Continuing Education

Courses 2012 - 2013

CIT CORK INSTITUTE OF TECHNOLOGY

INSTITIÚID TEICNEOLAÍOCHTA CHORCAÍ

knowledge at work

CORK INSTITUTE OF TECHNOLOGY
Institiúid Teicneolaíochta Chorcaí

incorporating

CIT CORK SCHOOL OF MUSIC
CIT CRAWFORD COLLEGE OF ART & DESIGN
NATIONAL MARITIME COLLEGE OF IRELAND

Continuing Education

Courses 2012 - 2013

President Dr Brendan J. Murphy
Registrar & Vice President for Academic Affairs Dr Barry O'Connor
Head of Department of Continuing Education Mr Don Crowley

Bishopstown,
Cork, Ireland.
T: 021 432 6100

CIT CORK INSTITUTE OF TECHNOLOGY
INSTITIÚID TEICNEOLAÍOCHTA CHORCAÍ

Please note that a special telephone line is available for queries after normal business hours T: 021 433 59900

CIT Bishopstown Campus

CIT Crawford College of Art & Design

CIT Cork School of Music

National Maritime College of Ireland

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.

A Message from the President

Dear Student,

It gives me great pleasure as the President of CIT to introduce the Continuing Education Handbook for 2012/2013.

For CIT, Continuing Education and Continuing Professional Development are vital and growing areas of our total education provision. Continuing Education learners are an essential part of our Institution. We value their commitment to, and enthusiasm for their studies and we enjoy working with them.

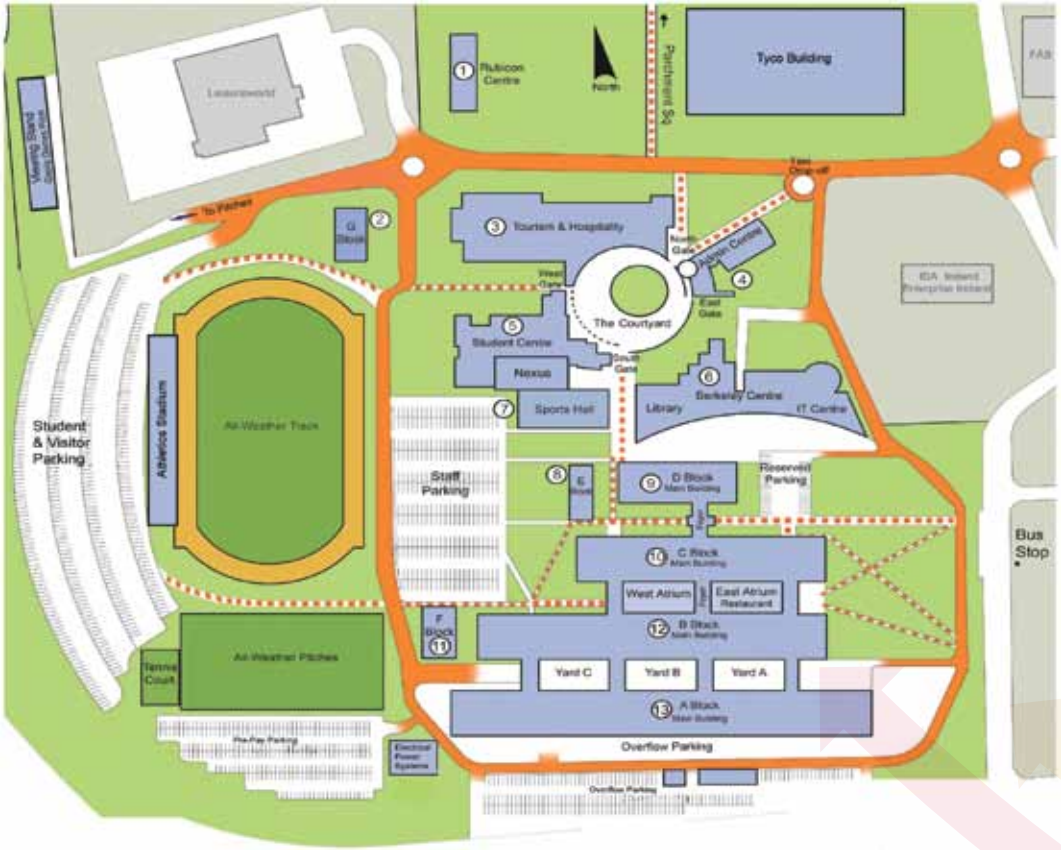
With the rapid changes in society, the workplace and technology, continuing education and professional development are now more essential than ever.

Here in CIT we provide an extensive range of courses with flexible modes of delivery that will allow you to continue the process of lifelong learning. I hope you will join us in 2012/2013.

Dr Brendan J. Murphy
President

June 2012

Bishopstown Campus



Admissions/Registrations
T: 021 433 5041/5044
E: admissions@cit.ie

Examinations
T: 021 433 5381/5385
E: exams@cit.ie

Course Fees
T: 021 433 5446/5448/5449
E: fees@cit.ie

Opening Hours
Reception
9.00am - 1.00pm
2.00pm - 5.00pm

Admissions & Examinations
9.30am - 12.30pm
2.00pm - 4.00pm

Accounts
10.15am - 12.00noon
2.15pm - 4.00pm

Contents

School of Mechanical, Electrical and Process Engineering 56

About Cork Institute of Technology

Whatever your plans and talents, CIT has a course to study for you. We offer the full range of Higher Education qualifications, including Bachelor Degrees and Honours Bachelor Degrees, as well as 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.

Cork Institute of Technology is the largest Institute outside Dublin. It has four principal campuses:

Bishopstown Campus
Bishopstown, Cork

CIT Crawford College of Art & Design (CIT CCCAD)
Cork City

CIT Cork School of Music (CIT CSM)
Cork City

National Maritime College of Ireland (NMCI)
Ringaskiddy, Co. Cork

The main campus of some eighty acres is situated in the western suburbs of Cork city. It is comprehensively equipped with lecture rooms, laboratories, theatres, drawing studios, library, computer suites, open-access computing centre and research units. CIT's student centre includes a common room, café, shops, students' union, clubs, and societies. Recreational facilities for students include a championship-standard running track, tennis courts, all-weather pitch, an excellently appointed gymnasium, and grass playing pitches. A heated indoor public swimming pool and fitness centre (Leisureworld) is located alongside the Institute.

The student population comprises approximately 6,200 full-time students, 7,600 part-time students and 3,000 catering and engineering craft students. Courses are offered in Engineering, Science, Business, Humanities, Art, Ceramics, Multimedia, Music, and Theatre & Drama at Certificate, Degree and Honours Degree level. There is also an extensive range of postgraduate research and taught programmes at Masters and Doctoral level.

The third-level courses offered by CIT are nationally and internationally recognised through national bodies such as the Higher Education and Training Awards Council (HETAC) and the National Qualifications Authority of Ireland (NQAI). The Institute has always sought the widest possible recognition for its courses and has established relationships with a wide variety of professional bodies for that purpose. For example, CIT's engineering courses are accredited by Engineers Ireland and consequently have world-wide recognition. Our business courses gain exemption and recognition from a variety of accounting, marketing and management professional bodies.

Effective contact with industry has been a key objective of the Institute since its inception. The benefits of the links which have been established with industry in the region are reflected in the high levels of student placement and in the R & D contracts won by the Institute.

CIT offers students an opportunity to pursue courses of proven merit in a progressive and caring environment where students' needs are treated as paramount.

For further information, visit our website:

www.**cit**.ie

Information/Registration for Adult Evening Courses

Institute staff and representatives of Professional Bodies will be in attendance during each session to offer career guidance and assistance.

Information/Registration for Adult Evening Courses for the academic year beginning September 2012 will take place at the Institute from 6.00pm to 8.30pm on the following dates:

Tuesday 4th September 2012

Faculty of Business & Humanities: Business Studies & Accounting, Media Studies, Social & General Studies, Tourism & Hospitality.

Wednesday 5th September 2012

Faculty of Engineering: Chemical, Civil, Structural & Environmental, Construction, Electrical, Electronic, Mechanical, Biomedical & Manufacturing, Nautical, Transport & Automobile, and Craft Studies.

Faculty of Science: Applied Physics, Biological Science, Chemistry, Computing & Mathematics, Nautical.

Thursday 6th September 2012

CIT Crawford College of Art & Design

Enrolment will take place at the CIT Crawford College of Art & Design, Sharman Crawford Street, Cork, from 6.00pm to 8.30pm.

Money Matters

Tax Relief

Tax Relief on Tuition Fees - Third Level Education Courses must be at least 2 academic years duration for undergraduates and 1 year for post graduate course.

Tax relief is available for one course per individual in a tax year and is at standard rate of tax. See leaflet IT1 “Tax Credits, Rates & Reliefs” also available from Revenue Forms & Leaflets – Lo Call 1890 306706

Fees
Details of course fees are included with the course information in this handbook. Except where stated, course fees cover the cost of tuition only. Registration fees for professional bodies etc. are payable separately to these institutions.

In all cases, course fees must be paid before attending lectures.

Failure to pay fees on time will result in a late payment fee of 10% being applied.

- Where course fees are being funded by an employer, you are asked to seek payment or reimbursement from your employer.

For semesterised courses, students pay for the relevant modules at the beginning of each semester. Payment of fees by laser or credit card can be made by contacting the accounts office T: 021 432 6822/6337

Students should familiarise themselves with the relevant section of the Student Regulations.

Please note that the Fees Office will use your CIT email account for important communications.

Refund Policy

The following refund policy applies to all courses detailed in this Handbook for the 2012/13 academic year:

- A full refund will be given to all applicants for courses which do not proceed.
- A full refund (less 15% administration fee) will be given to applicants for short courses if requested up to one week after course commencement. No refunds will be given thereafter.
- A full refund (less 15% administration fee) will be given to applicants for semesterised courses if requested up to one month after semester commencement. No refunds will be given thereafter.
- A full refund (less 15% administration fee) will be given to applicants for full year courses if requested before 31st October 2012. No refunds will be given thereafter.
- All applications for refunds must be made on the appropriate Refund Form, which can be requested from the Finance Office.

Please note refund policy will be strictly adhered to.

Examinations

Entering for examinations is the responsibility of the registered student. Students should make themselves aware of closing dates, examination fees, examinations dates, etc. All important examination information will be emailed to student mycit email accounts.

Examination fees have been included in the course fee where stated. The onus is on the student to ensure that s/he is registered for the correct modules. Failure to register on the correct module will have consequential effects on your examinations.

Please note that the onus is on each student to enter for the correct examination. Your completed registration form will be used as an examination entry form and the modules that you have listed thereon are the only modules that you may attempt.

N.B. Only students who have completed their registration processes (i.e. paid their fees in full) are entitled to sit examinations.

If your employer or any outside agency is paying your fees, the onus is on you to ensure that the correct fees are paid in full.
Students wishing to sit for Master's Degree, Honours Degree, Bachelor Degree or Higher Certificate examinations should note the following:

- The completed Registration form may be used as the examination entry form and the modules entered on your Registration form will be the examination modules for which you will be entered;
- If you do not enter any module on your form, you will not be allowed sit for any examination;
- Responsibility for entry to all other examinations lies with the student.
- Any students with disabilities or medical conditions who need Examination supports, such as a separate room, extra time, reader, scribe or laptop for their exams, need to first register (including submitting relevant documentation) with Laura O'Rourke, Disability Support Officer, Access Service, T: 021 433 5107, E: disability@cit.ie

Student Email System

Please note that all students will be issued with a CIT email address on Registration. Please ensure that you refer to this email address regularly as all communication from the Institute will be sent to your CIT email address. This includes information concerning examination timetables, examination results, class cancellation, projects, placements, job opportunities, etc.

If you have any difficulty setting up or accessing your email account, contact servicedesk@cit.ie

Identification Cards

All registered students of the Institute are required to have a current CIT ID card. ID cards will be issued on registration. A passport-sized photograph should be submitted with the completed registration form for this purpose. There is no charge for this service. CIT ID cards will be required to access various secure areas in the Institute such as the Library, Open Access, Gym, etc. Students will need to produce a current CIT ID Card if they wish to sit examinations.

