablets) communicate with each other and the world around them. You will gain an understanding of the fundamental principles of computer systems, embedded systems, systems programming and real time systems, along with knowledge and understanding of modern computer architectures. You will be encouraged to use initiative and confidence in approaching problems, investigating solutions using a blend of analytical and practical skills. You will be able to plan and design the infrastructure and systems that will allow this to happen. This knowledge of both the hardware and software of a computer system will be highly sought after in the very near future as the Internet of Things (IoT) vision becomes a reality. You will also learn general Computer Science skills that will benefit you in many industries.

In Year 3, placements for students are organised on a countrywide basis with a particular focus on Cork and Dublin. Students have also obtained placement in other countries such as France, Germany, Sweden and the USA.

### Further Studies

For details, see <http://cs.cit.ie>

Suitably qualified graduates may also apply for: postgraduate research degrees at Master's (MSc) or Doctoral (PhD) level where further specialisation in your preferred area of Computer Science is possible. Suitably qualified graduates may also apply for these taught programmes:

- > MSc in Software Architecture & Design
- > MSc in Information Security
- > MSc in Artificial Intelligence

- > MSc in Information Design & Development
- > MSc in Cloud Computing

### Career Opportunities

You will have career opportunities in Cork, Ireland and abroad, with large multinationals (such as IBM, EMC, Intel, Johnson Controls, Google, Cisco), and also with smaller Irish companies. You will be qualified to work in a wide variety of industries, such as networking, telecoms, data storage, and finance. Some graduates have progressed into Project and People Management roles. Graduates have commented that the dual nature of the course and the variety between the modules, opened more doors to employment than a single-focused course could have.

### Contact Information

Dr Paul Davern  
Department of Computer Science  
T: 021 433 5576  
E: paul.davern@cit.ie

### Question Time

#### What makes CR 116 different from the other Computer Science Honours Degrees at CIT?

It has a stronger hardware and telecommunications emphasis, and uses mathematical abilities more.

#### What level of Programming is contained in the programme?

Programming and Software Development are a crucial part of the programme, accounting for roughly a quarter of the mandatory modules.

#### Can I design and develop websites from this programme?

Yes, although it is not a primary focus of the programme. The programming skills you will learn can be applied to web development.

#### Can I go on to specialise in Cloud Computing?

Yes, having graduated with a BSc (Honours) in Computer Systems, it is possible to apply for entry to the taught MSc in Cloud Computing.

#### Can I work in the Games Development Industry with this programme?

Yes, the games industry requires interdisciplinary teams when developing new products. A graduate with good software development skills and in particular, programming skills would be a major asset to such a team.

We also offer a Games Development elective module.



## Donal Lynch

Software Engineer

"The work placement was of great benefit in which I was very fortunate to get the opportunity to work with Cisco Systems in San José, California. This was definitely one of the highlights of my four years spent in CIT.

Upon graduation, I rejoined Cisco Systems as a software engineer, this time in its newly established Research & Development Centre based in Galway. I'm currently working in the Unified Communications Business Unit where I apply both my knowledge on networking protocols and software design and development, all of which I acquired during my time spent in CIT."

# IT Management (Honours)

## CR 310 Level 8 Award

► Progression to Postgraduate Programmes

**Application:** CAO  
**Award Title:** Bachelor of Science (Honours) in IT Management  
**Duration:** 4 Years (8 Semesters)  
**Places:** 40  
**Location:** Bishopstown Campus, Cork

### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
4	2	O6/H7	O6/H7



### Programme Overview

The BSc (Hons) in IT Management is a four-year level 8 degree programme designed to provide students with the knowledge, skills and competencies in IT infrastructure and cyber security. The programme is designed around five key strategic pillars; Cyber Security, Networking, Cloud Computing Technologies, Automation and IT Management.

On successful completion of this degree programme, there are also further taught postgraduate study options in the Department of Computer Science as well as research and PhD programmes.

### Helpful Leaving Certificate Subjects

English, Science, Mathematics, Engineering, and Business Studies.

### Work Placement

Work placement starts in January of Year 3 and can last from four to nine months.

### Potential Areas of Employment

- IT Project Manager
- Cyber Security Specialist
- IT Security Engineer
- Network Manager
- System Manager

### First Year at a Glance

The first year curriculum is a common curriculum for all students and focuses on the fundamentals of Computer Science. Modules include:

- Programming Fundamentals
- Web Development Fundamentals
- Computer Architecture
- Computer Security Principles
- Maths for Computer Science
- Modular Programming
- Introduction to Databases
- Operating Systems in Practice
- Networking Fundamentals
- Physical Computing

### Computer Science Choices

The first year curriculum is common for all degrees in the Department of Computer Science. All first year students study the same modules and this means that students can transfer to another programme in the Department in year two if they meet the CAO entry requirements for that programme when they enter CIT. This offers great flexibility for qualifying students who may wish to change programmes after year one. This flexibility allows a student to make a more informed decision one year into his/her studies.



## Programme Details

This programme is designed to provide the graduate with both the management and technical skills to work in a wide range of organisations.

At a time when reliance on secure IT systems grows more critical, there is an increasing need for graduates with the skills required to manage IT services and implement complex projects securely. This programme is specifically designed to address these needs.

On this programme you will study a range of modules in cyber security, networking, database administration, system administration, project management, and IT planning and design. You may also choose other computer science modules as electives.

In Year 3, work placement begins in January. Placements for students are organised on a country-wide basis with a particular focus on Cork and Dublin. Students may also choose to work abroad.

CIT has a long and successful association with the Erasmus programme. Every year, students travel to study at CIT from across Europe and many CIT students travel to study beyond our shores. The Department of Computer Science has strong links with institutions in Germany, Sweden, France, and Finland.

## Further Studies

For details, see <http://cs.cit.ie>

Suitably qualified graduates may also apply for: postgraduate research degrees at Master's (MSc) or Doctoral (PhD) level where further specialisation in your preferred area of Computer Science is possible. Suitably qualified graduates may also apply for these taught programmes:

- > MSc in Information Security
- > MSc in Information Design & Development
- > MSc in Cloud Computing

## Career Opportunities

You will have career opportunities in Cork, Ireland and abroad, with large multinationals and also with smaller Irish companies. Graduates who can implement and manage IT services and infrastructure are in constant demand.

## Contact Information

Dr Seán McSweeney  
Department of Computer Science  
T: 021 433 5120  
E: sean.mcsweeney@cit.ie

## Question Time

### What makes CR 310 different from the other Computer Science Honours Degrees at CIT?

This programme is primarily concerned with the implementation and management of IT Services rather than computer programming.

### Is there a scholarship available for the programme?

Yes, registered students who successfully complete Year 1 of this programme may apply for the Yves Beretta Memorial Scholarship which is funded by Canadian based cyber security company, eSentire, whose European Headquarters is based in Ballincollig, Co. Cork.

### What level of Programming is contained in the course?

Programming is not the primary focus of this programme. You will cover some basic programming modules in first year.

### Can I design and develop websites from this programme?

Some modules in this Degree focus on building and running basic websites. More advanced specialised modules in web development are also available as electives.

### Can I go on to specialise in Cloud Computing?

Yes, having graduated with a BSc (Honours) in IT Management, it is possible to apply for entry to the taught MSc in Cloud Computing.

### Can I work in the Games Development Industry with this programme?

While there may be scope within a games development team for a graduate from this programme, a student who has a strong desire to work in that industry would be strongly advised to consider a software development degree.



## Olga Linek

Associate Network Engineer

"After I graduated with an Honours Bachelor of Science degree in Computer Services Management (retitled IT Management), I became employed as an Associate Network Engineer in EMC. In this role, I am responsible for configuring network devices, troubleshooting network issues and providing support to EMC offices in Europe, the Middle East and Africa.

I found that the degree was very practical, which helped me gain valuable networking and programming skills and boosted my employability."

# Software Development

## CR 016 Level 7 Award

- ▶ Progression to Level 8 Honours Degree & Postgraduate Programmes
- ▲ Higher Certificate Option

**Application:** CAO  
**Award Title:** Bachelor of Science in Software Development  
**Duration:** 3 Years (6 Semesters)  
**Places:** 40  
**Location:** Bishopstown Campus, Cork



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 5 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
5	0	O6/H7	O6/H7

### Programme Overview

The BSc in Software Development is a three-year level 7 degree programme designed to provide students with the theoretical and practical skills necessary to gain employment in the software development industry. More specifically, the programme will provide students with relevant skills and knowledge in the area of modern software development focusing on languages, techniques, tools and methodologies and their application to real-world problems. On successful completion of this degree programme there is a progression pathway available to enable students to enter Year 4 (final year) of the Level 8 BSc (Hons) in Software Development programme.

### Helpful Leaving Certificate Subjects

Science, Mathematics, Engineering, and English.

### Work Placement

Work placement starts in January of Year 3 and can last from four to nine months.

### Potential Areas of Employment

- Software Developer
- Software Tester

- Software Support Engineer
- Web Developer
- DBMS Developer

### First Year at a Glance

The first year curriculum is a common curriculum for all students and focuses on the fundamentals of Computer Science. Modules include:

- Programming Fundamentals
- Web Development Fundamentals
- Computer Architecture
- Computer Security Principles
- Maths for Computer Science
- Modular Programming
- Introduction to Databases
- Operating Systems in Practice
- Networking Fundamentals
- Physical Computing

### Computer Science Choices

The first year curriculum is common for all degrees in the Department of Computer Science. All first year students study the same modules and this means that students can transfer to another programme in the Department in year two if they meet the CAO entry requirements for that programme when they enter CIT. This offers great flexibility for qualifying students who may wish to change programmes after year one. This flexibility allows a student to make a more informed decision one year into his/her studies.