Enquiries concerning ID cards should be directed to E: idcards@cit.ie, or T: 021 433 5290.

The National Framework of Qualifications

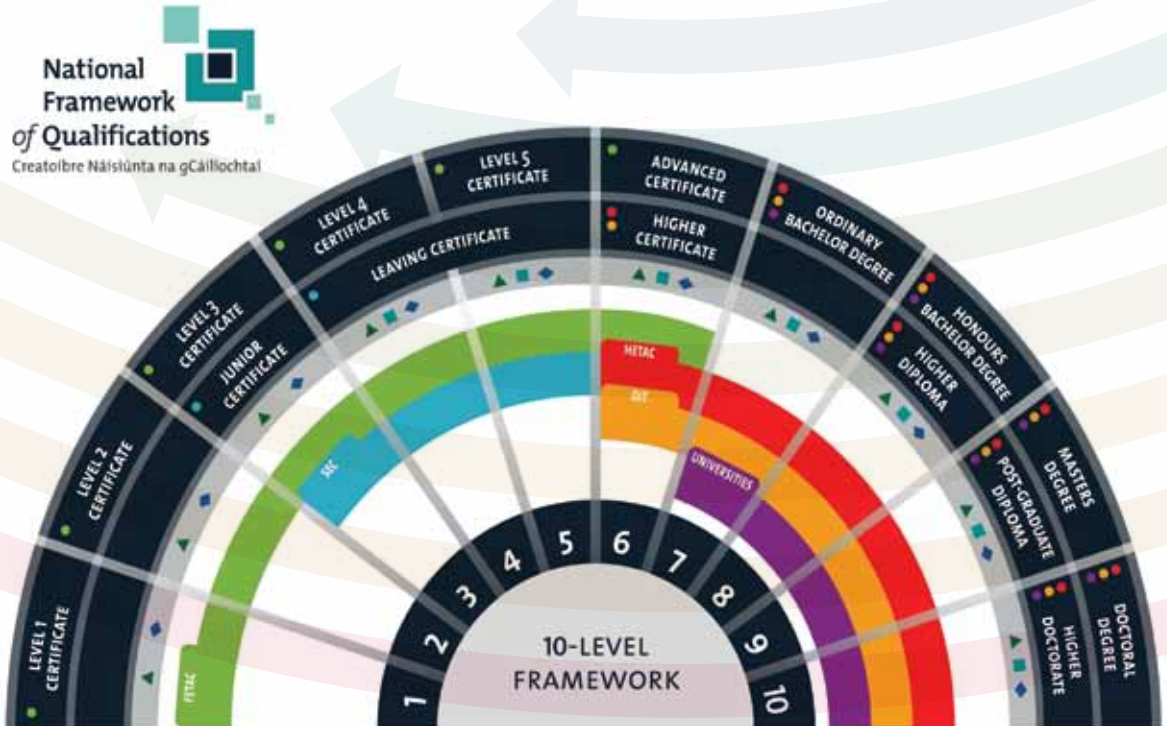
The Framework of Qualifications is an official national system for describing and linking all educational qualifications. The Framework has been established by the National Qualifications Authority of Ireland (NQAI), a State body established under the Qualifications Act 1999.

All educational awards have been assigned “levels” in the National Framework of Qualifications. For example:

Level 6 - Higher Certificate
Level 7 - Ordinary Bachelor Degree
Level 8 - Honours Bachelor Degree
Higher Diploma
Level 9 - Master’s Degree
Postgraduate Diploma
Level 10 - Doctoral Degree

The benefit for you, the continuing education student, is a clearer progression to further study, as well as national and international recognition of the awards you achieve.

For more information please visit www.nfq.ie and www.hetac.ie as well as www.cit.ie



Customised Courses and In-Company Training

The programmes presented in this Handbook represent only a part of the CIT provision of education for learners in the workplace. If you have a particular training and development need we would be very happy to talk to you about the development of a customised learning pathway. We recognise that knowledge exchange and partnership between higher education institutions and enterprises provides the optimum environment for relevant and up-to-date education and development opportunities.

Our modularised and semesterised approach offers a flexible and agile solution to programme development with a 'building blocks' credit accumulation approach. Our well established recognition of prior learning (RPL) service ensures that learning is built on and not repeated and our valuable experience in the development of specialised learning pathways
in partnership with enterprises includes integration of work-based learning and e-supported learning where appropriate.

If you wish to discuss your organisation's current or future learning needs please contact CIT Extended Campus by E: extendedcampus@cit.ie or T: 021 432 6017

Springboard – Programmes for the Unemployed

If you are unemployed and are seeking an opportunity to improve your career prospects you may be interested in a suite of courses which have been designed specifically for you under the Springboard initiative. These programmes will be free to eligible candidates and will allow you to retain your Jobseeker's Allowance or Jobseeker's Benefit while studying. Programmes are available at all levels on framework up to Masters Level but there is a limited capacity so early application is advised.

Applications for all programmes offered under the Springboard initiative are submitted online via www.springboardcourses.ie. Full details regarding the programmes and eligibility criteria are available on the Bluebrick website, www.bluebrick.ie.

Recognition of Prior Learning - learning from life counts too

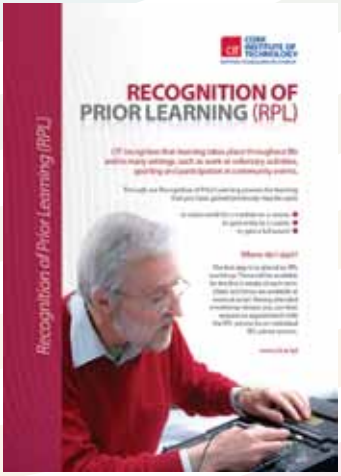
CIT knows that learning takes place throughout life and in many settings, such as work or voluntary activities, sporting and participation in community events. We also know that learners may dip in and out of formal education throughout a lifetime depending on the needs of the learner. Relevant learning may have been gained in formal, non-formal or informal settings and may allow the individual claim a credit against a module or modules on a programme or indeed towards a stage of a programme or for an award itself.

CIT has a Recognition of Prior Learning (RPL) Service where learning from all aspects of life may be presented for assessment towards credit or a grade or for advanced entry onto a programme. In 2011 there were 589 prior learning cases assessed in CIT. All processes are in accord with the NQAI principles and procedures for RPL.

What is RPL?
RPL is where prior learning is presented for assessment against the modules of a programme for credit or for a grade. Learning is categorised as prior formal, non-formal and informal and depending on which type is the basis of your case (or maybe it's a combination of them all) you may have different evidence to gather and present for assessment. For further information, check out our website www.cit.ie/rpl.

How can RPL help me?
- RPL acknowledges the value of learning regardless of how or where it was gained;
- It encourages access for 'non-traditional' students;
- Eliminates unnecessary repetition;
- Can shorten the time necessary to complete a qualification;
- Encourages lifelong learning;
- Enhances self-esteem of the learner.

What do I have to do?
- Attend an RPL workshop session at the beginning of the semester – see www.cit.ie/rpl for details
- Contact the appropriate Head of Department
- Contact the Course Co-coordinator
- In all instances (except advanced entry cases) you must register for the module(s)



Important Notes
For your RPL claim to be progressed you must attend an information session and avail of the online supports.
There are strict timelines for the submission of RPL claims - applications received outside of these dates cannot be considered until the following semester.

Note on Fees
While the module fee is payable, in the case of a successful prior formal learning application, an examination fee is held and the difference is refunded.

General Information

ACCS Scheme
ACCS is an acronym for “Accumulation of Credits and Certification of Subjects”. This scheme allows students (for specified courses) - instead of studying an entire course - to study one or more modules of that course. Modules passed, are certified individually, and can be accumulated, leading to an award of Higher Certificate, Degree or Honours Degree.

Institute Regulations
All students are required to make themselves aware of CIT Regulations. A copy of the booklet is available from the Admissions Office.

Parking Facilities
Parking facilities are provided at the Institute. Parking is prohibited along the main entrance and on all double yellow lines. Vehicles parked in non-designated areas will risk being towed away or clamped. There is a charge for vehicle recovery (from the service provider’s compound in Togher) or for unclamping vehicles. Please refrain from blocking access to private residences near the Institute.

Library
Part-time registered students are permitted to use the Library. An official CIT ID card must be produced to gain entry to the Library, and also to borrow books.

The following are the hours of business:
Monday - Friday 9.15am - 9.45pm
Saturday 9.15am - 5.00pm

Banking
Banking services are provided at CIT through the Bank of Ireland. Full ranges of banking services including ATM facilities are available.

Catering Facilities
Snack bar facilities are available on Monday to Thursday (inclusive) until 9.00pm and on Saturday from 10.00am - 3.00pm. The Atria may be used as a social and amenity area for part-time students.

Shop
Hours of business:
Monday - Thursday 8.30am - 9.00pm
Friday 8.30am - 3.30pm
Saturday 10.00am - 2.00pm

Chaplaincy - Student Support - Pastoral Care
Chaplain:
Fr Dave McAuliffe
T: 021 432 6778
E: dave.mcauliffe@cit.ie

Coordinator of Pastoral Care:
Edel Kelly
T: 021 432 6225 / 087 205 5595
E: edel.kelly@cit.ie

Chaplaincy is a dynamic presence at CIT recognising and responding to the pastoral and spiritual needs of students and staff. An “Open Door” policy exists, enabling students to feel welcome and to seek support, especially in times of distress, illness and bereavement. Chaplaincy/Student Support team work in close co-operation with the student support services in the Institute. Our offices are located on D Corridor (D151) and on the 1st Floor of the Student Centre, and open daily from 8.30am - 5.00pm.

You can be assured that if you are experiencing stress or pressure of any nature during your time in the Institute that we are here for you.

Issues of concern can be discussed in complete confidence.

Modularisation & Semesterisation

Cork Institute of Technology has moved to 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.

FAQs

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 February 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 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. In CIT, one credit is equivalent to approximately 20 - 25 hours of student learning of all types, including lectures, practicals, tutorials, assignments, and independent study.

Access

CIT is committed to ensuring that education is a basic right, not a privilege. Our Access Service believes that equal access, equal opportunities and equal treatment are key principles to support access to higher education.

The CIT Access Service is aimed at four main target groups;
- People who are socio-economically disadvantaged
- Mature Students (Full-time Courses)
- Students with Disabilities
- Ethnic Minorities

The Access Service organises supports such as information sessions, school visits, parents' information sessions, student shadowing, induction programmes, the Mature Student Support Network and financial assistance.

Contact
Deirdre Creedon
Access Officer
T: 021 433 5140
E: deirdre.creedon@cit.ie

Disability Support Service

The aim of this service is to widen participation and increase access to third level for students with disabilities. Once a student has registered with this Service, a needs assessment is carried out and supports are put in place in accordance with the assessment. The Service offers a range of supports including learning support, assistive technology, tuition, interpreters, stereotyping and note taking service, one-to-one sessions with a support worker, and so on. The support we offer is funded by the Fund for Students with Disabilities. For more information on the fund please see www.studentfinance.ie

Contact
Laura O'Rourke
Disability Support Officer
T: 021 433 5107
E: laura.orourke@cit.ie

CIT Alumni Association (CITAA)

CIT has an established Alumni Association which enables graduates to keep in touch with developments at CIT and maintain contacts with friends, classmates and faculty staff from college days. To find out about all the latest news and developments at CIT we encourage you to join these groups by logging onto LinkedIn, Facebook and Twitter and search for:

 **"CIT Alumni Association Facebook"**

 **"CIT Alumni LinkedIn"** or http://ie.linkedin.com/in/citaa

 **"CIT Alumni Twitter"** or https://twitter.com/CITAlumni

To stay in touch with CIT, please update your contact details at www.cit/alumni

What can we offer new graduates?
The CIT Alumni Association offers members the following benefits and services:
- Access to worldwide and regional chapters of the CIT Alumni Association
- CIT affinity credit card with the Bank of Ireland which offer cardholders preferential rates
- Class reunions service
- Discounts for services
- E-News
- Mailing of the Learning City magazine
- General information about careers, interview skills and CV development for recent graduates (for 1st year out graduates);
- Access to CIT facilities (including library membership)
- Invitations to various events.

Contact
CIT Alumni Association
T: +353 21 432 6589
E: alumni@cit.ie

SCHOOL OF BUSINESS

Head of School
Gerard O'Donovan

The School consists of the following Departments:
Department of Continuing Education
Department of Accounting and Information Systems
Department of Management and Marketing

DEPARTMENT OF CONTINUING EDUCATION

Business, Accounting, and Human Resource Management

Head of Department
Don Crowley

Department Secretary
Eileen O'Mahony
Location: Room D143
T: 021 433 5903 | E: eileen.omahony@cit.ie

Department Secretary
Shirley O'Driscoll
Location: Room D143
T: 021 433 5900 | E: adulted@cit.ie

Please note: *Lecturers are on annual holidays during the summer and you should contact the Department's Administration office, T: 021 433 5900.*

Each course has its own unique e-mail address from which you can apply on-line. Following your application, please attend on the first night of class unless you hear to the contrary beforehand (i.e. if you do not meet the entry requirements).

COURSES

Master of Business (Taught) Level 9
Bachelor of Business (Honours) (ACCS) Level 8
Bachelor of Business in Management (ACCS) Level 7
Certificate in Entrepreneurship & Business Level 7
Higher Certificate in Business (ACCS) Level 6
Bachelor of Business (Honours) in Accounting (ACCS) Level 8
Bachelor of Business in Accounting (ACCS) Level 7
Bachelor of Arts (Honours) in Human Resource Management Level 8
Bachelor of Arts in Human Resource Management Level 7

Professional Accountancy Courses

ACCA Programme (Full-time) Level 9
Institute of Certified Public Accountants in Ireland
Chartered Institute of Management Accountants (CIMA)
Accounting Technicians Ireland
ACCA Diploma in Accounting & Business

Introductory Book-Keeping and Accounting
Road Transport - Certificate of Professional Competence (CPC)

Higher Certificate in Business for Mature Students (Full-time)

GRADUATE TESTIMONIAL

Daragh King

Director of Business Operations for EMEA Channel & Mid Market, EMC.

"During the course of my career two organisations have formed a massive part of my professional life. EMC Information Systems, my employer for the last 15 years, and CIT with whom I've been learning for over a decade...

Lifelong learning is hugely important to me as an individual as I really believe education not only broadens horizons, opens doors and develops networks but it also brings friendships that endure. I was privileged that my employer, EMC, encouraged my journey into adult education and has supported me along the way. CIT offered a huge range of choices when I started. I began my part-time studies in the early noughties with a Diploma in Business and then, with my interest peaked, I continued to complete my Honours Bachelor of Business Degree, finally graduating in 2005. This involved a serious level of commitment trying to balance a busy work life, a young family, and a crammed college life. Encouraged by my peers and some fantastic mentors and lecturers at CIT, I progressed to the part-time Master of Business (MBus) and spent a massively enjoyable (and challenging!) two years to complete the postgraduate. Again , with my thirst for knowledge not yet quenched I embarked on a CPA qualification which I did in tandem with the MBus, and with the momentum well and truly built I also managed to become a fully qualified accountant in 2010.

My relationship with CIT continues today as I value the opinions of many of the lecturers as trusted advisors and also look to CIT to help supplement my business unit not only with qualified graduates but also with co-op placement students who can gain practical experience with EMC. I always look forward to sharing my experience as a guest speaker at CIT when the opportunity arises to impart some of the knowledge and business acumen I've gained during the course of my studies. I fully expect CIT will continue to play an important role in my personal and professional life for years to come."

Master of Business (Taught)

COURSE FEE	ENQUIRIES	COURSE CODE
€2950 P.A.	John Meyler T: 021 433 5335 E: john.meyler@cit.ie	CR_BBUSA_9

For application forms please email: mbs@cit.ie
Module Information: http://modules.cit.ie

Aim

The overall aim of this programme is to facilitate the further personal and intellectual development of students, encompassing the skills of analysis, interpretation and synthesis within their chosen field of knowledge. Participants will be required to adopt innovative and creative approaches to business related issues and analyse critically business and management problems in a national, international and global context.

Entry Requirements

Applicants who have a minimum of an Honours Bachelor of Business or cognitive degree (Level 8) or cognate discipline (H2.2) or an approved equivalent qualification are eligible to apply for entry to the programme.

The Department of Continuing Education offers four streams for the Master's Degree in Business viz:

(1) Marketing
(2) Accounting
(3) Information Systems
(4) Innovation & Enterprise

Course Structure

The following mandatory modules are common to all streams:

- Research Methods
- Services Marketing Management
- Information Systems Framework
- Applied Corporate Strategy
- International Corporate Strategy
- Research Dissertation

Specialist Modules

(1) Marketing Stream
Strategic Marketing Management, Contemporary Issues in Marketing, Applied Marketing Communications
(2) Accounting Stream
Financial Accounting & Reporting, Strategic Management Accounting, Corporate Governance
(3) Information Systems Stream
Enterprise Data Based Management, Data Communications and Networks, Information Systems Development
(4) Innovation & Enterprise Stream
Innovation and Creativity, Enterprise Finance and Law, New Venture Management and Growth

Course Programme

- Two part-time academic years (4 semesters)
- Each semester is of a 15 week duration (including examinations).
- Semester 1 commences on Wednesday, 5th September 2012 at 6.30pm in T103.
- Presentation of course consists of lectures, tutorials, case studies, visiting lectures, etc.

Semester 1 Wednesday & Friday
Semester 2 Friday only
Semester 3 Wednesday & Friday
Semester 4 Research Dissertation
Time: Wed 6.30pm - 9.30pm
Fri 3.00pm - 6pm and 6.30pm - 9.30pm

- Fees should be paid in full by the 31st October of the academic year.
- Please submit I.D. photograph with the application form.

Bachelor of Business (Honours)
(Level 8) (ACCS)

COURSE CODE	COURSE FEE	ENQUIRIES
CR_BBUSN	€190 per module (inc. exam fees)	Aidan Pyke T: 021 433 5908 E: aidan.pyke@cit.ie

Apply online at
http://www.cit.ie/course/CRBBUSN

Module Information: http://modules.cit.ie

Year 1: Monday & Wednesday, 6pm - 10pm
Year 2: (One semester only): Two evenings per week,
6pm - 10pm

This programme has been designed to provide a balanced education through a critical study of business.

Entry Requirements

(a) Ordinary Bachelor Degree in Business (with a minimum average mark of 50%); or
(b) Equivalent qualification.
N.B. This programme is designed to be undertaken over one academic year and one semester. A total of 60 credits (12 modules) is required to complete the programme.
A maximum of 40 credits (8 modules) can normally be undertaken in the first academic year.

Course Structure

The principle areas of study are:
Mandatory – each module carries 5 credits
Strategic Management 1
Strategic Management 2
Financial Management 1
Financial Management 2
Business Ethics
The Business Environment

Electives (choose 6) – each module carries 5 credits
Business Marketing Environment
Business Marketing
Workforce Diversity
International HRM
Decision Support Systems
MIS Strategy and Planning
Strategic Management Accounting 1
Strategic Management Accounting 2
Entrepreneurship

ACCS Scheme

ACCS is an acronym for "Accumulation of Credits and Certification of Modules". This scheme allows students (for specified courses) - instead of studying an entire course - to study one or more modules of that course. Modules passed, are certified individually, and can be accumulated, leading to an award of Higher Certificate, Degree or Honours Degree.

Duration

One academic year and one semester.

Award

Bachelor of Business (Honours) (Level 8)

Progression

Graduates with an Honours Bachelor of Business with a H2.2 award or higher can apply for CIT's Taught Master of Business.

Lecture Commencement Date

Year 1 - Monday, 17th September 2012 at 6pm
Year 2 - Monday, 17th September 2012 at 6pm

Semester 1 fees to be paid on registration

Bachelor of Business in Management (Level 7)

COURSE FEE	ENQUIRIES		COURSE CODE
€165 per 5 credit module (inc. exam fees)	Year 1 Martin O'Sullivan T: 021 433 5907 E: martin.osullivan@cit.ie	Year 2 Bernard Vallely T: 021 433 5904 E: bernard.vallely@cit.ie	CR_BMNGT_7 Year 1 CR_BMNGT_7 Year 2

Apply online at
http://www.cit.ie/course/CRBMNGT7

Year 1: Two/Three evenings per week, 6pm – 10pm
Year 2: Two evenings per week, 6pm – 10pm
(Extra workshops and tutorials will be provided).

Aims

This Degree is for persons who intend to make careers in professional management. The qualification will enable them to contribute more fully to the growth of their organisations and will give them access to further educational opportunities i.e. Honours Bachelor of Business.

Are you eligible for Recognition of Prior Learning (RPL)? For details, see the information section at the beginning of this Handbook.

Entry Requirements

Year 1: A minimum of a two year Higher Certificate (Level 6) is required in a discipline other than business studies.
Note: Students in Year 1 must account for 60 credits, either by RPL and/or course work. The module selection for each student will be carried out in conjunction with the course co-ordinator.
Year 2: Higher Certificate in Business, with minimum of Pass result or successful completion of Year 1 of the Bachelor in Business (Level 7).

ACCS Scheme

ACCS is an acronym for "Accumulation of Credits and Certification of Modules". This scheme allows students (for specified courses) - instead of studying an entire course - to study one or more modules of that course. Modules passed, are certified individually, and can be accumulated, leading to an award of Higher Certificate, Degree or Honours Degree.

Course Structure

The principle areas of study are:
Year 1 – Modules, all mandatory
Economics (10 credits)
Management (10 credits)
Management Information Systems (5 credits)
Financial Accounting (5 credits)
Marketing (10 credits)
Behavioural Science (10 credits)
Business Law (5 credits)
Business Mathematics & Statistics (5 credits)

Year 2 – Modules, all mandatory
Management Accounting (5 credits)
Strategic Management (5 credits)
Human Resource Management (5 credits)
Organisational Behaviour (10 credits)
Marketing Management (5 credits)
Project Management Framework (5 credits)
Supply Chain Management (5 credits)
Management Information Systems (5 credits)
Managerial Finance (5 credits)
Integrated Case Study (10 credits)

Award

Bachelor of Business in Management (Level 7)

Lecture Commencement Dates

Year 1 Monday 17th September 2012 at 6pm
Year 2 Tuesday 18th September 2012 at 6pm

Semester 1 fees to be paid on registration

Certificate in Entrepreneurship & Business (Level 7)

COURSE CODE	COURSE FEE	ENQUIRIES
CR_BENBU_7	€165 per 5 credit module (inc. exam fees)	Caroline O'Reilly T: 021 432 6328 E: caroline.oreilly@cit.ie

Apply online before Friday 17th August, 2012 at http://www.cit.ie/course/CRBENBU7

Course commences week starting Monday 17th September.

Duration

2 semesters (15 weeks each)
3 days a week (to be arranged)

Entry Requirements

The minimum entry requirement is holding a Level 6 qualification in a relevant area. A good working knowledge of IT applications will be required and there is a requirement that students would be competent in IT. If not, a student would have to take the elective module 'Introduction to IT'. Applicants should be comfortable with mathematics and be able to express themselves. Any previous business experience would be very welcome. The programme will also consider applications under CIT's Recognition for Prior Learning www.cit.ie/rpl.

Aim

The programme aims to provide students with a foundation in the fundamentals of business enabling them to appreciate the business environment from the perspective of management, marketing, law, information technology, communications and accounting. This programme will also provide a foundation to build additional credits for a major business award. Emphasising, as it does, the role of entrepreneurship and business development it presents a very significant qualification with particular relevance for new business development and growth

Course Structure

http://modules.cit.ie
All modules are worth 5 credits each.