## Programme Details

The aim of the BSc in Software Development is to provide students with the competencies necessary to support a successful career in the software development industry. The degree provides students with analytical skills as well as an in-depth understanding of modern programming languages, tools and methods. The students' education is also supported in other related areas to ensure the capability to progress their careers in the long term.

In Year 3, work placement runs from January. Placements for students are organised on a country-wide basis with a particular focus on Cork and Dublin. Students can also work abroad.

The main focus of the degree is programming, so you will learn languages such as Python, Java, C and PHP. You will also learn about databases (where and how data is stored), operating systems, object-oriented programming, application development, software testing and many more topics. You will complete projects on your own and in groups throughout the degree, which is similar to working in industry.

## Further Studies

For details, see <http://cs.cit.ie>

Graduates who have achieved an average of 50% are eligible to apply for Year 4 of  
> BSc (Honours) in Software Development (CR 106)

## Career Opportunities

Graduates primarily move on to complete an Honours Degree in Software Development. However, others have gained employment as Graduate Software Developers and Graduate Networking Engineers.

## Contact Information

Dr Ignacio Castiñeiras  
Department of Computer Science  
T: 021 433 5857  
E: [ignacio.castineiras@cit.ie](mailto:ignacio.castineiras@cit.ie)

## Question Time

### What makes CR 016 different from the other Computer Science Honours Degrees (Level 8) at CIT?

CR016 is a Level 7 Software Development degree which has a Higher Certificate option for successful students who wish to leave after two years of study.

### What level of Programming is contained in the programme?

Programming and Software Engineering are a crucial part of the programme.

### Can I design and develop websites from this programme?

You will learn about web publishing and development and will be designing and developing websites by the end of the programme.

### Will I be designing Apps?

You will take the Programming Mobile Devices module in Year 3. In this module you will learn how to develop mobile applications for Android based devices.

### Can I work in the Games Development Industry with this programme?

Yes, the skills acquired in completing the course in software development and programming are very applicable to the games development industry.



## William Lynn

Software Developer

"In CIT I learned about all aspects of technology. CIT covers every aspect of Computing from web to App development. On graduating, I had the skills to work on any aspect of software, from high-tech startups, where I developed a climate change computer graphics engine, to smart phone application development. I currently make Android and iPhone apps in the USA and the apps I work on are used by millions of users. The skills I learned in CIT are relevant to my job on a daily basis."

William completed the BSc in Software Development and then went on to complete BSc (Hons) in Software Development, followed by a Masters by Research in Software Development.

# Information Technology

## CR 888 Level 7 Award

- ▶ Progression to Level 8 Honours Degree & Postgraduate Programmes
- ▲ Higher Certificate Option

**Application:** CAO  
**Award Title:** Bachelor of Science in Information Technology  
**Duration:** 3 Years (6 Semesters)  
**Places:** 40  
**Location:** Bishopstown Campus, Cork



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 5 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
5	0	O6/H7	O6/H7

### Programme Overview

The BSc in Information Technology is a three-year level 7 degree programme designed to provide students with the knowledge, skills and competencies in IT infrastructure, security, emerging technologies, systems management, database systems and IT applications. The programme is designed around five key strategic pillars; Networking, Security, Cloud Computing Technologies, Scripting and Database Systems. The students who enrol on this programme will study modules aligned to the above areas.

On successful completion of this degree programme there is a progression pathway available to enable students to enter Year 4 (final year) of the Level 8 BSc (Hons) in IT Management programme.

### Helpful Leaving Certificate Subjects

English, Science, Mathematics, Engineering, and Business Studies.

### Work Placement

Work placement starts in January of Year 3 and can last from four to nine months.

### Potential Areas of Employment

- IT Support Engineer
- Database Administrator

- Network Administrator
- System Administrator

### First Year at a Glance

The first year curriculum is a common curriculum for all students and focuses on the fundamentals of Computer Science. Modules include:

- Programming Fundamentals
- Web Development Fundamentals
- Computer Architecture
- Computer Security Principles
- Maths for Computer Science
- Modular Programming
- Introduction to Databases
- Operating Systems in Practice
- Networking Fundamentals
- Physical Computing

### Computer Science Choices

The first year curriculum is common for all degrees in the Department of Computer Science. All first year students study the same modules and this means that students can transfer to another programme in the Department in year two if they meet the CAO entry requirements for that programme when they enter CIT. This offers great flexibility for qualifying students who may wish to change programmes after year one. This flexibility allows a student to make a more informed decision one year into his/her studies.



## Programme Details

The aim of the BSc in Information Technology programme is to produce graduates who have strong Information Technology skills in areas such as IT infrastructure, operating systems, systems administration, cloud computing technologies and cyber security. Graduates will be able to deploy and administer virtualised environments, deploy and configure networks, and secure the IT infrastructure. Along with learning about IT systems, you will also learn about Information Security which is a rapidly expanding sector in the computer industry. As more technology goes online, you have to learn how private/sensitive information may be at risk and the steps you can take to protect it.

The programme covers a wide range of modules which will be useful in any type of IT role such as networking, web services, databases, system administration, operating systems, computer security principles, project management and network security.

At a time of increasing reliance on IT services, the demand for graduates with the skills to implement and maintain IT infrastructure remains high. This programme is specifically designed to address this need. In Year 3, work placement runs from January. Placements for students are organised on a country-wide basis with a particular focus on Cork and Dublin. Students can also work abroad.

CIT has a long and successful association with the Erasmus programme. Every year, students travel to study at CIT from across Europe and many CIT students travel to study beyond our shores. The Department of Computer Science has strong links with institutions in Germany, Sweden, France, and Finland.

## Career Opportunities

Graduates who can coordinate and supervise the configuration, testing and deployment of IT Services and the ongoing support of those systems and their users are in constant demand.

## Further Studies

For details, see <http://cs.cit.ie>

Graduates who have achieved an average of 50% are eligible to apply for Year 4 of

- > BSc (Honours) in IT Management (CR 310)

## Career Opportunities

Graduates primarily move on to complete an Honours Degree in IT Management. The programme aims to produce high-quality graduates with the knowledge, skills and understanding for the effective pursuit of a variety of careers in Information Technology. These include careers in IT Services, IT Support Roles, Network Administration, Data Centre Administration, IT Engineers, and Security Engineers.

## Contact Information

Dr Olivia Brickley  
Department of Computer Science  
T: 021 433 5582  
E: [olivia.brickley@cit.ie](mailto:olivia.brickley@cit.ie)

## Question Time

**On successful completion of the programme, am I qualified as an IT Technician?**

Yes. You will learn hands-on the skills required to implement, maintain and secure computer networks, hardware, databases, web services and applications.

**What can I work at after the 3 years study?**

You can work in many IT roles e.g. IT Support Engineer, Network Administrator, System Administrator, Website Administrator, etc.

**Can I work in the Games Development Industry with this programme?**

This programme is not designed to equip its graduates with the skills needed in a developmental or programming role.

**What level of Programming is contained in the programme?**

Programming is not the primary focus of this programme. You will cover some basic programming modules in first year.



## Ann-Marie Fitzgerald

ICT Information Security Specialist

"I was unsure of what area of IT I wanted to study initially and this programme offered a wide range of modules which allowed me to learn about several areas. Shortly after I graduated, I began working for Pricewaterhouse Coopers (PwC), Dublin. A few years later, I was promoted to Senior IT Risk & Compliance Specialist, where I performed security risk assessments, security audits and dealt with clients across many areas. I'm now working as an ICT Security Specialist in the Information Security Services Department for Lease Plan Information Services (LPIS).

I'd recommend this programme to anyone who is looking for a great basis in different aspects of IT from Web development, Linux to IT Security. When you find your particular interest, you can focus your Final Year project on where your skills lie best and it can guide you into any area of IT."

Ann-Marie initially completed a BSc in IT and then progressed to an add-on year for a BSc (Hons) in Computer Services Management (retitled IT Management).

# CIT Cork School of Music

at a glance

## CAO Courses

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- CR 129 BA (Honours) in Popular Music: Voice	164
- CR 700 BA (Honours) in Theatre & Drama Studies	166

**Note:** Course CR 125, CR 126, CR 127, CR 128, and CR 129 will qualify with a BA (Honours) in Popular Music

## Postgraduate Programmes

- MA in Music Performance (Taught)
- MA in Music Composition (Taught)
- MA in Music Conducting (Taught)
- MA in Music and Technology (Taught)
- MSc in Music and Technology (Taught)
- MA (by Research)
- PhD





# CIT Cork School of Music

Founded in 1878, the Cork School of Music (CSM) was the first Municipal School of Music to be established in Ireland and the United Kingdom.

The CSM was the first institution in the State to offer a Music Teaching Diploma Course embracing academic, pedagogic and practical training – and the spirit of this course was incorporated into the CSM's Honours BMus Degree course. On 1st January 1993, together with the Crawford College of Art & Design, the Cork School of Music became a Constituent School of Cork Institute of Technology.

The musical life of Ireland is rich and varied, and nowhere more so than in Cork. The staff and students of the CSM play a pivotal role in this life through performances and their involvement with musical organisations not only in the city, but also regionally, nationally and internationally. The greatest asset of the CSM is its large and distinguished staff that includes many highly qualified and experienced teachers who are also performers of national and international standing.

Many opportunities exist for students to attend a wide variety of performances. Because of the CSM's city-centre location, students are able to avail of non-musical activities and a varied social life – vital ingredients of a liberal third-level education.