Semester One
MRKT7009 Marketing Research 1
MGMT8006 Entrepreneurship
ACCT7007 Business Finance
Elective Option
INFO6014 Introduction to I.T.
Semester Two
MRKT7011 Selling and Sales
MGMT8007 New Venture Planning
MGMT7004 E-Commerce Infrastructure

Further Study

Students who successfully complete the programme will have the opportunity to progress to Business Degree Programmes and attain exemptions from modules completed as part of the Certificate in Entrepreneurship & Business. Students may go into industry at assistant management level or opt to engage in entrepreneurship by participating in programmes which support early stage start-ups.

Application

Late applications may be considered at the Institute evening class enrolment session at CIT's Bishopstown Campus on Tuesday 4th September.

Awarding Body

CIT: Special Purpose Award at Level 7 (ECTS 35)

Higher Certificate in Business (Level 6) (ACCS)

COURSE FEE	ENQUIRIES	COURSE CODE
€165 per 5 credit module (inc. exam fees)	Aisling Conway T: 021 433 5900 E: aisling.conway@cit.ie	CR_BBUSA_6

Apply online at http://www.cit.ie/course/CRBBUSA6

Year 1 and 2
Trimester 1: Two evenings per week, 6pm - 10pm
Trimester 2: Three evenings per week, 6pm - 10pm
Trimester 3: One evening per week, 6pm - 10pm

Aim

To give participants a firm foundation in Business studies in order to give them a better opportunity to gain employment or to enable them make an immediate contribution in their place of employment. Successful completion of the course will afford students the opportunity of progressing to a Bachelor Degree or other courses.

Are you eligible for Recognition of Prior Learning (RPL)? For details, see the information section at the beginning of this Handbook.

Entry Requirements

The minimum requirements are Grade D3 (ordinary level) in five subjects in the Leaving Certificate, to include Mathematics and either English or Irish. Mature students will be considered on an individual basis.

Award

Higher Certificate in Business (Level 6)

Progression

Successful graduates can progress to the Level 7 Bachelor of Business in Management or Accounting.

Commencement Date

Year 1 - Wednesday 19th September 2012 at 6.30pm
Year 2 - Wednesday 19th September 2012 at 6.30pm

Course Structure

Year 1 – Modules, all mandatory
Behavioural Science
Business Mathematics & Statistics
Economics
Financial Accounting
Communications, Creativity, Innovation & Teamwork
Information Technology
Public & Business Institutions

Year 2 – Modules, all mandatory
Decision Making
Cost and Management Accounting
Law
Marketing
Financial Accounting
Management
Human Resource Management
The complete course will extend over two years.
Modules will be taught on a trimesterised basis.
Official examinations will be held at the end of each term.
Certification for the course is through the ACCS Scheme.

ACCS Scheme

ACCS is an acronym for “Accumulation of Credits and Certification of Subjects”. This scheme allows students (for specified courses) - instead of studying an entire course - to study one or more modules of that course. Credits and Certificates are awarded for each module passed. Students who accumulate the appropriate number of modules qualify for the award of Higher Certificate.

Semester 1 fees to be paid on registration

Bachelor of Business (Honours) in Accounting (Level 8)

COURSE CODE	COURSE FEE	ENQUIRIES
CR_BACCE_8 (ACCS)	€190 per 5 credit module (inc. exam fees)	Muireann O'Neill T: 021 432 6018 E: muireann.oneill@cit.ie

Apply online at
http://www.cit.ie/course/CRBACCE8

Monday & Wednesday, 6pm – 10pm

Aim

The overall aim of the programme is to produce graduates with the specialist education and training necessary to enable them to gain employment in an Accounting/Financial capacity in any business sector.

Entry Requirements

Bachelor of Business in Accounting (Level 7) with a minimum average mark of 50%; or equivalent qualification.

N.B. This programme is designed to be undertaken over one academic year and one semester. A total of 60 credits (12 modules) is required to complete the programme. A maximum of 40 credits (8 modules) can normally be undertaken in the first academic year.

Award

Bachelor of Business (Honours) in Accounting (Level 8)

Progression

Graduates with a Bachelor of Business in Accounting (Honours), with a H2.2 award or higher, may apply for CIT's Taught Master of Business. Graduates may also use their Exemptions to progress to the Professional Accountancy Bodies.

Module Information

http://modules.cit.ie
CIT has developed a website which gives full details of all modules for all courses. The website also has information on recommended textbooks, average weekly workload, assessments and exams.

Commencement Date

Monday, 17th September 2012 at 6pm

Course Structure

The principal areas of study are:
Strategic Management
Advanced Financial Management
Strategic Management Accounting
Financial Reporting
IT Auditing
Taxation
Corporate Governance

Bachelor of Business in Accounting (Level 7)

COURSE FEE	ENQUIRIES	COURSE CODE
€165 per 5 credit module (inc. exam fees)	Noreen Murphy T: 021 433 5902 E: noreen.murphy@cit.ie	CR_BACCE_7 (ACCS)

Apply online at
http://www.cit.ie/course/CRBACCE7

Semester 1 fees to be paid on registration

Aim

The overall aim of the programme is to produce graduates with the specialist education and training necessary to enable them to gain employment in an Accounting/Financial capacity in any business sector.

Are you eligible for Recognition of Prior Learning (RPL)? For details, see the information section at the beginning of this Handbook.

Entry Requirements

Directly to Semester 1
A Higher Certificate in Business with sufficient credits in Financial Accounting, Economics, Management Accounting, Business Law, and Business Mathematics & Statistics.

Bridging Studies
Graduates of the Institute of Accounting Technicians in Ireland or equivalent.

Award

Bachelor of Business in Accounting (Level 7)

Further Studies

Graduates of this degree who obtain an average of 50% or more would be eligible to progress to the Level 8 Bachelor of Business (Honours) in Accounting or Bachelor of Business (Honours).

Commencement Date

Semester 1: Tuesday 18th September 2012 at 6pm

Course Structure

Semester 1 – Modules, all mandatory
Advanced Financial Accounting 1
Advanced Management Accounting 1
Financial Management 1
Management Information Systems 1
Auditing 1
Income Tax

Semester 2 – Modules, all mandatory
Advanced Financial Accounting 2
Advanced Management Accounting 2
Financial Management 2
Management Information Systems 2
Auditing 2
Corporation Tax,
Capital Gains Tax

Bridging Studies – Modules subject to demand
Introduction to Micro-economics
Mathematics and Statistics 1
Mathematics and Statistics 2
The Macroeconomy
Organisational Systems
Introduction to Marketing

Bachelor of Arts (Honours) in Human Resource Management (Level 8)

COURSE CODE	COURSE FEE	ENQUIRIES
CR_BHRMN_8	€190 per 5 credit module (incl exam fees)	Dr Felix Raekson T: 021 433 5906 E: felix.raekson@cit.ie

Apply online at
http://www.cit.ie/course/CRBHRMN8

Semester 1 fees to be paid on registration

The BA (Honours) in Human Resource Management is a one year Level 8 add-on programme. This Level 8 Honours Degree will allow graduates to apply for Level 9 Masters programmes and will aid them as their career progresses to strategic roles in organisations. The programme is delivered from June until September of the following year i.e. over fifteen months.

Delivery

Two/three evenings per week, 6pm - 10pm

Aim

The progamme is designed to expose students to topical issues in the Human Resource Management discipline. This degree has been designed in consultation with industry to respond to changes that have taken place in the HR area. This consultation has informed the suite of modules and their content.

Entry Requirements

Bachelor of Arts in Human Resource Management (Level 7) at grade H2.2 or higher. Graduates of cognate programmes may also be eligible. The programme is offered on a modular basis and requires learners to attain 60 credits.

Commencement Date

June 2012

Award

Bachelor of Arts (Honours) in Human Resource Management (Level 8)

Course Structure

Semester One
Research Methods (Summer 2012) (5 credits)
Organisational Development & Change Management (5 credits)
eHRM (5 credits)
Negotiation Skills (5 credits)
Emerging Markets & Trends (5 credits)
Occupational Psychology (elective) (5 credits)
Psychometric Testing (elective) (5 credits)

Semester Two
Managing an International Workforce (5 credits)
Project Management Framework (5 credits)
Business Finance (5 credits)
Concept Acquisition & Cognitive Learning (elective) (5 credits)
E-Learning (elective) (5 credits)
Consultancy Project (completed over the full academic year) (10 credits)

Progession

Graduates of the Bachelor of Arts (Honours) in Human Resource Management are eligible to apply for Level 9 Masters programmes.

Bachelor of Arts in Human Resource Management (Level 7)

COURSE FEE	ENQUIRIES	COURSE CODE
€165 per 5 credit module (inc. exam fees)	Olive Murphy-O'Dwyer T: 021 433 5907 E: olive.murphyodwyer@cit.ie	CR_BHRMN_7

Apply online at http://www.cit.ie/course/CRBHRMN7

This three year BA includes an embedded award at Level 6 whereby all students who successfully complete Year 1 will be awarded a Certificate in HR Management and Development. Students who successfully complete the three year programme will also be awarded a Bachelor of Arts in Human Resource Management (Level 7).

Years 1 - Two - three evenings per week, 6pm - 10pm
Year 2 & 3 - Tuesday & Thursday 6pm - 10pm
Additional tutorials and workshops will be provided.

Aim

The course is designed to meet the needs of those working in human resources/training and development or who provide support for key aspects of these functions. The programme is also suitable for someone new to or aspiring to a career in the human resources/ training and development functions. The course also attracts students who work as line managers, supervisors or team leaders who wish to gain people management skills as well as the owners or managers of small businesses. Are you eligible for Recognition of Prior Learning (RPL)? For details, see the information section at the beginning of this Handbook.

Entry Requirements

The minimum requirements are Grade D3 (ordinary level) in five subjects in the Leaving Certificate, to include Mathematics and either English or Irish. Mature students will be considered on an individual basis. This course is offered on a modularised basis and requires participants to attain 60 credits in each year.

Commencement Date

Wednesday 19th September 2012

Award

Bachelor of Arts in Human Resource Management (Level 7)

Course Structure

Year 1 – Modules
Creativity, Innovation & Teamwork
Introduction to Human Resource Management
Training and Development (2 X 5 credit modules)
Employment Law
Employee Relations
Employee Behaviour & Motivation
Recruitment and Selection
Performance Management
HR Information Systems
Behavioural Science

Year 2 – Modules
Managing Information
People Resourcing Skills
Law (2 x 5 credit modules)
Industrial Relations (2 x 5 credit modules)
Current Issues in People Management
Management Concepts & Practices (2 x 5 credit modules)
Integrated Case Study (10 credits)
Economic Data and Principles

Year 3 – Modules
Learning & Training
Employee Rewards (2 x 5 credit modules)
Corporate Strategy, Project Management
Human Resource Strategy (2 x 5 credit modules)
Training and Testing
Health and Safety (2 x 5 credit modules)
Management Report (2 x 5 credit modules)

Progression

Graduates from the BA in Human Resource Management can progress to BA (Honours) in Human Resource Management or to the Honours Bachelor of Business Studies via one semester of Bridging Studies (details on request).

ACCA Programme (Full-time)
(Level 9)

COURSE CODE	COURSE FEE	ENQUIRIES
CR_BACCA_9	€5,500 (or €1,100 per subject)	Muireann O'Neill T: 021 432 6018 E: muireann.oneill@cit.ie

Apply online at
http://www.cit.ie/course/CR_BACCA_9

ACCA operates in 170 countries with 493,500 students and qualified members. The ACCA qualification is recognised nationally and internationally and offers great job prospects. Qualified ACCA members can work in practice, business/ industry, financial services, academia and public sector.

Aim

The aim of this full-time day programme is to provide graduates with the opportunity to complete all Professional Level subjects from the ACCA qualification. This will enable them to find roles in either practice or industry and complete the workexperience necessary to qualify as an ACCA. 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.

Entry Requirements

Applicants who have a minimum of an Honours Bachelor of Business in Accounting or an approved equivalent qualification and who qualify for exemptions from previous levels of the ACCA qualification are eligible to apply for entry to the programme.

Note
Students who qualified for a grant for their undergraduate studies may be eligible for a grant for this programme also. Applicants should contact ACCA directly to verify their exemptions before registering for the programme.

Course fee includes the following:
- Course/lecture notes;
- 2/3 day revision course with accompanying notes;
- Registration Fee;
- Mock exams in each subject;
- Question based revision (QBR)

Course Structure

Subjects offered:
P1 Professional Accountant
P2 Corporate Reporting
P3 Business Analysis
P6 Advanced Taxation
P7 Advanced Audit & Assurance

Offered subject to demand:
F6 Taxation
F8 Audit & Assurance

Duration

One academic year.

Commencement Date

September 2012 with examinations in December 2012 and June 2013.

Early registration is recommended as places are limited.

COURSE FEE	ENQUIRIES	COURSE CODE
Includes lecture notes and revision €320 per subject (F2) €395 per subject (P1) €395 per subject (P2)	Ann Marie Twomey T: 021 433 5904 E: annmarie.twomey@cit.ie	CR_BCPAC_8

Apply online at
http://www.cit.ie/course/CR_BCPAC_8

Professional Accountancy Courses
Note: Registration fees, annual subscription, examination fees etc. are payable to Professional Bodies for each of the accountancy courses. **These are not included in the course fees quoted.** Please take note of the closing dates for examination registration.

Formation 2 – Monday & Thursday
Management Accounting
Financial Accounting
Information Systems
Taxation

Professional Level

Professional 1 –Tuesday & Thursday
Managerial Finance
Corporate Reporting
Corporate Law and Governance Auditing
Professional 2 – Monday & Thursday
Strategy, Leadership & Knowledge Management (M)
Audit Practice & Assurance Services (E)
Advanced Corporate Reporting (M)
Strategic Corporate Finance (E)
Strategic Performance Management (E)
Advanced Taxation (E)

Choice

CPA students will at Professional 2 Stage, tailor their qualification to their chosen career path. Those wishing to pursue a career in industry will, in most instances, elect for the Strategic Performance Management and Strategic Corporate Finance electives in addition to the two mandatory subjects. However, students intending to qualify and apply for a practice certificate must sit and pass the Auditing and Taxation elective subjects.

Institute Information

The Institute of Certified Public Accountants in Ireland
17 Harcourt Street
Dublin 2
T: 01 425 1000
W: www.cpaireland.ie

Registration with CPA

01 December 2012 for April 2013 Exams
01 June 2013 for August 2013 Exams

Exam Registration Closing Date(s)
01 March 2013 for April 2013 Exams
01 August 2013 for August 2013 Exams

Awarding Body

Institute of Certified Public Accountants in Ireland

Commencement Date

Formation 2 Monday, 17th September 2012
Professional 1 Tuesday, 18th September 2012
Professional 2 Monday, 17th September 2012

CPA Institute contact details
Exams
Arron Feery T: 01 425 1021

Registration for new students
Cliodhna Kenny T: 01 425 1022

Exemptions
Julia Haenig T: 01 425 1023

Chartered Institute of Management Accountants (CIMA)

COURSE CODE	COURSE FEE	ENQUIRIES
CR_BBLRN_9	Fees to CIMA €450 per subject or €975 for three subjects plus examination and exemption fees. These are payable to CIMA	Ruth Vance T: 021 433 5512 E: ruth.vance@cit.ie

Apply online
http://www.cit.ie/course/CR_BBLRN_9

CIT offers the CIMA Blended-Learning Programme. Blended tuition integrates classroom and on-line elements.

The syllabus and examinations are distinguished by their relevance to business and their dedicated focus on developing the financial, non-financial and management skills needed to sustain organisational success. CIMA prepares people for a career in business. It teaches skills for strategic advice, managing risk and making key decisions. CIMA's qualification is driven by the needs of business to produce financially qualified business leaders. There are currently 7,800 CIMA members and students in Ireland working in industry, commerce and non-profit organisations. CIT has built a strong reputation in terms of empowering students with the necessary skills to succeed in business. The addition of blended tuition for the CIMA Diploma further reinforces our offering to business managers and students. In the current climate, this programme provides enhanced learning and skills to better position individual managers to access the best career opportunities and to play a pivotal role within their specific organisations.

Course Structure

Tuition over three months will consist of:

- An initial 'kick-start' session where students will be introduced to their lecturers in CIT and given an introduction to, and study overview of CIMAStudy.com for their chosen subject(s);
- Access to the CIMAStudy.com content for chosen subject(s) which will be studied by students over four equal study periods;
- Follow-on e-tutorial sessions, each designed to facilitate a question and answer session between the student and their lecturer, dealing with queries that may have arisen during the previous two week study period;
- Two day face-to-face revision sessions in CIT.

Programme Outline

A blended learning approach leads to a more stimulating experience for students, it ensures different learning styles are catered for and students can learn at their own pace and at times suitable to them.

CIMAstudy.com delivers the only complete online CIMA approved courses direct to your computer.

- No need to buy any supplementary products or spend time traveling – everything you need is online;
- 24 hour web-based training doesn't tie you down. Flexibly manage your study time to suit you;
- Interactive cases, tools and exercises provide a dynamic way to learn – reinforcing learning to help you remember more and make exam preparation easier;
- Direct access to an online subject matter expert.

Progression

CIMA Diploma in Management Accounting Graduates can progress to the CIMA Advanced Diploma in Management Accounting followed by Strategic Level and then Professional Competence Level to qualify as a CIMA member.

Awarding Body

Chartered Institute of Management Accountants

Further Information

Fiona Arnold
Student Recruitment Manager
Chartered Institute of Management Accountants Ireland
5th Floor, Block E, Iveagh Court
Harcourt Road, Dublin 2
T: +353 1 643 0405
W: www.cimaglobal.com/ireland

COURSE FEE	ENQUIRIES	COURSE CODE
€900 Year 1 €990 Year 2	Ann Marie Twomey T: 021 433 5904 E: annmarie.twomey@cit.ie	CR_BIATI_6

Apply online at
http://www.cit.ie/course/CR_BIATI_6

Year 1: Tuesday & Thursday, 6.30pm - 9.30pm
Year 2: Tuesday & Thursday, 6.30pm - 9.30pm

Aim

To provide a qualification in Accounting and Information Skills for persons working at support levels in accounting firms and public practice, in industry and commerce and in the public sector.

Entry Requirements

Leaving Certificate with a minimum of Grade D3 in five subjects at Ordinary level. Subjects passed must include English and either Mathematics or Accounting. Mature students without a Leaving Certificate may be admitted at the discretion of Accounting Technicians Ireland.

Year 1
Financial Accounting 1
Law & Ethics
Business Management
Taxation 1
Y**ear 2**
Financial Accounting 2
Taxation 2
Integrated Accounting Systems
Management Accounting

Duration

Two years

Institute Information

Accounting Technicians Ireland (ATI)
47/49 Pearse Street
Dublin 2
T: 01 649 8100
W: www.accountingtechniciansireland.ie

Exemption Deadline

Friday 28th September 2012

Exam Registration Closing Date(s)

Start 5th February 2013 for May 2013 exams.
Registration as first time student with ATI by 31st October 2012.
Contact Leda Egri at the Institute: T: 01 649 8180

Exemptions

Please note that applications for exemptions must be made directly to the Accounting Technicians Ireland.

Commencement Date

Year 1 Thursday 20th September
Year 2 Tuesday 18th September

Awarding Body

Accounting Technicians Ireland

ACCA Diploma in Accounting & Business

COURSE CODE	COURSE FEE	ENQUIRIES
CR_BACCB_6	€1,500 (excl exam fee)	Martin O'Sullivan T: 021 433 5907 E: martin.osullivan@cit.ie

Apply online at
http://www.cit.ie/course/CR_BACCB_6

Tuesday 7.00pm – 10.00pm & Wednesday 6.30pm – 9.30pm

The Diploma is suitable for those aspiring to work or already working in the following types of roles:

- basic bookkeeping;
- trainee accountant in a commercial organisation or accounting practice;
- accounts clerk in public or private sector.

The Diploma in Accounting and Business is broadly equivalent to HND level/equivalent to the first year of a degree.

Subjects

Financial Accounting (FFA);
Management Accounting (FMA);
Accounting in Business (FAB) and
Foundations in Professionalism (offered entirely online via ACCA).

Progression

Students who successfully complete the Diploma in Accounting and Business via Foundations in Accountancy can either:
transfer to the ACCA Qualification and commence their studies at F4 onwards of the ACCA Qualification
OR
continue to study for the Certified Accounting Technician (CAT) Qualification. However, please note
students who continue with the CAT Qualification will have to complete a further 6 CAT exams and gain one year's relevant work experience. The CAT qualification involves completing 9 exams, three of which you will have completed as part of the Diploma in Accounting in Business, and one year's relevant work experience.

Course Structure

Subjects FFA, FMA and FAB will be taught from September to May with examinations taking place in early June.

Award

Diploma in Accounting & Business

Awarding Body

Association of Chartered Certified Accountants (ACCA)

Exemptions

Candidates may be eligible to apply for Exemptions. These may be viewed at www.accaglobal.com/exemptions

Registration Details

Students must apply to CIT before 1st September. Students must also register online with ACCA by December at W: www.accaglobal.com/applynow and also register directly with ACCA for paper based exams.

Note:
ACCA registration, exam and exemption (if applicable) fees are payable directly to ACCA.
CIT fee to be paid on registration.

Institute Information
ACCA Ireland,
9 Leeson Park,
Dublin 6
T: 01 498 8900
E: info@ie.accaglobal.com
W: www.accaglobal.com

Introductory Book-Keeping and Accounting

COURSE FEE	ENQUIRIES	COURSE CODE
€400	Noreen Murphy T: 021 433 5902 E: noreen.murphy@cit.ie	CR_BBACC_6

Apply online at
http://www.cit.ie/course/CR_BBACC_6

Tuesday 6.30pm - 9.30pm

Class size is limited to 20 students.
This course is intended to introduce participants to:

- Books of original entry.
- Value added Tax (VAT).
- Receivables (debtors) and Payables (creditors) ledgers.
- Treatment of PAYE, PRSI, and other deductions.

The first section of the course will be dedicated to instructing students on manual processing, while the later part will concentrate on computerised accounting using the Sage Accounting Software Package.

This course is a good 'stepping stone' to the Institute of Accounting Technicians (IATI) and Higher Certificate in Business.

Duration

10 weeks
This course will be offered twice during the 2012/2013 academic year, subject to demand.

Commencement Dates

Course 1: Tuesday 2nd October, 2012
Course 2: Tuesday 5th February 2013

Road Transport Course - Certificate of Professional Competence in Road Haulage & Road Passenger Transport (CPC)

COURSE CODE	COURSE FEE	ENQUIRIES
CR_ERTPC_6	€900 inc Manual	Eileen O'Mahony T: 021 433 5903 E: eileen.omahony@cit.ie

For application forms please email cpc@cit.ie

Monday, Tuesday, and Friday 7pm - 10pm

This course is one of the requirements for qualification to hold a Road Freight Carrier's Licence or a Road Passenger Transport Operator's Licence C.P.C.

Awarding Body

Chartered Institute of Logistics & Transport in Ireland,
1 Fitzwilliam Place,
Dublin 2.
T: 01 676 3188
W: www.cilt.ie

Course Content

- Road Transport Operations
- Access to the Transport Market
- Financial Aspects & Accounts
- Contract, Civil, Commercial & Social Law
- Health & Safety Legislation
- Route Planning & Road Safety
- Setting up a Road Transport Business
- Management & Marketing
- Technical Standards
- Employment Law
- Conventions & Documentation

Duration

One term
This course will be offered twice during the 2012/2013 academic year, subject to demand.

Commencement Dates

Course 1: Late September 2012 | **Exam:** Late January 2013
Course 2: February 2013 | **Exam:** June 2013

Higher Certificate in Business for Mature Students (Full-time)

COURSE FEE	ENQUIRIES	COURSE CODE
Standard Department of Education & Skills full-time registration fee applies	Louise Byrne Department of Management & Marketing T: 021 433 5806 E: louise.byrne@cit.ie	CR_BBUSE_6

Please contact Louise Byrne for an application form.