## Facilities

A purpose-built home for the CSM opened in September 2007 and provides nearly 13,000m<sup>2</sup> of state-of-the-art facilities. This was supplied by means of a Public Private Partnership (Department of Education & Science & Hochtief PPP Solutions). It includes:

- 60 teaching/practice studios (equipped with a fleet of Steinway grand pianos)
- 400-seater auditorium
- 120-seater drama theatre
- Movement room & changing facilities
- Professional 48-track, digital HD recording studio
- Electronic music studio
- Piano labs
- Audio lab
- MusicIT lab
- Double bass studio
- Early music (organ & harpsichord) studio
- Harp studio
- Percussion studio
- Postgraduate centre

With an inspirational ground-floor atrium that appears to flow up the entire building through two huge natural light shafts, and with acoustic, temperature and humidity controls provided throughout the building, these facilities are without parallel. The CSM provides the internationally-renowned staff of Ireland's largest conservatory of music and drama with the very best of facilities to ensure that many more students are able to pursue their studies. One of the distinguishing features of the CSM is that music is music, and the genres of classical, Irish traditional, jazz, and popular are treated with equal respect and opportunity.

## Opening Hours

Monday to Friday 8.30am - 10.00pm

Saturdays 9.00am - 5.30pm

Most Sundays 10.00am - 5.00pm





Another important distinguishing feature is the range and quality of ensemble music making opportunities that are available to students. Performing in public is a vital ingredient of any musical training and the CSM provides many platforms, both formal and informal, for its students. Full-time students are encouraged to play a leading role in the performing groups presented by the CSM. In addition to a wide variety of chamber music groups, the CSM's bands (including jazz), choirs, drama groups, Irish traditional music groups, opera studio, and orchestras have strong international as well as national reputations for their extensive profiles, achievements and standards. Students are also encouraged to enter the annual competitions that the CSM organises - particularly the Senior Concerto, Chamber Music, Piano Accompaniment, and Advanced Recital Competition.

Five bands cater specifically for wind and percussion students of the CSM. Four graded wind bands allow students to participate in large-ensemble music making from their earliest years of study to an advanced level. The CSM Wind Ensemble gives concerts throughout the country and has made several radio broadcasts. The CSM Jazz Big Band has given performances in Belgium, England, France, Holland, Italy, and the USA, as well as throughout Ireland.

The CSM has a proud tradition of producing professional singers – for example Majella Cullagh, Mary Hegarty, Bridget Knowles, Paul McNamara, Cara O'Sullivan and Finbarr Wright. As well as individual vocal lessons, students can participate in an Opera Workshop, small vocal ensembles, and avail of specialist language classes. The CSM choirs range from a Junior and Senior childrens' choruses and a Youth Choir to the Fleischmann Choir – a large mixed-voice choir which performs and broadcasts

the large-scale works for chorus with orchestra, and tours annually both within Ireland and abroad. The CSM also boasts an equal-voice choir of full-time students, Cappella Lyrica.

Instrumentalists move through Preparatory, Junior, Intermediate and Senior orchestras to the CSM Symphony Orchestra that performs the literature for full orchestra. Its programmes usually feature a Cork-trained or Cork-based artist as soloist, and its concerts in Cork and various other major centres around the country have earned it an enviable reputation for consistent excellence. In recent years, the CSMSO has committed itself to providing a series of rehearse-record sessions for composers studying in the CSM that have provided great encouragement and developmental support. In addition, the CSM supports specialist Baroque & Classical orchestral ensembles for those interested in historical performance practice and a Contemporary Music Group. Chamber music ensembles are a prominent feature of the CSM, and the Drama staff foster a range of drama groups. Students benefit greatly from the residencies of artists-in-residence such as Barry Douglas and Ash Soan.

CSM has state-of-the-art digital technology to provide a unique resource for recording as well as Music and Technology studies – the latter being integrated with the BA (Honours) in Creative Digital Media offered in CIT's Bishopstown Campus. An extraordinary bequest from the family of the late Norman Young also means that the CSM has a unique collection of professional recording equipment that represents all the technologies developed during the twentieth century.



## Entrance Test

The Honours BMus Entrance Test is provisionally scheduled to be held on 13th April, 2019. The BA (Honours) in Popular Music and the BA (Honours) in Theatre & Drama Studies Entrance Assessment Tests are provisionally scheduled to take place from 11th - 13th April, 2019. Each candidate who sits an Entrance Test is awarded up to a maximum of 600 points that are added to the Leaving Certificate points for the purpose of determining entry. Each standard candidate must achieve the minimum threshold of 276 points in the Entrance Test and must also meet the minimum Leaving Certificate entry requirement in order to be eligible for admission.

**NB:** Candidates are NOT allowed to defer the results of the Entrance Test from one year to the next.

## Music CR 121

The Entrance Test involves an interview, performance and a written paper dealing with rudiments, compositional techniques (harmony), aural and general musical knowledge. Samples of the Entrance Test written paper are available to download at [www.cit.ie/course/CR121](http://www.cit.ie/course/CR121) or upon request from the Administrator, CIT Cork School of Music, Union Quay, Cork. Specific requirements for instrumentalists and singers are outlined in the Sample Entrance Test. Please note Jazz and Pop singers should apply for CR129.

## Popular Music

**CR 125 / CR 126 / CR 127 / CR 128 / CR 129**

Applicants will be required to prepare two contrasting pieces of music; undergo an interview; and sit a written assessment paper. Sample of the Entrance Test paper is available to download at [www.cit.ie/course/popularmusic](http://www.cit.ie/course/popularmusic) or upon request from the Administrator, CIT Cork School of Music, Union Quay, Cork.

## Theatre & Drama Studies CR 700

For the practical assessment, candidates will prepare a three-to-four minute monologue from a published play of their choice. Individual auditions/interviews will also include the performance of a short, previously unseen text given on the day. Each candidate will also take part in a 45-minute group drama workshop.

Sample of the Entrance Test Assessment paper is available to download at [www.cit.ie/course/CR700](http://www.cit.ie/course/CR700) or upon request from the Administrator, CIT Cork School of Music, Union Quay, Cork.

## About the Bachelor of Music (Honours) CR 121

This four-year programme leads to the award of an Honours BMus Degree. The course offered by the CSM differs fundamentally from those available elsewhere in the country in a number of ways. In particular, Performance Studies are an integrated feature throughout the course and students receive credit for them proportional to their level of ability and specialisation.

One of the attractions of this Honours Degree course is the nature of Years 1 and 2, which are best described respectively as "Foundation" and "Transition". The carefully coordinated elements of the Year 1 course seeks to ensure that every student is subsequently able to fulfil their potential, whatever specialisations are chosen. During Year 2, the continuation of core studies is balanced by the introduction of elements that ensure students can make an informed decision about which subjects they would like to concentrate on during the third and fourth years. Whilst these might prove to be Performance Studies, or Music in the Community, or Pedagogic (Music Teaching) Studies, or Music and Technology, or Music Therapy, it is equally possible to specialise in Applied Musicianship Skills and/or Music History. Students specialising in conducting and/or orchestration reap the benefits of multiple sessions with the CSM's most senior performing groups, including the Fleischmann Choir, Symphony Orchestra, and Wind Ensemble.

Potential professional performers can study with people who have played in and/or conducted professional orchestras, choirs and bands, are (or have been) members of professional chamber ensembles, and perform regularly as soloists. Aspiring teachers take courses in Pedagogic Studies that reflect the very best practices to be found in a School that has been at the forefront of music education for over 130 years. In addition, there is also coherent and meaningful provision for students whose interests and strengths lie in the fields of Applied Musicianship Studies (including Analysis, Conducting, Composition and Counterpoint) and/or Historical Studies. Staff of the CSM have blazed the trail for both Community Music and Music Therapy studies in Ireland, and the Music and Technology Studies are enhanced by the unique availability of state-of-the-art digital equipment in the CSM and linkages with the BA (Honours) in Creative Digital Media offered by CIT in its Bishopstown Campus.





## About the Bachelor of Arts (Honours) in Popular Music

CR 125 / CR 126 / CR 127 / CR 128 / CR 129

This is a four-year programme leading to the award of a Bachelor of Arts (Honours) in Popular Music. Singers and instrumentalists who play guitar, bass, keyboards or drums in a pop style will study together: performance skills, ensemble, theory & harmony, song writing, music technology and music business, law and entrepreneurship. In third and fourth year, students' electives include Music Therapy, and Music in the Community. Those wishing to specialise in Music Technology have access to some of the most sophisticated electronic and computer equipment available in the country.

Graduates will be able to compete in the busy world of commercial music in Ireland, for recording contracts, gigs in clubs and concert halls, TV and stage shows, corporate entertainment, and the fertile melting pot that is the Irish singer-songwriter circuit. Synergies with the classical, jazz and traditional musicians on the BMus course will open creative doors and career opportunities such as those fostered in the famous performing arts schools and colleges of the UK and the USA.

## About the Bachelor of Arts (Honours) in Theatre & Drama Studies CR 700

This is a four-year programme leading to the award of Bachelor of Arts (Honours) in Theatre & Drama Studies. The programme centres on theatre performance training, with supporting modules to facilitate wider career options. The programme aims to produce artists that are physically and vocally flexible and intellectually alive and curious. Alongside core disciplines of voice, movement and acting studies, you will develop a range of creative and practical techniques and transferable skills that will encourage you to be an independent thinking and motivated artist, an articulate and reflective practitioner equipped to succeed in a competitive profession. Small group and large ensemble practical and workshop sessions are balanced with lectures, tutorials and field-based studies.

**Capstone Module:** In the fourth and final year, each student works on an integrated production. As the emphasis throughout the programme is on performance, this allows an involvement at a professional level as a theatre practitioner as the culmination of the four years' work.



# Music (Honours)

## CR 121 Level 8 Award

► Progression to Postgraduate Programmes

**Application:** CAO  
**Award Title:** Bachelor of Music (Honours)  
**Duration:** 4 Years (8 Semesters)  
**Places:** 30  
**Location:** CIT Cork School of Music, Union Quay, Cork  
**Restricted Application/Early Assessment Procedures:** Yes  
**National Vetting Bureau:** Yes

### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
4	2	(Note 1)	O6/H7

**Note 1:** There is no specific requirement for Mathematics. A Grade F2 or higher in Foundation Level Mathematics is recognised as one of the subjects for entry.