About Business

This course aims to equip mature students (i.e. 23 years of age by 1st January of the year of entry), with the skills, knowledge and competencies to take advantage of employment opportunities in areas such as accounting, marketing, banking, insurance etc.

Entry Requirement

Leaving Certificate is desirable but not essential. Relevant work experience, skills gained through experiential learning and other qualifications will be considered when assessing applications.

Cost

No tuition fees are payable except by certain categories of student. Student Services, Registration and Examination fees may apply, depending on circumstances of the student.

Note: The Third-Level Training Grant administered by local VEC offices are available for eligible students. The course is also recognised under the Back to Education Allowance Scheme, which in certain circumstances permits those participants in receipt of social welfare payments to retain these payments while completing the course.

Mature Student Support Network

The Network provides support with organised workshops, e.g. Study Skills, Stress Management, and provides students with peer support and assists students in managing college life. **E: maturestudent@cit.ie W: www.cit.ie/maturestudents**

Duration & Timetables

This is a full time course over two academic years. Lectures are timetabled from Monday to Friday between 9.00am – 2.00pm in so far as possible to accommodate the needs of mature students.

Module Information

http://modules.cit.ie
CIT has developed a website which gives full details of all modules for all courses. The website also has information on recommended textbooks, average weekly workload, assessments and exams.

Course Content

Year 1
Behavioural Science; Business Mathematics & Statistics; Introduction to Information Technology; Economics, Financial Accounting; Communications; and Public and Business Institutions.

Year 2
Legal Studies; Management; Management Accounting; Marketing; Information Technology; Financial Accounting; Decision Making in Economics; and Management.

Further Studies

Suitably qualified graduates are eligible to apply for the Bachelor Degrees in Business and thereafter, for the Bachelor of Business (Honours) degrees.

SCHOOL OF HUMANITIES

Head of School
Dr Margaret Linehan

The School consists of the following Departments:
Department of Social and General Studies
Department of Tourism and Hospitality
DEIS: Department of Education Development

DEPARTMENT OF SOCIAL CARE & GENERAL STUDIES

Head of Department
Jim Walsh

Department Secretary
Helen Dillon
T: 021 433 5310
E: helen.dillon@cit.ie

COURSES

- One Year Certificate in Counselling Skills
- Higher Certificate in Arts in Counselling Skills
- Bachelor of Arts (Honours) in Counselling & Psychotherapy*
- Master of Arts in Integrative Psychotherapy

***The Bachelor of Arts (Hons) in Counselling and Psychotherapy is recognised as a professional training course by the Irish association for Counselling and Psychotherapy and satisfies the professional accreditation requirements of this body.**

In Brief

One Year Certificate in Counselling Skills
This course is a One Year Certificate course in its own right and for those who are seeking to complete the full training, it is also year one of the four year honours degree in Counselling and Psychotherapy.

Higher Certificate in Arts in Counselling Skills
This course is a Higher Certificate course in its own right and for those who are seeking to complete the full training, it is also year two of the four year honours degree in Counselling and Psychotherapy.

Bachelor of Arts (Hons) in Counselling and Psychotherapy Years 3 and 4
This course comprises the final two years of the four year honours degree in Counselling and Psychotherapy. It is open to those who have completed the One Year Certificate and Higher Certificate courses or their equivalent through prior training.

Master of Arts in Integrative Psychotherapy
The MA aims to equip practitioners with the advanced knowledge and clinical capability that would match international standards of best practice within the Psychotherapy profession.

One Year Certificate in Counselling Skills

COURSE CODE	COURSE FEE	ENQUIRIES	
CR_HCOUI_6	€1,850	Application Form: Helen Dillon T: 021 433 5310	Course Info: Gus Murray T: 021 434 7800

Application closing date is the 10th August 2012

Aims

This course aims to meet the needs of people who require an introductory training in Counselling for use in their existing work or life situations. Additionally, the course aims to provide a foundational introduction for those students who wish to pursue further training in Counselling.

Course Content

The course is offered over two semesters from September to May. Each semester has 5 modules. The following are the key components of course content:

Part 1 Counselling Theory

- Introduction to Mindfulness
- Person centred counselling theory
- Person centred counselling application
- Family systems theory
- Family systems application
- Introduction to Developmental theory
- Change and loss

Part 11 Counselling Skills

- The core skills of counselling – theory and practice
- Forming a helping relationship
- Counselling Skills practice, review and feedback
- Counselling Skills application

Part 111 Experiential Group Process

The purpose of the Experiential Group Process module is to provide the students with a facilitated group experience through which they will have the opportunity to develop Personal process competencies which are necessary for their development as Counselling trainees.

Entry Requirements

Applicants for 2012/2013 must:
1. Be over 25 years of age at the date of registration;
2. Be assessed through interview;
3. Submit two written references, (see application form for details).

Dual Relationships

Due to the personal and experiential nature of the course, it is generally not possible to have staff or students with significant existing personal or professional relationships in the same course group. Where possible, every effort is made to overcome this difficulty by placing them in separate groups. Oftentimes this solution is not possible and in these instances, the dual relationship may prevent the applicant from being offered a place on the course at that time.

Duration

The course is offered on a part-time basis for the duration of the academic year as follows:
a) Theory and Application Programme – one evening per week - Mondays 6.30pm - 9.30pm.
b) Counselling Skills Workshops - one additional evening every three to four weeks 6.30pm - 9.30pm.
c) Experiential Group Process – Ten Saturdays, 10.00am - 5.00pm spread throughout the year.
Dates for these are arranged when the course begins.

Attendance

Attendance at all sessions is a requirement.

Personal Therapy

Students are required to undertake a minimum of 20 sessions of personal therapy during the One year Certificate Course. The cost of this is separate to the course and is arranged directly between the student and the therapist. To fulfil this requirement, students may be offered the option to avail of low cost Counselling, if desired.

Award

The One Year Certificate is awarded by the Cork Institute of Technology on the basis of satisfactory attendance as well as the submission of written work and the satisfactory completion of practical and experiential assignments. The Certificate recognises that the student has successfully completed an introductory training in Counselling Skills which should enable him/her to practice basic counselling skills within his/her existing role. *It is not a professional qualification in Counselling* and does not qualify the holder to practice as a professional counsellor.

Application

A special application form is required for this course. It can be downloaded from the College website www.cit.ie and should be returned to Gus Murray, Department of Social and General Studies, Cork Institute of Technology, Cork on or before FRIDAY, 10 August 2012. Please mark envelope One year Certificate application. Interviews will be scheduled as early as possible after the closing date.

Higher Certificate in Arts in Counselling Skills

COURSE CODE	COURSE FEE	ENQUIRIES	
CR_HCOUN_6	€2,000	Application Form: Helen Dillon T: 021 433 5310	Course Info: Gus Murray T: 021 434 7800

Application closing date is the 11th May 2012

Aim

This course is being offered to students who have successfully completed the One Year Certificate in Counselling Skills or its equivalent. It aims to consolidate and expand upon the One Year Certificate foundational training, thus providing students with an introduction to counselling for use in their existing work or voluntary settings. The course also aims to facilitate interested students to reach the level of training and development required to work with clients during the professional practitioner training programme in Counselling and Psychotherapy in B.A. Years 3 and 4.

Course Content

The course is offered over two semesters from September to May. Each semester has 5 modules. The following are the key components of course content:

Part I Counselling Theory

- Ego states –Theory and Application
- Life Script - Theory and Application
- Group process - theory and application
- Developmental theory

Part II Counselling Skills

- Level 2 Counselling Skills – theory and practice
- Writing a Counselling Process review
- Counselling Skills practice, review and feedback
- Counselling skills application

Part III Experiential Group Process

The purpose of the Experiential Group Process module is to provide the students with a facilitated group experience through which they will have the opportunity to develop, expand and consolidate Personal process competencies which are necessary for their development as Counselling trainees.

Duration

The course will be offered on a part-time basis for the duration of the academic year. The regular sessions will be held on week evenings - 6.30pm to 9.30pm. Alternatively some of the sessions may be held on Saturday 10.00am to 5.00pm. There will be two weekend workshops in addition to the regular weekly sessions. There will also be five evening skills workshops.

Attendance

Attendance at all sessions is a requirement.

Personal Therapy

Students are required to undertake personal therapy weekly during the Higher Certificate course. The cost of this is separate to the course and is arranged directly between the student and the therapist.

Entry Requirements

Applicants must

1. Be over 25 years of age at the date of registration;
2. Have successfully completed the One Year Certificate in Counselling Skills or its equivalent;
3. Be assessed through interview;
4. Submit two written references (for applicants who have not already been on a prior stage of the course) See application form for details.

Garda Vetting

All applicants to the Higher Certificate in Arts in Counselling Skills will be required to undergo Garda vetting. Depending upon the outcome of the vetting process, the Institute reserves the following rights:
1. to not register a student;
2. to remove an existing registered student;
3. to delay the student's practice placement modules.
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.

Dual Relationships

Due to the personal and experiential nature of the course, it is generally not possible to have staff or students with significant existing personal or professional relationships in the same course group. Where possible, every effort is made to overcome this difficulty by placing them in separate groups. Oftentimes this solution is not possible and in these instances, a dual relationship may prevent the applicant from being offered a place on the course at that time.

Award

The Higher Certificate is awarded on the basis of satisfactory attendance as well as the submission of written work and the satisfactory completion of practical and experiential assignments. The Higher Certificate recognises that the student has undertaken a comprehensive training in Counselling Skills which should enable him/her to practice a full range of counselling skills within a pre-existing role. It is not a professional qualification in Counselling and does not qualify the holder to practice as a Professional Counsellor. To achieve a professional qualification, it is necessary to complete Bachelor of Arts in Counselling and Psychotherapy, years 3 and 4.

Application

A special application form is required for this course. It can be downloaded from the College website www.cit.ie and should be returned to the Gus Murray, Department of Social and General Studies, Cork Institute of Technology, Cork. Please mark envelope Higher Certificate application. Closing date for completed application forms is FRIDAY, 11 May 2012.

Bachelor of Arts (Honours) in Counselling & Psychotherapy (Years 3 & 4)

COURSE CODE	COURSE FEE	ENQUIRIES	
CR_HCOUN_8	Year 3: €2,800 Year 4: €2,800	Application Form: Helen Dillon T: 021 433 5310	Course Info: Gus Murray T: 021 434 7800

Application closing date is the 11th May 2012

The Bachelor of Arts (Hons) in Counselling & Psychotherapy is a four year course comprising the following:
Year 1: The One Year Certificate in Counselling Skills
Year 2: The Higher Certificate in Arts in Counselling Skills
Year 3: Bachelor of Arts (Hons) in Counselling & Psychotherapy - Year 3
Year 4: Bachelor of Arts (Hons) in Counselling & Psychotherapy - Year 4

Aims

This course is a professional practitioner training in Counselling and Psychotherapy. Its aim is to develop reflective and skilled practitioners who will have attained the requisite knowledge, personal development and competence to provide Counselling and Psychotherapy in a professional manner.

Core Theoretical Orientation

The core theoretical orientation of the course is integrative. The core humanistic elements are Person Centred, Gestalt and Transactional Analysis. The course also draws substantially from the relational end of Psychoanalysis. Some elements from the Cognitive and Behavioural traditions are also included.

Course Content

The course is offered over two semesters from September to May each year. Each semester has 5 modules. The course has five key elements which are integrated in the training, using a strong experiential and practical focus. These are:
(i) Counselling and Psychotherapy Theory and Application
(ii) Practitioner Development
(iii) Experiential Group Process/personal process integration
(iv) Supervised Counselling and Psychotherapy Practice
(v) Counselling and Psychotherapy integration

(i) Counselling and Psychotherapy Theory and Application
- The Gestalt Approach
- The Person Centred and Transactional analysis approaches revisited and integrated
- An introduction to Self Psychology
- An introduction to the Cognitive Behavioural Approach
- Integrating elements from the psychoanalytic Tradition
- Developmental Theory
- Personality Theory
- An integrative theory of Counselling and Psychotherapy
- Professional Practice and Ethics
- Understanding Abnormality
- Therapeutic change

(ii) Practitioner Development
- Structuring the Counselling and Psychotherapy process
- Developing a Therapeutic Relationship
- Assessment and Diagnosis
- Counselling Planning
- Integrative Interventions
- Supervised Practice

(iii) Experiential group process/personal process integration
The content of the Experiential Group Process arises from within the process itself. The purpose of the Experiential Group Process module is to provide the students with a facilitated group experience through which they will have the opportunity to develop, expand and consolidate personal process competencies which are necessary for their development as Counselling and Psychotherapy practitioners.

(iv) Supervised Counselling and Psychotherapy Practice
Through regular supervision the student will receive ongoing support, guidance and assessment of all aspects of his/her work with clients.

(v) Counselling and Psychotherapy Integration
This element provides students with the opportunity to integrate the theoretical, personal and practice elements of their training in an experiential way

Entry requirements

Applicants for 2012/2013 must
1. Be over 25 years of age at the date of registration;
2 Have successfully completed the Higher Certificate in Arts in Counselling Skills or its equivalent through alternative prior learning;
3 Be assessed through interview or progression assessment for internal students;
4. Submit two written references (for applicants who have not already been on a prior stage of the course), (see application form for details).

Garda Vetting

All applicants to the Bachelor of Arts (Honours) in Counselling & Psychotherapy will be required to undergo Garda vetting. Depending upon the outcome of the vetting process, the Institute reserves the following rights:
1. to not register a student;
2 to remove an existing registered student;
3. to delay the student's practice placement modules.

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.

Work with Clients

Students will be required to carry out 100 hours of Counselling work with clients during the training. They will be required to obtain supervision for this work from a supervisor nominated by the College. Payment for supervision will be made directly by students and is not included in the course fee.

Personal Therapy

Students will be required to have undertaken at least 100 sessions of personal therapy before the completion of their training. The cost of this is separate to the course and is arranged directly between the student and the therapist.

Dual Relationships

Due to the personal and experiential nature of the course, it is generally not possible to have staff or students with significant existing personal or professional relationships in the same course group. Where possible, every effort is made to overcome this difficulty by placing them in separate groups. Oftentimes this solution is not possible and in these instances, a dual relationship may prevent the applicant from being offered a place on the course at that time.

Award

On successful completion of the full programme, students will be awarded a Bachelor of Arts (Honours) in Counselling and Psychotherapy, conferred by the Higher Education Training and Awards Council. On achieving the honours degree, students will be equipped to carry out Counselling and Psychotherapy in a structured setting with the support of supervision. The BA honours degree is a fully validated professional Counselling and Psychotherapy training programme which satisfies the accreditation requirements of the Irish Association for Counselling and Psychotherapy.

>>

Bachelor of Arts (Honours) In Counselling & Psychotherapy *continued*

Duration

The course will be offered on a part-time basis over two years. The regular sessions will be held on two evenings per week 6.30pm to 9.30pm. Alternatively, some of the evening sessions could be transferred to Saturday. When a Saturday is involved it would replace two evening sessions. During Year 3, there will be two weekend workshops in addition to the regular weekly sessions. There will be occasional evening skills workshops in Year 3.

Assessment

Assessment will be made for the purposes of evaluating overall competency in Counselling and Psychotherapy. To this end, the assessment methods are:

(i) Written projects;
(ii) Practical skills assessments;
(iii) Attendance at and participation in all programme activities;
(iv) A final oral examination.

Application

A special application form is required for this course. It can be obtained from It can be downloaded from the College website www.cit.ie and should be returned to the Gus Murray, Department of Social and General Studies, Cork Institute of Technology, Cork. Please mark envelope B.A. degree application. Closing date for completed application forms is FRIDAY, 11 May 2012.

Master of Arts in Integrative Psychotherapy

COURSE FEE	ENQUIRIES		COURSE CODE
To be advised	Gus Murray T: 021 434 7800	Helen Clancy T: 021 4892108	CR_HINTP_9

Course details
www.cit.ie/course/CR_HINTP_9

Please note: The MA in Integrative Psychotherapy is run over a two year cycle. The next intake will be in September 2013. The administrative details in this handbook refer to the 2011-12 intake. These will be updated in due course in preparation for the 2013 intake.

Aim

This programme is a postgraduate course of study and training in Integrative Psychotherapy for practitioners who have completed the Bachelor of Arts (Honours) in Counselling and Psychotherapy or its equivalent. It aims to equip practitioners with the advanced knowledge and clinical capability that would match international standards of best practice within the Psychotherapy profession.

Entry Requirements

Applicants must

a) Have successfully completed the Bachelor of Art (Honours) in Counselling or Psychotherapy (minimum H2.2) or an equivalent* professional training in Counselling and Psychotherapy that satisfies the training requirements for professional accreditation.
b) Have competed two years post-qualifying supervised clinical practice with a minimum of 250 hours of clinical practice which is verified by an accredited supervisor
c) Be assessed through interview
d) Submit two written references (for applicants who have not already been on a prior stage of the course).

***Equivalence**

Where an applicant has not completed the BA (Honours) in Counselling or Psychotherapy, equivalence is assessed through the formal Recognition of Prior Learning (RPL) process used in CIT. This involves applicants preparing a portfolio in which they would demonstrate how they have achieved the learning outcome of the modules in the BA (Honours) in Counselling and Psychotherapy as well as the two years post-qualifying supervised clinical practice.

Duration

The course has 90 credits and will be offered as follows: Year 1 (60 Credits) is a taught year where students will attend at College and supervision, thus completing the taught modules of the course. The regular sessions will be held on a combination of weekday evenings and on Saturdays and Sundays.

Year 2 will involve a programme of directed/supervised learning where students will research and write the Reflective Practitioning dissertation. During this year they will also carry out their Mental Health Placement.

DEPARTMENT OF TOURISM & HOSPITALITY

Head of Department
Adrian Gregan

Department Secretary
Geraldine McCarthy
T: (021) 433 5820
E: hospitality@cit.ie

COURSES

Bachelor of Arts in Culinary Arts Level 7*
Advanced Certificate in Professional Cookery – Total Immersion Programme*
Advanced Certificate in Professional Cookery National Traineeship (Day Release)*
Primary Certificate in Food Hygiene
Bakery Techniques
Pastry: Tarts and Small Gateaux
Supervisory Development Programme*
Professional Bar Operations

*** This programme is supported by Fáilte Ireland**

Bachelor of Arts in Culinary Arts

COURSE FEE	ENQUIRIES	COURSE CODE
CIT Fee €2,400 (Fáilte Ireland supported premises) €4,800 (where a participant is not in full time employment in a Fáilte Ireland supported premises)	Geraldine McCarthy T: 021 433 5820 E: hospitality@cit.ie	OCULP_7_Y3

Fáilte Ireland
National Tourism Development Authority

This programme is supported by Fáilte Ireland.

Aims

The aim of these modules is to develop advanced culinary art skills of a specialised nature. The emphasis is on extending culinary knowledge and ability in a flexible and imaginative manner towards excellence, innovation and artistic merit.

Entry Requirements

A recognised culinary arts or professional cookery qualification or equivalent and minimum of one year's industry experience and must be working as a chef in a recognised catering establishment. Mature students will be considered on an individual basis and in accordance with CIT regulations for part-time enrolment.

Modules

12 modules

- Advanced Pastry 1
- Advanced Pastry 2
- Advanced Culinary Skills 1
- Advanced Culinary Skills 2
- Culinary Leadership & Training
- Gastronomy in the Modern World
- Cost Management
- Service Business Environment
- Research Methods and Styles
- Food Product Development
- Food Product Development Concepts
- Synoptic Study

Students are required to have completed part 1 of the module prior to continuing to the second stage.

Students should expect to take 2/3 years to complete the Bachelor of Arts in Culinary Arts.

Please note: Modules are offered subject to demand and mode of delivery is in consultation with the student group. Modifications to the above configuration may take place in accordance with changing requirements.

Award

HETAC: Bachelor of Arts in Culinary Arts Level 7

Students who participate on Individual modules may be awarded the Certificate in Advanced Culinary Arts (Single Module).

Advanced Certificate in Professional Cookery
Total Immersion Programme

COURSE CODE	COURSE FEE	ENQUIRIES
FALPR_6_Y1	CIT Fee €1,500 (supported by Fáilte Ireland	Ann O'Connor T: 021 433 5839 E: ann.oconnor@cit.ie E: hospitality @cit.ie

This programme is supported by Fáilte Ireland.
Full-time, 3 days in college; 2 days in Industry

Fáilte Ireland
National Tourism Development Authority

Course

This course is aimed at mature participants, with a passion for cookery, who wish to pursue a career as a professional chef in the hospitality sector. The course covers the key skills required in professional cookery, and is delivered in 3 stages of learning:

- Learning the Fundamentals
- Exploring the Techniques
- Refining Culinary Service

The programme provides participants with the benefits of personal attention, instant feedback, hands-on experience and reinforcement so that each carefully planned class logically provides participants with the tools for working in the catering sector. Participants will truly immerse themselves in the world of professional cookery.

The programme offers high quality hands-on education where both theory and practical elements are delivered in state of-the-art professional culinary facilities. As part of the programme, participants work in industry in a professional kitchen and enhance their practical skills of professional cookery. Work experience is directly aligned to the learning in college to ensure skills and knowledge are reinforced and embedded for the enhancement of the overall learning experience.

Who should apply?

The course is aimed at career changers, school leavers with a proven flair for cookery, employees in industry. Only candidates who show a level of maturity and demonstrate a passion for food and a commitment to the field of professional cookery will be considered for entry into this programme. **NB: Places are limited to 16 participants per year.**

The Department of Tourism and Hospitality Studies works closely with Fáilte Ireland and the French Culinary Institute in New York in delivering this programme.

Course Content

The twelve month programme is structured as follows:
9 months > 3 days in college and 2 days working in industry with an employer of choice followed by
3 months > Intensive structured industry training with an employer of choice.

Modules

- Culinary Skills and Standards
- European, Mediterranean and Global Cuisine
- Pastry
- Larder
- Food Safety and Nutrition
- Gastronomy
- Culinary Science and Technology
- Restaurant Service and Communications

Some of the benefits you can expect

- Gain an internationally recognised qualification in twelve months;
- Avail of valuable college education and intensive industry experience in a structured manner;
- Opportunity to learn from highly skilled lecturing staff;
- As a participant, you will develop a broad base of knowledge, a confidence in your skills and the fluency to move successfully into a career that is right for you.

Award

FETAC Level 6 Award: Advanced Certificate in Professional Cookery

Advanced Certificate in Professional Cookery National Traineeship

- 2 Years Day Release FETAC Level 6

COURSE FEE	ENQUIRIES	COURSE CODE
€1,500 per year*	Geraldine McCarthy T: 021 433 5820 E: hospitality@cit.ie	FCHEF_6_D1

Fáilte Ireland
National Tourism Development Authority

*The Course Fee is fully supported for participants deemed by Fáilte Ireland to represent tourism premises

This programme focuses on developing professional qualifications for people who are working in the field of professional cookery but have not previously gained a Professional Cookery qualification. Participants must already be working in professional cookery in an establishment where their employer is committed to facilitating their further development.

Course Content*

The Traineeship Programme in Professional Cookery is a day release programme with attendance at CIT and on-the-job training in a recognised catering business over a 2-year period. (In September of each year, some full time attendance is required on the programme).

*This Programme is under review and subject to change in structure and delivery.

Modules

- Culinary Skills and Standards
- Food Safety, Nutrition
- Classical Cuisine
- European, Mediterranean and Global Cuisine
- Pastry
- Larder
- Gastronomy
- Culinary Science and Technology and Menu Planning and Cost Control
- Restaurant Service and Communications

The programme operates on the basis of mentor direction, i.e., participating employers are required to provide a mentor/trainer who is a member of the culinary staff and who has successfully completed an accredited trainer programme.