**Note 2:** Entrance Test is also required (provisionally scheduled to be held on Saturday, 13th April, 2019).

**Note 3:** CIT uses the National Vetting Bureau to help assess the suitability of applicants. It is important to note that participation in, or completion of, this programme may be affected by subsequent disclosure/discovery.

See Page 160 for further admission information.



### What is Music?

It is the art or science of combining sounds and silence in order to produce a form that is satisfying and emotionally stimulating. The study of music involves the enhancement of instrumental skills, theoretical learning and understanding, history, exploration of the social and therapeutic benefits of music making and listening, conducting, composition, orchestration, psychology, education, and use of technology.

### Helpful Leaving Certificate Subjects

Music, and English.

### Potential Areas of Employment

- Solo and Ensemble Performance
- Music Teaching
- Music Production and Recording
- Film, Video and TV Scoring
- Conducting
- Arts Administration
- Music Therapy
- Community Music

### First Year at a Glance

A comprehensive grounding in Musicianship and Technical Skills, encompassing individual Instrumental Tuition and both small and large ensemble participation, aligned with music literacy and aural development.

The Programme also offers the opportunity to engage with Music Technology and team building activities.



## About the Course

There are three mandatory skill-based modules which are taken in each Semester. The remaining electives may be selected from a wide choice of modules: Community Music, Composition, Conducting, Counterpoint, Education, History, Music Technology, Music Therapy, Orchestration, Performance, and Research.

Instrumental tuition is delivered in one-to-one lessons according to best international practice. Other modules are delivered across a variety of labs, lectures, tutorials and workshops.

## Further Studies

For details, see <http://csm.cit.ie>

Suitably qualified graduates may apply either to undertake research (leading to the award of a MA and/or PhD), or to follow a Taught Master's programme in either Music (Performance or Composition or Conducting) or Music & Technology.

## Career Opportunities

There are many employment opportunities for music graduates apart from the obvious ones of performing and teaching. This course also enables students to develop the skills necessary for a career as a music/arts administrator, music librarian, conductor of amateur bands/choirs/orchestras/musical shows, music animator, music publicist/promoter, and music editor.

However, taking an Honours Degree in music does not mean that a graduate is restricted to a music driven career for the rest of their life. In addition, a growing number of employers outside the specific music business favour music graduates because of the combination of intellectual training, digital skills, interpersonal sensitivity and greatly enhanced general response rates represented by a musical training.

## Contact Information

The Administrator,  
CIT Cork School of Music,  
Union Quay, Cork.  
T: 021 480 7307  
E: [bmus@cit.ie](mailto:bmus@cit.ie)

## Question Time

### Do I need to have Leaving Certificate Music?

Leaving Certificate Music is not an admission requirement. This is a restricted access course, you need to pass the CSM's Entrance Test and then you will be placed on a ranked list based on your combined marks from the CSM Entrance Test and your Leaving Certificate points.

### Do I need to be able to read music?

Yes, you need to be able to read music notation to a reasonable standard.

### Can I apply if I have never completed a grade exam?

It is not necessary to have actually completed grade examinations. The audition result is based on what the examination panel hear on the day.

### Is there a late application facility?

It is very important to note that the option of 'change of mind' before 1 July does not apply to restricted access courses such as CR121. You can change the order of your CAO choices but you cannot add on this course if you haven't listed it already on your choices before the 1 February.

### Are there any other special requirements?

Yes, there are Early Application Procedures. This is a Restricted Access Course and all applicants must sit the CSM's Honours BMus Degree Course Entrance Test. The provisional date for the Entrance Test is Saturday 13th April, 2019.

### Are past test papers available?

Yes. All CAO applicants receive a copy. However, you can also access them online ([www.cit.ie/course/CR121](http://www.cit.ie/course/CR121)), or request one by post from the CSM's Administrator, Union Quay, Cork, to check that you can meet the requirements of the practical, aural, and written elements.

### Can I defer the results of my Entrance Test from one year to the next?

Candidates are not allowed to defer the results of the Entrance Test.



## Colm O'Regan

Musical Director

Colm is a Musical Director working primarily in theatre. While undertaking the BMus degree at the CSM he studied piano with Gabriela Mayer and conducting with Alan Cutts. He also studied abroad during his third year through the Erasmus programme in Trieste, Italy, where he studied with Teresa Trevisan. After graduation he continued to train as a conductor and subsequently moved to the UK to work in musical theatre. An avid arranger and orchestrator, his scores have been performed in New York, London and across the world on tour. Having worked on many projects across the UK and in the USA, Colm took over as Musical Director for one of the longest running productions in the world, "Starlight Express" in Bochum, Germany. He is currently on a world tour with "Wicked" the musical as Assistant Musical Director.

# Popular Music (Honours)

## Level 8 Award

CR 125 Popular Music: Electric Bass Guitar

CR 126 Popular Music: Drums

CR 127 Popular Music: Electric Guitar

CR 128 Popular Music: Keyboards

CR 129 Popular Music: Voice

### ► Progression to Postgraduate Programmes

**Application:** CAO

**Award Title:** Bachelor of Arts (Honours) in Popular Music

**Duration:** 4 Years (8 Semesters)

**Places:** 30 (6 places on offer in each specialised area)

**Location:** CIT Cork School of Music, Union Quay, Cork

**Restricted Application/Early Assessment**

**Procedures:** Yes

**National Vetting Bureau:** Yes

### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
4	2	(Note 1)	O6/H7

**Note 1:** There is no specific requirement for Mathematics. A Grade F2 or higher in Foundation Level Mathematics is recognised as one of the subjects for entry.

**Note 2:** Entrance Test is also required (provisional dates are from Thursday to Saturday, 11th - 13th April, 2019).

**Note 3:** CIT uses the National Vetting Bureau to help assess the suitability of applicants. It is important to note that participation in, or completion of, this programme may be affected by subsequent disclosure/discovery.

See Page 160 for further admission information.



### What is Popular Music?

Popular Music is the music heard around the clock on radio, TV, in the theatres, clubs and venues all around the country. We use it to encompass all of the sub genres: rock, country, soul, blues, commercial, modern musical theatre, electronic music, dance music, and so on.

### Helpful Leaving Certificate Subject

Music.

### Potential Areas of Employment

- Musician in a band
- Singer songwriter
- Session/Pit Musician
- Music teaching
- Sound technician
- Film, Video and TV scoring





## First Year at a Glance

- Contextual Harmony: provides a foundation in harmonic and notational skills required of the popular music professional and is delivered in the context of popular music history
- Popular Musicianship: provides intensive directed study in aural skills and an auxiliary instrument. For non-keyboard players the auxiliary instrument is keyboard, for keyboard players the auxiliary instrument is drum kit
- Popular Ensemble Workshop: provides practical performance-based engagement with popular music on the student's principal instrument-both in full band and small ensemble configurations
- Music & Technology: introduces the student to the recording studio, its equipment and procedures - while also developing the necessary skill set for the practical operation of live sound equipment

## About the Course

Each student is assigned a matched group of peers to form a small popular ensemble, this becomes the centre of the learning experience. Lectures, classes, and music technology labs provide supporting skills to the core training in performance.

**Instrumental Tuition; Ensembles** – everything from rock, pop, hip hop, blues, soul, metal, jazz, salsa, disco, electronica, funk, ska, reggae, etc.; **Musicianship and Harmony** – play by ear, harmonise, notate your favourite songs and solos; **Music Technology** – live sound and PA, studio engineering, computer-based music applications including ProTools and Logic Studio; **Song Writing** – mentored guidance and practical experience in realising your own composition; **Arranging and Musical Direction** – coordinate, arrange for, and direct a group of your musical peers.

Additionally, BAPM students will have the opportunity to devise and develop personal live and recorded music projects. Along with their BMus counterparts, BAPM students will be introduced to Community Music and Music Therapy as potential pathways. Students will also have access to specialist modules embracing arts marketing, professional promotion, and business for artist practitioners and career development.

## Further Studies

For details, see <http://csm.cit.ie>

Suitably qualified graduates may apply either to undertake research (leading to the award of an MA and/or PhD), or to follow a Taught Master's programme in either Music (Performance or Composition) or Music & Technology.

## Career Opportunities

There are many employment opportunities for popular music graduates apart from the obvious one of performing. Composition, music for multimedia, song writing, playing in recording sessions, in theatrical productions and TV. Outside of this field is the associated area of promotion, festival and arts administration, and the business side of the industry.

However, taking an Honours Degree in Popular Music does not mean that a graduate is restricted to a music driven career for the rest of their life. In addition, a growing number of employers outside the specific music business favour music graduates because of the combination of intellectual training, digital skills, interpersonal sensitivity and greatly enhanced general response rates represented by a musical training.

## Contact Information

The Administrator,  
CIT Cork School of Music, Union Quay, Cork.  
T: 021 480 7307 E: [popularmusic@cit.ie](mailto:popularmusic@cit.ie)

## Question Time

### Are there any other special requirements?

Yes, there are Early Application Procedures. This is a Restricted Access Course and all applicants must sit the CSM's BA (Honours) in Popular Music Degree Course Entrance Test. The provisional dates for the Entrance Test are from 11 - 13th April, 2019.

### Are sample test papers available?

Yes. All CAO applicants receive a copy. However, you can also access them online ([www.cit.ie/course/popularmusic](http://www.cit.ie/course/popularmusic)), or request one by post from the CSM's Administrator, Union Quay, Cork, to check that you can meet the requirements of the practical, aural, and written elements.

### Can I defer the results of my Entrance Test from one year to the next?

Candidates are not allowed to defer the results of the Entrance Test.



## Ophelia McCabe

Singer, Teacher, Composer

Ophelia McCabe graduated with First Class Honours in October 2016 as part of the first cohort of students to graduate with a BA in Popular Music (Voice). She combines an artistic performance career with an array of teaching contexts while continuing her studies on CSM's Taught Masters Course (Performance). Ophelia's profile as a professional songwriter was elevated in her final undergraduate year due to winning the Colin Vearncombe Memorial Bursary for the best original composition, providing a solid foundation for her progression as a producer of original contemporary and commercial music in Ireland.

# Theatre & Drama Studies

## (Honours)

### CR 700 Level 8 Award

► Progression to Postgraduate Programmes

**Application:** CAO  
**Award Title:** Bachelor of Arts (Honours) in Theatre & Drama Studies  
**Duration:** 4 Years (8 Semesters)  
**Places:** 20  
**Location:** CIT Cork School of Music, Union Quay, Cork  
**Restricted Application/Early Assessment Procedures:** Yes  
**National Vetting Bureau:** Yes

#### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

#### Minimum Entry Requirements

Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
4	2	(Note 1)	O6/H7

**Note 1:** There is no specific requirement for Mathematics. A Grade F2 or higher in Foundation Level Mathematics is recognised as one of the subjects for entry.

**Note 2:** Assessment Test is also required (provisional dates are 12th & 13th April, 2019).

**Note 3:** CIT uses the National Vetting Bureau to help assess the suitability of applicants. It is important to note that participation in, or completion of, this programme may be affected by subsequent disclosure/discovery.

See Page 160 for further admission information.



#### What is Theatre & Drama Studies?

Theatre & Drama Studies is a practice-based course for those intending to pursue a career in theatre or dramatic arts. Individual acting skills, voice production, ensemble performance and related theatre design and technical audio visual studies equip the student to work in live theatre, broadcast media or community-based arts facilitation.

#### Helpful Leaving Certificate Subject

English.

#### Potential Areas of Employment

- Actor
- Director/Producer
- Theatre Designer
- Theatre Technician
- Drama Teaching
- Community Arts
- Theatre in Education
- Arts Administration
- Film and Television

#### Work Placement

There is a mandatory 84 hours work placement over a minimum of 8 weeks in Year 3.



## First Year at a Glance

- Performance Ensemble: performance studies focusing on the work of Stanislavski and Chekhov
- Voice Studies: freeing and strengthening the speaking voice and working with texts
- Theatre History & Text: theatre history from the age of Greek Theatre to that of Shakespeare
- Theatre Lab: movement and performance, focusing on improvisation and the work of Le Coq
- Theatre Technology: an introduction to theatre lighting and sound
- Costume and Make-up: costume study and make-up design

## About the Course

This Honours Degree course centres on theatre performance training, with supporting modules to facilitate wider career options. The course aims to produce artists that are physically and vocally flexible and intellectually alive and curious.

Alongside core disciplines of voice, movement and acting studies, you will develop a range of creative and practical techniques and transferable skills that will encourage you to be an independent thinking and motivated artist, an articulate and reflective practitioner equipped to succeed in a competitive profession. Small group and large ensemble practical and workshop sessions are balanced with lectures, tutorials and field-based studies.

In the second semester of Year 3, each student will have a supervised work placement in an appropriate professional environment. The work placement is done as a complete module with 84 hours work contact to be done in a minimum of 8 weeks.

**Capstone Module:** In the fourth and final year, each student works on an integrated production. As the emphasis throughout the course is on performance, this allows an involvement at a professional level as a theatre practitioner as the culmination of the four years' work.

## Further Studies

For details, see <http://csm.cit.ie>

Graduates will be able to pursue any Level 9 course for which a drama degree is relevant and recognised – including postgraduate education programmes.

Postgraduate study in education, drama therapy and arts administration are examples of what are possible pathways.

## Career Opportunities

Graduates will have the ability to pursue careers in the performing arts, education, arts administration, community arts, film and television media.

## Contact Information

The Administrator,  
CIT Cork School of Music, Union Quay, Cork.  
T: 021 480 7307 E: [csminfo@cit.ie](mailto:csminfo@cit.ie)

## Question Time

**When I graduate from this Degree, what necessary steps do I need to take to be qualified to teach?**

Graduates will be able to seek work as drama teachers in stage schools and various community arts organisations.

**Are sample assessment papers available?**

Yes. All CAO applicants receive a copy. However, you can also access a copy online ([www.cit.ie/course/CR700](http://www.cit.ie/course/CR700)), or by emailing [csminfo@cit.ie](mailto:csminfo@cit.ie)

**Can I avail of the Erasmus programme?**

Yes, in Year 3, students may avail of the Erasmus Scheme to study abroad in a partner institution.

**What elective modules are available?**

Where timetables and resources permit, you may have the choice of studying a module of your own choice. This gives you access to a wide range of electives from other disciplines, such as Music, Fine Art, Mathematics or Sciences. The synergy with the Music Degree offers particular opportunities for musical theatre specialists.

**Can I defer the results of my Assessment Test from one year to the next?**

Candidates are not allowed to defer the results of the Entrance Assessment Test.

**Are there early assessment procedures?**

Yes, the Assessment Test will provisionally take place at the CIT Cork School of Music, 12th & 13th April, 2019.



## Emma Willis

Actor

Emma completed her degree in 2016. During her studies, she appeared in several stage productions including the Irish premiere of *The Laramie Cycle*, and *Our Town*. She also appeared as Mary Boyle in *Juno and the Paycock*, and in *Room for Two*. In film, Emma starred alongside Brian Gleeson in the Irish neo-Western drama *Darkness on the Edge of Town* which recently got distribution on America Netflix and iTunes. Emma most recently appeared as Janette in BBC's hit comedy drama *The Young Offenders* (BBC3/BBC1). Emma also appears as a recurring character (Amber) in *Can't Cope, Won't Cope* season 2 (RTE 2), and appeared as a series regular (Michele) in *Nowhere Fast* for the same channel at the end of 2017. Also for the BBC, Emma appeared as series regular Tara in *Overshadowed* for BBC in 2017, and she will appear later in 2018 as Gyda in season 6 of *Viking*.

# CIT Crawford College of Art & Design at a glance

## CAO Courses

### Level 8

#### Fine Art and Applied Art @ Sharman Crawford Street

- CR 210 BA (Honours) in Contemporary Applied Art (Ceramics, Glass, Textiles) 174
- CR 220 BA (Honours) in Fine Art 176

#### Media Communications @ Bishopstown Campus

- CR 112 BA (Honours) in Creative Digital Media 178
- CR 600 BA (Honours) in Visual Communications 180

#### Postgraduate Programmes

- Professional Master of Education (Art and Design)
- MA in Art Therapy (Taught)
- MA in Teaching Visual Arts for Primary & Early Years Education (Taught)
- MA in Art & Process (Taught)
- MA in Leadership in the Creative Industries (Taught)  
(Joint Award CIT / h\_da, Media Faculty, Germany)
- MA in Public Relations with New Media (Taught)
- MA in Journalism and Digital Content Creation (Taught)
- MA in E-learning Design and Development (Taught)
- MA by Research
- PhD



# CIT Crawford College of Art & Design

CIT Crawford College of Art and Design (CCAD) is a vibrant multi-campus College, which has been providing education in the arts for more than 100 years. Crawford graduates are among Ireland's top artists, curators, designers, media practitioners, art therapists, and art educators.

The Crawford is a diverse, dynamic & creative community exploring art, design, technology, culture, visual arts education & media through theory, research and professional as well as independent practice. Whatever your creative aspirations, the Crawford can support you on the journey to your future career.

In addition to all of these careers in the creative and cultural industries, our graduates apply the skills acquired in their art and design education to a wide variety of careers in all sectors, where their ability to think both laterally and critically, their powers of analysis, their exceptional team-working and communication skills, and their problem-solving attitudes are all highly valued by employers.



## The College comprises three distinct departments as follows:

- The **Department of Fine Art & Applied Art** offering studio programmes in Fine Art, Contemporary Applied Art (Ceramics, Glass, Textiles), is based in Cork City Centre on Sharman Crawford Street campus.
- The **Department of Media Communications**, offering programmes in Visual Communications, Creative Digital Media, TV and Radio Production, Journalism, E-learning, and Public Relations, is based on the CIT Bishopstown Campus.
- The **Department of Arts in Health & Education**, offering postgraduate programmes is based in Cork City Centre, on the Grand Parade.

There are extensive links with industry and external arts organisations, an exciting visiting lecturer programme, and a strong focus on the development of individual creativity.





## Fine Art and Contemporary Applied Art (Ceramics, Glass, Textiles) @ Sharman Crawford Street

The BA (Honours) in Fine Art, and the BA (Honours) in Contemporary Applied Art (Ceramics, Glass, Textiles) are based on our Sharman Crawford Street campus in Cork's city centre with easy access to vibrant art institutions and arts scene. Both programmes provide studio based education, with an emphasis on instilling individualism and independence.

Facilities include personal studio space for all students with access to well-equipped workshops including drawing studio, media-labs, photography studio, digital imaging lab and/or traditional darkrooms, projection space, print studios, textiles, glass, ceramics, metal, and wood fabrication alongside lecture theatres.

## Visual Communications & Creative Digital Media @ Bishopstown Campus

The BA (Honours) in Visual Communications, and the BA (Honours) in Creative Digital Media are offered on the Bishopstown campus in the Department of Media Communications. Both programmes maintain close links with industry ensuring that courses are targeted to 'real world' needs and that graduates are both highly educated and eminently employable.

Facilities include photographic/video production space, design/drawing studios and lecture rooms. There is also a print workshop and digital print facilities available to the students. All labs consist of up-to-date industry standard computer hardware and software.

## Postgraduate Programmes

CCAD offers an extensive range of Postgraduate Programmes:

- Professional Master of Education (Art and Design)
- MA in Art Therapy
- MA in Teaching Visual Arts for Primary & Early Years Education
- MA in Art & Process
- MA in Public Relations with New Media
- MA in Journalism and Digital Content Creation
- MA in E-learning Design and Development
- MA by Research
- PhD

## International Links

The College has strong connection with partners in China, USA, South Africa, Singapore, Vietnam and Europe. The College actively participates in the ERASMUS student mobility programme in Germany, the UK, the Netherlands, Portugal, Italy, Estonia, Hungary, Romania, Czech Republic, France, Spain, Austria, and Finland.





# Portfolio Guidelines

## CCAD Undergraduate Programmes

1. BA (Honours) in Fine Art CR 220
2. BA (Honours) in Contemporary Applied Art (Ceramics, Glass, Textiles) CR 210
3. BA (Honours) in Visual Communications CR 600

The portfolio is your opportunity to show what interests and excites you visually; it should show your ability and potential to engage in a challenging and creative contemporary art and design practice. If you have an inquisitive mind and want to explore your creativity, then the CCAD Degree Programmes are for you.

## There is no 'standard' portfolio but these are indications of what will be looked for:

- Make it exciting so your portfolio reflects your interest and enthusiasm for the chosen course as a prospective art and design student.
- Evidence of drawing and painting are essential and should be demonstrated through both observational and imaginative work. However, at least half of the work you include should be from direct observation.
- Don't leave out large scale or 3D work; however it is sufficient to present this by photographing the objects from a variety of viewpoints and including some indication of scale if possible.
- Sketchbooks and personal visual diaries are vital since they give an idea of how you inform yourself, how you generate ideas and your approach to researching and developing them.

- It is important to organise and present your portfolio clearly but there is no need to spend a lot of money mounting work - spend time putting your folder in order, be selective, judge what best displays your interests, abilities and skills, then arrange it in a clear and coherent manner- don't put everything in. Remember we are looking for quality not quantity.
- Please do not include work on disc (unless it is motion graphics or video work specific to course CR 600).

**Note:** Portfolios for the BA in Visual Communications CR 600 should contain examples of any 'graphic design' projects you may have undertaken such as logos, event posters, CD covers, or graphics for packaging.

Finally and most importantly, enjoy the process of creating your portfolio - it will be evident in the work. Be inventive, we enjoy seeing work that is individual and imaginative.

## Portfolio Admission Procedures

- This involves aggregating the points scored for the Leaving Certificate or FETAC (now Quality and Qualifications Ireland (QQI)) points alongside marks awarded for a Portfolio Assessment.
- Points are awarded out of 600 using the normal CAO points system applied to six subjects. A further 600 points are available for the Portfolio, making a total of 1200 maximum.
- A minimum of 240 (40%) points must be obtained in the Portfolio Assessment in order for an applicant to be eligible for the course.
- Applicants should apply in the normal way through the CAO by 1st February, after which they will receive an invitation to submit their portfolio for consideration. This usually takes place before the 17th March.
- The marks allocated to the portfolio will be communicated to the CAO and to the applicant before the end of May by post. When the Leaving Certificate results become available, the CAO will make offers in the usual manner.





- In order to be considered for a place on the courses CR 210, CR 220 and CR 600, applicants must satisfy the minimum academic requirements (please see each course for details). All assessments will be carried out by portfolio review and applicants will be required to present their portfolio in person for both the Fine Art and Contemporary Applied Art (Ceramics, Glass, Textiles) Programmes.

## Portfolio Presentation

We view hundreds of portfolios each year and to ensure the process works, we ask you to thoroughly read through the procedures outlined below.

## Locations

Presentations for CR 210 and CR 220 will be made to the Department of Fine Art & Applied Art, which is based at the CIT Crawford College of Art and Design at Sharman Crawford Street campus in Cork City.

Please note that the application procedure and review of presentations for CR 600 will be held in the Department of Media Communications, which is based at CIT Bishopstown campus on the ground floor - C corridor of the main building.

- All work should be contained within a secure art portfolio that is clearly labelled with your name, address, contact telephone number, and your correct CAO number.
- Each individual artwork must be clearly labelled on the reverse, if desired, with your correct CAO number.
- Applicants of CR 220 BA (Honours) in Fine Art, and CR 210 BA (Honours) in Contemporary Applied Art (Ceramics, Glass, Textiles) are required to deliver and collect portfolios directly to the college by invitation. Applicants are invited to tour the college and meet with staff and students and should allow approximately 3 hours in total for portfolio assessment. Portfolios must be collected on the day of assessment.
- Applicants of the CR 600 BA (Honours) in Visual Communications are responsible for delivery and collection of their portfolios. The Department secretary will issue the applicant with a collection receipt and on return the receipt is handed in and the portfolio returned. Portfolios not collected within a reasonable time period are not the responsibility of the department.
- Portfolios may be posted or shipped to the Department of Media Communications, CIT. However, the Department cannot be responsible for wrapping and return shipping.

**Note: If you apply to both CR 600 and CR 210 or CR 220, we will facilitate applicants in holding the portfolio reviews at the Sharman Crawford Street Campus so as to avoid having to attend at two locations.**

If you have any queries please email [ccad.enquiries@cit.ie](mailto:ccad.enquiries@cit.ie)



# Contemporary Applied Art (Ceramics, Glass, Textiles)(Honours)

## CR 210 Level 8 Award

» Progression to Postgraduate Programmes

**Application:** CAO  
**Award Title:** Bachelor of Arts (Honours) in Contemporary Applied Art (Ceramics, Glass, Textiles)  
**Duration:** 4 Years (8 Semesters)  
**Places:** 15  
**Location:** CIT Crawford College of Art & Design, Sharman Crawford Street, Cork.  
**Restricted Application/Early Assessment Procedures:** Yes



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
4	2	(Note 1)	O6/H7

**Note 1:** There is no specific requirement for Mathematics. A Grade F2 or higher in Foundation Level Mathematics is recognised as one of the subjects for entry.

**Note 2:** A Portfolio is required. See Page 172 for further admission information.

### What is Contemporary Applied Art?

Contemporary Applied Art (Ceramics, Glass & Textiles) encourages fresh ideas, inventive use of materials and techniques, and offers students the opportunity to critically engage with making.

### Helpful Leaving Certificate Subjects

Art, and Design and Communication Graphics.

### Potential Areas of Employment

- Exhibiting Artist/Designer/Maker
- Art Professional e.g. Curator/Arts Administrator
- Educator – requires further postgraduate study

### First Year at a Glance

- Introduction to Art History: history of Western Art; modernity and visual culture; seminars including site visits to local galleries and cultural institutes
- Introduction to Art Processes: learning to use and express yourself in a variety of media, Textiles, Glass, Ceramics and one of the following: Print, Photography, Drawing, Digital Media
- Formal Visual Elements: making of 3D and sculptural pieces; making & constructing objects and the relationship these objects have to the space they exist within
- Drawing: developing a personal understanding of visual language through objective/non-objective drawing
- Introduction to Studio: explore ideas through a range of materials, combined with specific workshops in the fundamental processes of Ceramics, Glass & Textiles
- IT for Artists: provides the learner with a foundation in IT as it relates to visual arts practice



## About the Course

This is an innovative interdisciplinary programme with an emphasis in three main material areas, Ceramics, Glass, and Textiles, either as a chosen specialism, or in combination. It offers students the opportunity to creatively develop and make objects. The emphasis is on an open and experimental exploration grounded in historical context and current critical debate about contemporary practice. This course offers a creative and playful approach to materials and idea development with a strong emphasis on practical skills, conceptual development and self-directed exploration.

The delivery of this course is modular and centred on 'thinking through making' including: skills development workshops, lectures, group seminars, tutorials, peer and independent learning. In their final year students will be expected to develop and execute an original body of work to a high standard and undertake a written thesis which explores the intellectual aspects and implications of the work. In the final year also, students undertake a professional practice module, which is delivered by an international curator to teach students how to present their work to the professional world.

Students are encouraged to pursue opportunities within the programme for international exchange and placement. The College has extensive facilities; excellent specialised workshops, digital labs, individual studio space, and a specialised visual arts library; which with the experienced artist and educator lecturing staff makes the College a vibrant place to study and grow.

## Career Opportunities

The Degree can potentially lead to a wide variety of career opportunities across a range of art industries from working as an artist, creating unique artefacts for exhibition and commission, art professional within museums and galleries, education, to running workshops.

## Further Studies

For details, see <http://crawford.cit.ie>

Suitably qualified graduates are eligible to apply for:

- > Professional Master of Education (Art and Design)
- > MA in Art Therapy
- > MA in Teaching Visual Arts for Primary & Early Years Education
- > MA in Art & Process
- > MA in Public Relations with New Media
- > MA in Journalism and Digital Content Creation
- > MA in E-learning Design and Development
- > MA by Research
- > PhD

## Contact Information

Trish Brennan  
Department of Fine Art & Applied Art  
T: 021 433 5200  
E: [ccad.enquiries@cit.ie](mailto:ccad.enquiries@cit.ie)

## Question Time

### Is there any written exam?

There are no sit-down exams. However, there are many academic modules where assessment is in essay, report, seminar paper/thesis format.

### Does the College provide all the materials for coursework?

We have material stores in the College providing papers, canvas, paint, clay, inks etc. Students are required to pay cost price for these materials



## Luke Sisk

Artist

Studying at CCAD helped me to find out a lot about myself, and more importantly what sort of career and lifestyle I want to pursue. It opened a lot of opportunities to travel and to make connections with people from all walks of life, and all parts of the world.

I am an independent professional artist and also work as a part-time technician in CCAD Applied Art Workshops. I am based in the Backwater Studios on Wandesford Quay, where I make both glass and ceramic pieces for exhibition, as well as working to commission on a regular basis. The commission based work varies from custom ware for cafes to wedding gifts, which helps to fund the more sculptural work I then make for exhibiting. After going to CCAD I realised that I am happiest when I'm making, and seeing other people enjoy what I make.

## My advice to current CIT CCAD students

Be open to all advice... and criticism. The tutors are there to guide you, they will see things in you that you can't see. Try as many different things as you can while you have the opportunity, the more skills and techniques you can learn while there, the better. **When the challenge is no longer fun, throw it all in the bin and start something else!**

# Fine Art (Honours)

## CR 220 Level 8 Award

### ► Progression to Postgraduate Programmes

**Application:** CAO  
**Award Title:** Bachelor of Arts (Honours) in Fine Art  
**Duration:** 4 Years (8 Semesters)  
**Places:** 65  
**Location:** CIT Crawford College of Art & Design, Sharman Crawford Street, Cork.  
**Restricted Application/Early Assessment Procedures:** Yes



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
4	2	(Note 1)	O6/H7

**Note 1:** There is no specific requirement for Mathematics. A Grade F2 or higher in Foundation Level Mathematics is recognised as one of the subjects for entry.

**Note 2:** A Portfolio is required. See Page 172 for further admission information.

### What is Fine Art?

This studio-based programme prepares students for the professional world of contemporary art; learning how to make, experiment, research and critique art. Students will explore and engage with: painting, drawing, sculpture, print, photography, performance, sound, video, and digital media in varied contexts. Students are encouraged to experiment with a wide range of media in order to develop their individual art practice.

### Helpful Leaving Certificate Subject

Art.

### Potential Areas of Employment

- Artist Practice
- Arts Education
- Arts Administration & Management

- Curation
- Community Arts
- Art Criticism

### First Year at a Glance

- Introduction to Art History: history of Western Art; Modernity and visual culture; including seminars and visits to local galleries and arts institutions
- Introduction to Art Processes: learning to use and express yourself in a variety of media including: Print, Photography, Drawing and Digital Media
- Formal Visual Elements: making of 3D and sculptural pieces; making & constructing objects and the relationship these objects have to the space they exist within
- Drawing: developing a personal understanding of visual language through objective/non-objective drawing
- Fine Art Studio: the initiation and application of visual research strategies towards the making and presentation a personal body of work
- Art in Context: introduction to art when working in a broad social, cultural and environmental context



## About the Course

The BA (Hons) in Fine Art is a studio-based course with an emphasis on individual creative development. Students are introduced to the skills and philosophies of the practicing artist. The course supports the development of studio practice enabling students to position their artwork in terms of art history and contemporary critical thought. Students can choose from a wide range of media including: painting, sculpture, photography, film, video, digital media, sound, print, performance, and/or drawing, and will be trained in the processes and facilities available in the College's excellently equipped workshops.

Fine Art offers very varied career paths. The course aims to instil individualism and independence preparing students for active careers in the visual arts or for further study to Master's degree level.

## Further Studies

For details, see <http://crawford.cit.ie>

Suitably qualified graduates are eligible to apply for:

- > Professional Master of Education (Art and Design)
- > MA in Art Therapy
- > MA in Teaching Visual Arts for Primary & Early Years Education
- > MA in Art & Process
- > MA in Public Relations with New Media
- > MA in Journalism and Digital Content Creation
- > MA in E-learning Design and Development
- > MA by Research
- > PhD

## Career Opportunities

Graduates may develop professional careers as practicing artists or professional careers and/or in education, art institutions, independent curation, arts administration, and arts management. Many students also continue to the Higher Diploma and/or Masters level to progress their career.

## Contact Information

Trish Brennan  
Department of Fine Art & Applied Art  
T: 021 433 5200  
E: [ccad.enquiries@cit.ie](mailto:ccad.enquiries@cit.ie)

## Question Time

**I might like to go on an Erasmus programme, is this possible with this course?**

Yes, we have links with many European colleges and facilitate students to exchange on Erasmus programmes annually.

**Is there any written exam?**

There are no sit-down exams. However, there are many academic modules where assessment is in essay, report, seminar paper/thesis format.

**Does the College provide all the materials for coursework?**

We have material stores in the College providing papers, canvas, paint, clay, inks etc. Students are required to pay cost price for these materials.

**Is there specialism within this course e.g. Fine Art Print?**

This programme offers students the opportunity to work across a range of media or specialise in their chosen media. All Fine Art students study and work together which encourages greater peer interaction. We do not separate students into media specialised class groups.



## Rachel Doolin

Visual Artist

I am a visual artist because I can't imagine myself doing anything else. I had some really amazing tutors at the Crawford whom have had a very strong influence on my approach to making. They really nurtured and encouraged my instinctual response to materials, and supported me to develop my own language through materiality. As an artist, support is vital, and as a recent graduate I continue to be supported in my professional development by the staff at the Crawford.

## My advice to current CIT CCAD students

College may be tough at times, but the real world is tougher. Enjoy your time in studio because it really is precious, experiment loads and don't take yourself too seriously.

# Creative Digital Media (Honours)

## CR 112 Level 8 Award

» Progression to Postgraduate Programmes

**Application:** CAO

**Award Title:** Bachelor of Arts (Honours) in Creative Digital Media

**Duration:** 4 Years (8 Semesters)

**Places:** 40

**Location:** Bishopstown Campus, Cork



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
4	2	O6/H7	O6/H7

### What is Creative Digital Media?

Creative Digital Media combines the creativity of art and design with the skills and knowledge of computer technologies and programming to create interactive digital media products. Creative Digital Media comes in many different formats. It can be almost anything you can hear or see like text, image, music, sound, video, film, animation, and more. By combining media, content and interactivity, those interested in creative digital media can take on and work with a variety of media forms to get their content to communicate across a variety of platforms and in some cases perform interactive experiences.

### Helpful Leaving Certificate Subjects

Art, Music, and English.

### Potential Areas of Employment

- Web Design
- Video/Animation
- V Production
- E-learning
- Gaming and VR
- Music Technology

### First Year at a Glance

- Web Design Basics: interactive web design - HTML and CSS
- Moving Image & Sound: introduction to the theories and practical application of time-based AV media production
- Creative & Enterprise: the study of business systems, operations and enterprise. Learning communication and business writing skills
- Design Basics: visual design solutions for basic media design problems
- Introduction to Digital Media: knowledge and practical use of digital media formats and devices
- Media Group Project: projects involving actual or virtual scenarios, simple games, animations, and video and audio for interactive applications
- Project Management: this module introduces students to the theory and practice of project management
- Introduction to AV Technology: the study of audio and video technology - audio video recording, storage and editing equipment and processes
- Interaction & Media: developing content for web browsers, interactive media players
- Electives include Film Language; Media Design; Animation Principles; and Interface Design



## About the Course

The Creative Digital Media course provides you with the design, technical and programming skills to create interactive digital media products. You will produce projects that can communicate across a variety of platforms and in some cases perform interactive experiences. You partake in a work placement and you can travel on a student exchange.

You will be introduced to the most up-to-date design and media industry software and hardware. The course will also support the development of contemporary critical awareness to assist you in your academic studies. You will be given the opportunity to develop your presentation skills and learn to create innovative creative digital media projects. You will produce projects in digital media design, video production, music technology, computer programming, digital marketing, media business, animation, virtual reality, user experience (UX), user interface design (UI), digital culture and much more!

## Further Studies

For details, <http://crawford.cit.ie>

Suitably qualified graduates are eligible to apply for:

- > MA in Leadership in the Creative Industries (Joint Award CIT / h\_da, Media Faculty, Germany)
- > MA in Public Relations with New Media
- > MA in Journalism and Digital Content Creation
- > MA in E-learning Design and Development
- > MA by Research
- > PhD

## Career Opportunities

There is a very broad range of career opportunities for you if you study on the BA (Honours) in Creative Digital Media. Areas of specialist employment include E-learning, Game and App Development, 3D Design, Animation, Interactive Programming, and Audio Technology. Creative Digital Media graduates can also go on to further studies to Master's degree level and PhD.

## Contact Information

Trevor Hogan  
Department of Media Communications  
T: 021 433 5812  
E: [trevor.hogan@cit.ie](mailto:trevor.hogan@cit.ie)

Rose McGrath  
Department of Media Communications  
T: 021 433 5812  
E: [rose.mcgrath@cit.ie](mailto:rose.mcgrath@cit.ie)

## Question Time

### What is the difference between Visual Communications and Creative Digital Media?

Visual Communications is a graphic design course that focuses on creative design for the printed and electronic media.

Creative Digital Media investigates a broader spectrum and focuses on areas such as digital media design, digital media technology, video production, music technology, computer programming, digital marketing, media business, animation, virtual reality, user experience (UX), user interface design (UI) and digital culture.

### Is the Creative Digital Media course diverse?

Yes, it is a diverse course. The BA (Honours) in Creative Digital Media allows you to study in the CIT Cork School of Music in areas such as music technology. You also learn about virtual and augmented reality and there is also the opportunities to go on work placement or an erasmus exchange.



## Joe Darrer

User Experience Lead

"Over the 4 years in CIT's Creative Digital Media Degree there was a great opportunity to study and experience many facets of a media development career. Working on areas from web development, design, E-learning, film to project management prepared me to join one of the world's largest E-learning companies, Mindleaders, in 2008.

In 2011, I began work as the lead technical director with a startup software development company. The company has delivered eBook tablet applications for iPad, Android, and Windows 8 along with In-Classroom activities for primary and post primary schools around Ireland.

Since 2012, I became partner and Operations Director at Ralii.ie - delivering software development and design solutions for companies all over Ireland, the UK, and the USA. Today I am a User Experience Lead at Verizon Connect, in Dublin."

# Visual Communications (Honours)

## CR 600 Level 8 Award

» Progression to Postgraduate Programmes

**Application:** CAO  
**Award Title:** Bachelor of Arts (Honours) in Visual Communications  
**Duration:** 4 Years (8 Semesters)  
**Places:** 30  
**Location:** Bishopstown Campus, Cork  
**Restricted Application/Early Assessment Procedures:** Yes



### Admission

For admission to a programme, standard applicants must

- score the necessary CAO points and
- meet the minimum entry requirements

Entry  
2019

### Minimum Entry Requirements

Leaving Certificate in 6 Subjects

Subjects O6/H7	Subjects H5	Maths Grade	English or Irish Grade
4	2	(Note 1)	O6/H7

**Note 1:** There is no specific requirement for Mathematics. A Grade F2 or higher in Foundation Level Mathematics is recognised as one of the subjects for entry.

**Note 2:** A Portfolio is required. See Page 172 for further admission information.

### What is Visual Communications?

Visual Communication is the art of problem-solving and communication through the use of type, space, and image. It presents the idea that a graphic message has the power to inform, educate, or persuade a person or audience. It can be presented as a still image, or motion graphics, including sound, and in some cases, interactive activity.

### Helpful Leaving Certificate Subjects

Art, and English.

### Potential Areas of Employment

- Graphic Design
- Advertising
- Branding
- Illustrator
- Photographer
- Web Designer
- Motion Graphics
- Creative Director

### First Year at a Glance

- **Design Principles & Practice:** applying creative thinking, ideas generation, design methods and techniques to create graphic design project solutions
- **Introduction to Image Making:** creating images across a wide range of media through drawing practices and techniques
- **Visual Culture:** the theory of the imagery in modern society, with a particular emphasis on visual communication
- **Typography:** introducing the basic language and principles of typography
- **Cultural and Organisation Theory:** the study of design culture and also the study of the culture of business and how communication underpins this relationship
- **Print Making:** introducing to experimental print techniques and skills, develop creativity and drawing skills in future design projects.
- **Creative Technology:** introducing and applying design software for graphic design
- **Electives:** Information Graphics and Creative Digital Media elective choices.





## About the Course

Visual Communications, also known as Graphic Design encourages you to think creatively and produce new design ideas and concepts. From pitching a design brief to a client, to producing graphics, a new brand, layout for interface or illustration for a book, you will go on a journey to understand who you are as a designer.

You will be introduced to the most up-to-date design and media industry software and hardware. The course will also support the development of critical awareness to assist you in your academic studies. You will be given the opportunity to develop your presentation skills and learn to create innovative approaches to solve design problems.

You will produce artwork for print, interface design, motion graphics, illustration, photography, typography, packaging, branding, advertising campaigns and much more!

## Further Studies

For details, see <http://crawford.cit.ie>

Suitably qualified graduates are eligible to apply for:

- > Professional Master of Education (Art and Design)
- > MA in Public Relations with New Media
- > MA in Journalism and Digital Content Creation
- > MA in E-learning Design and Development
- > PhD

## Career Opportunities

The course will equip you to work in the exciting world of design. There are jobs in graphic design, advertising and creative digital media in which you can be employed. After graduating you have the opportunity to start up your own business. Visual Communications graduates can also go on to further studies to Master's degree level and PhD.

## Contact Information

Rose McGrath  
Department of Media Communications  
T: 021 433 5812  
E: [rose.mcgrath@cit.ie](mailto:rose.mcgrath@cit.ie)

## Question Time

### How much Art is involved in this course?

A portfolio is a requirement for entry to the course so drawing skills are required. In first year the students are assisted with modules in creative image-making to encourage drawing and mark making skills.

### What is the difference between Visual Communications and Creative Digital Media?

Visual Communications is a graphic design course that focuses on creative design for the printed and electronic media.

Creative Digital Media investigates a broader design spectrum and focuses on areas such as computer programming, technology, media & culture, and business as well as specialised areas such as video, animation, UX and UI.



## Paul Gately

Graphic Designer

"Throughout the Visual Communications course, I was encouraged to explore my creativity, to push the boundaries, visualise my ideas, rationalise, and present them, all of which are essential skills to have as a designer. After graduating from the Visual Communications programme, I worked for a number of top Irish design companies. I now own my own company Motif Design."

# Money Matters

[www.cit.ie/fees](http://www.cit.ie/fees)

## Student Fees and Grants

Please visit [www.cit.ie/fees](http://www.cit.ie/fees) for more information  
SUSI Grants - [www.susi.ie](http://www.susi.ie)  
Scholarships - [www.cit.ie/scholarships](http://www.cit.ie/scholarships)

**Third Level undergraduate Student Fees are made up of the following 3 elements:**

1. Student Contribution Charge
2. Union of Students in Ireland (USI) Levy
3. Tuition Fees

### 1. Student Contribution Charge

The Student Contribution Charge is an annual fee which is set by the Government for all full-time third level students. The fee for 2018/2019 is €3,000.

Students can apply to the Student Universal Support Ireland (SUSI) for a grant which, if approved, may cover 100% of the Student Contribution Charge. Please visit [www.susi.ie](http://www.susi.ie) for information on Grants. The Application system opens in April each year so students should apply early. You do not need to know what course or college you will be attending when submitting an application.

### 2. Union of Students in Ireland (USI) Levy

The USI membership levy of €7.00 applies to all full-time undergraduate students and must be paid in September before the start of Semester 1. This Levy is not covered by a SUSI grant.

### 3. EU Tuition Fees

Many undergraduate students attending publicly funded third-level courses do not have to pay tuition fees. Under the terms of the Free Fees Initiative, the Government will pay these fees to the colleges instead.

Students undertaking a second undergraduate course, non-EU students, students studying by Accumulation of Credits and Certification of Subjects (ACCS) mode, and students taking a year of a course for a second time (i.e. repeating a year/level) may be liable for tuition fees.

### Payment of Fees

- Students are notified of their fees by e-mail to their CIT student e-mail account, CIT does not post out invoices unless specifically requested.
- Students are expected to pay 50% of their fees in September before the start of Semester 1 and the remaining 50% in January before the start of Semester 2.
- Students awaiting grant approval can apply to pay their fees in monthly instalments.

### Refund of Fees paid

Full-time students who **officially** withdraw from their course before **31st October** (Semester 1) or before **28th February** (Semester 2) will be refunded their semester fees less a 15% administrative charge.

**Students must complete the Online withdrawal form and submit it to the Admissions Office by 31st October or 28th February in order to be eligible for a refund.**

For further information and to access the online withdrawal form please go to:  
[www.cit.ie/fees/info/withdrawing](http://www.cit.ie/fees/info/withdrawing)

### Withdrawing from a Course

Should you wish to withdraw from your course at any stage during the academic year **you must ensure that you inform the Admissions Office directly** as it may impact on your fees should you return to CIT or another third level institute in the future.

### CIT Student Fees Office Contact Details:

The Student Fees Office is located on the ground floor of the Administration Building adjacent to the Admissions Office, Bishoptown Campus.

Opening Hours: Monday - Friday 9.30am - 12.30pm & 2.00pm - 4.00pm

T: 00 353 21 433 5440

E: [fees@cit.ie](mailto:fees@cit.ie)

W: [www.cit.ie/fees](http://www.cit.ie/fees)

# Contact Information

Bishopstown Campus	(021)
Main Switchboard	432 6100
Admissions	433 5040
Academic Learning Centre	433 5098
Access Office	433 5138
Accommodation Office	433 5750
Alumni Office	432 6589
Arts Office	433 5344
Careers & Counselling	433 5772
Chaplaincy	433 5756
Examinations	433 5384/5383
Erasmus Students	432 6689
Extended Campus	433 5302
Fees & Grants	433 5440
Graduate Studies	433 5099
International Office	433 5300
Library	433 5286/5287
Marketing Unit	433 5547
Medical Services	433 5780
Registrar's Office	433 5393
Reprographics & Card Services	433 5752/5290
Societies Office	433 5759
Sports Office	433 5767
Students' Services	433 5388
Students' Union	433 5270

Department Secretaries	(021)
Accounting & Information Systems	433 5920
Applied Social Studies	433 5310
Architecture	433 5950
Biological Sciences	433 5885
Centre of Craft Studies	433 5910
Civil, Structural & Environmental Engineering	433 5950
Computing	433 5160
Construction	433 5950
Distance Education & Instructional Support	433 5930
Electrical & Electronic Engineering	433 5470
Management & Enterprise	433 5806
Marketing & International Business	433 5939
Mathematics	433 5160
Mechanical, Biomedical, and Manufacturing Engineering	432 6505
Media Communications	433 5810
Organisation & Professional Development	433 5903
Physical Sciences	433 5870
Process, Energy & Transport Engineering	433 5150
Sport, Leisure & Childhood Studies	433 5930
Tourism & Hospitality	433 5820
CIT Cork School of Music	480 7300
CIT Crawford College of Art & Design	433 5200
National Maritime College of Ireland	433 5600

W: <http://www.cit.ie>  
 W: <http://courses.cit.ie>  
 Admissions E: [admissions@cit.ie](mailto:admissions@cit.ie)

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## Your Views

Feedback on this Handbook is very welcome.  
 Please contact:

.....  
 Marketing Unit  
 Cork Institute of Technology  
 T: 021 433 5547  
 E: [marketing@cit.ie](mailto:marketing@cit.ie)  
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# CIT Open Days

Information available at  
[www.cit.ie/openday](http://www.cit.ie/openday)