Some of the benefits you can expect

Participant

- Gain an internationally recognised qualification in your chosen field of study;
- Continue to earn while you learn with an employer of your choice;
- Enrich your job immediately as you acquire more skills and secure a better future within the industry;
- Access to state-of-the-art training facilities.

Employer

- Improved business performance due to highly trained staff;
- Increased levels of return through greater staff commitment to the business;
- Enhanced image for you as an employer of choice;
- A new approach to on-the-job training to facilitate business.

Employer commitment is vital

Participating employers play a crucial role in the operation of the programme by contributing to the development of the learner's progress through following a programme of directive learning and by abiding by a specific code of practice developed for the programme.

To Apply

Participant

Complete the application form and return to the Department of Tourism and Hospitality Studies at CIT.

Employer

Establishments wishing to operate this programme and nominating an employee must be registered. Please complete the Registration of Establishment Form and return it to the Department of Tourism and Hospitality Studies at Cork Institute of Technology.

Primary Certificate in Food Hygiene

COURSE CODE	COURSE FEE	ENQUIRIES
CR_OFHYG_6	€230 (payable to CIT) Exam fee €30 (payable to EHOA)	Catherine O'Mahony T: 021 433 5842 E: hospitality@cit.ie

The Primary Certificate in Food Hygiene is a minimum requirement for all food handlers.

Course Content

- Food hygiene
- Food contamination
- Food delivery and storage
- Food preparation, cooking and service
- Personal hygiene
- Design and layout of food premises and pest control
- Cleaning
- An introduction to Hazard Analysis Critical Control Point

Duration

Four Fridays, each class lasting 3 hours.

Award

Successful candidates will be awarded the EHOA (Environmental Health Officers Association) Primary Certificate in the Principles & Practice of Food Hygiene.

Please note: Delivery of this programme is subject to sufficient number of applicants.

Bakery Techniques

COURSE FEE	ENQUIRIES	COURSE CODE
€400 (incl. exam fee) This fee does not include the necessary work uniform (€60)	Catherine O'Mahony T: 021 433 5842 E: hospitality@cit.ie	CR_FPASB_6

Application deadline: 15th June 2012

This course provides skills and knowledge in the areas associated with modern pastries and breads. It is suitable as a foundation course or to build on existing skills.

Course Content

- Yeast Breads – cheese and onion, sundried tomato, herb and seed breads
- Bagels
- Soda bread extensions
- Bun Doughs
- Croissants
- Danish pastries
- Puff pastry
- Brioche

Duration

Start date September 2012.
The course is operated on Monday evenings over 8 weeks, consisting of a four-hour practical class each evening. Time 6.00pm to 10.00pm. Places are limited, apply by application before the 15th June.

Award

A Certificate will be awarded to all successful participants.

Pastry: Tarts and Small Gateaux

COURSE CODE	COURSE FEE	ENQUIRIES
To be advised	€400 This fee does not include the necessary work uniform (€60)	Catherine O'Mahony T: 021 433 5842 E: hospitality@cit.ie

Course commencement date is February 2013.

This course provides skills and knowledge in the areas of modern pastries.

Course Content

Modern Gateaux and small pastries made using the following

- Macaroons
- Choux Pastry
- Sweet Pastry
- Puff Pastry
- Chocolate techniques
- Fillings – glacage, mousse, frangipane, caramel, pastry cream, praline etc.

Duration

The course will operate on a Monday night over 8 weeks consisting of a four hour practical class, 6.00pm to 10.00pm. Places are limited, application to the department before the 14th December.

Award

A Certificate will be awarded to all successful participants.

Please note: Delivery of this programme is subject to sufficient number of applicants.

Supervisory Development Programme

COURSE FEE	ENQUIRIES	COURSE CODE
€650	Geraldine McCarthy T: 021 433 5820 E: hospitality@cit.ie	CR_OSDPR_6

Fáilte Ireland
National Tourism Development Authority

This programme is supported by Fáilte Ireland.

Aims

This course is designed specifically with the needs of the hospitality and tourism sector in mind. It is ideally suited for the existing supervisors who have not previously had the opportunity to formally develop their supervisory and management skills. Equally, the course will meet the needs of persons, who have ambitions to become supervisors.

Course Content

- Understanding the role and attributes of the supervisor
- Supervisory Management
- Introduction to Human Resource Management
- Staff Training Skills & Implementing Training Plans
- Marketing & Promotions
- Current Employment Legislation (Introduction)
- Introduction to Computing & Applied Hospitality IT
- Introduction to Book-Keeping & Accounts

The programme is suitable to learners who have previously undertaken course in tourism and hospitality operations, additionally applicants with sufficient work experience can be considered. The programme is accredited at FETAC Level 6.

Duration

This programme may be offered as a day release programme over 30 weeks, or alternatively 2 nights per week over the academic year.

Award

FETAC Level 6 Special Purpose Certificate in Supervisory Development.

Please note: Delivery of this programme is subject to sufficient number of applicants.

Professional Bar Operations

COURSE CODE	COURSE FEE	ENQUIRIES
CR_OBARR_6	€350	Geraldine McCarthy T: 021 433 5820 E: hospitality@cit.ie

8 weeks, one night per week.
Tuesday 6.30pm - 9.30pm

Aims

The aim of this course is to give an introduction to participants to the knowledge, skills and aptitude necessary to become competent bartenders.

Content

- Responsible Service of Alcohol
- Attributes of the Professional Bar Tender
- Customer Care
- Basic Bar Legislation
- Service of Beverages; alcoholic and non-alcoholic
- Product Knowledge
- Cellar and Cold Room equipment
- Cocktails and Wines/Service of Wine
- Use of specialised equipment i.e. Cash Register, EPOS, Glass Washer
- Hygiene and safety procedures

Award

Certificate in Bar Operations

Please note: Delivery of this programme is subject to sufficient number of applicants.

SCHOOL OF BUILDING, CIVIL AND ENVIRONMENTAL ENGINEERING

Head of School
Dr Joseph R. Harrington

The School consists of the following Departments:
Department of Civil, Structural and Environmental Engineering
Department of Construction
Department of Architecture

Head of Department of Civil, Structural & Environmental Engineering
Desmond J. Walsh

Head of Department of Construction
Dr Daniel Cahill

Head of Department of Architecture
Katherine Keane

Department Secretary
Mary Crowley
T: 021 432 6203
E: mary.crowley@cit.ie

COURSES

- MEng in Structural Engineering (Taught) (NFQ Level 9)
- MEng in Civil Engineering (Environment and Energy) (Taught) (NFQ Level 9)
- Certificate in Environmental and Energy Engineering (NFQ Level 8)
- Bachelor of Engineering in Civil Engineering (NFQ Level 7)
- Higher Certificate in Civil Engineering (NFQ Level 6)
- The Institution of Structural Engineers – preparation for Chartered Membership examination
- Introduction to Eurocodes – single subject certification
- Practical Land Surveying – single subject certification
- Digital Land Surveying and GPS – single subject certification
- Building Regulatory Engineering – single subject certification
- Bachelor of Science in Construction Management (NFQ Level 7)
- Higher Certificate in Construction (NFQ Level 6)
- Bachelor of Science in Quantity Surveying (NFQ Level 7)

DEPARTMENT OF CIVIL, STRUCTURAL & ENVIRONMENTAL ENGINEERING

Civil Engineering deals with one of the most visible signs of change and progress around us, the construction and development of buildings and infrastructure. New infrastructure and buildings are required for the public and private sectors: older buildings and existing facilities are redeveloped and renewed. Utilities for water supply, waste treatment and infrastructural developments require the skills Civil Engineers. Civil Engineers are required to plan, design, construct and maintain these facilities.

The Civil Engineering profession is a broad based discipline, closely associated with public works and the construction industry. Opportunities vary in scope and location and may be office based, site-based or a combination of both.

Further information on the profession may be obtained from the following:
Engineers Ireland W: http://www.engineersireland.ie
The Institution of Structural Engineers W: http://www.istructe.org
Institution of Civil Engineers W: http://www.ice.org.uk

COURSES

- **MEng in Structural Engineering** (Level 9)
- **MEng in Civil Engineering (Environment and Energy)** (Level 9)
  Both taught Master of Engineering programmes are available to those who hold a minimum of a Second Class Honours Grade 2 in a professionally accredited Level 8 Engineering (shared delivery with full-time students)
- **Certificate in Environmental and Energy Engineering** (Level 8) – a part-time programme providing an opportunity for engineering degree graduates (Level 7 or 8) to acquire advanced skills and knowledge in the specific disciplines of Environmental and Energy Engineering (shared delivery with full-time students).
- **Bachelor of Engineering in Civil Engineering** (Level 7)
- **Higher Certificate in Civil Engineering** (Level 6)
- **The Institution of Structural Engineers** – preparation for Chartered Membership examination

Subject to demand, the Department periodically offer the following CPD single subject certification short courses:
- **Introduction to Eurocodes** – single subject certification
- **Practical Land Surveying** – single subject certification
- **Digital Land Surveying and GPS** – single subject certification
- **Building Regulatory Engineering** – single subject certification

In Brief

MEng in Structural Engineering (Level 9)
MEng in Civil Engineering (Environment and Energy) (Level 9)

The taught Master of Engineering programmes are designed to:

- deepen the postgraduate student's technical knowledge, skills and competences in the field of specialisation;
- develop an ability to carry out in depth research in a chosen field of Engineering, to draw conclusions from the research and present research findings;
- broaden knowledge in other areas such as Sustainability, Management, and Business. Additionally, the MEng in Structural Engineering programme will provide preparation for the Institute of Structural Engineers Professional Practice Examinations by developing structural analysis and design skills.

Certificate in Environmental and Energy Engineering (Level 8)

This programme is designed to:

- deepen the student's technical knowledge, skills and competences in the fields of Environmental and Energy Engineering;
- develop the student's ability to appraise and critically evaluate Environmental and Energy Engineering practices;
- Extend existing educational qualifications and enhance employment opportunities.

BEng in Civil Engineering (Level 7)

The Bachelor of Engineering (Ordinary) Degree is the traditional academic qualification for Higher Technician entry to the civil engineering profession.**

Career Opportunities

Graduates at Ordinary Degree level may find employment in consulting engineering offices, local authorities and with building and civil engineering contractors. Such opportunities exist both at home and abroad. Graduates are likely to work in conjunction with architects, quantity surveyors, builders and also with personnel from other engineering disciplines. The course also provides a basis for suitably qualified graduates who are interested in pursuing more advanced studies.

Higher Certificate in Civil Engineering (Level 6)

The Higher Certificate is the traditional academic qualification for Technician level entry to the civil engineering profession.**

Career Opportunities

Graduates may find employment in local authorities, consulting engineering offices and with building and civil engineering contractors in related areas. The initial employment of a civil engineering technician may involve surveying or setting out, manual or computer aided draughting, sampling and testing materials and site supervision. The course provides a basis for suitably qualified students to progress to Degree studies.

** For further information on entry standards to the Civil Engineering profession please refer to the Engineers Ireland website at www.engineersireland.ie

All courses offered are subject to demand and places may be limited.

In Brief

The Institution of Structural Engineers

A short course facilitating preparation for the examinations of The Institution of Structural Engineers (http://www.istructe.org)

Introduction to Eurocodes

- **single subject certification at intermediate level**
  A CPD course, comprising a series of practical lectures, intended to familiarise Civil / Structural Engineering graduates (Level 7 or Level8) with the requirements of the Eurocodes in relation to Structural Engineering design.

Practical Land Surveying

- **single subject certification at intermediate level**
  A CPD course for those who have certified competence in Land surveying, linear surveying and levelling or equivalent**.**

Digital Land Surveying and GPS

- **single subject certification at intermediate level**
  A CPD course for those who have certified competence in Practical Land Surveying or equivalent.

Building Regulatory Engineering

- **single subject certification at advanced level**
  A CPD course for those who have a minimum of a Level 7 degree in Civil/ Structural Engineering or other cognate discipline**.**

All courses offered are subject to demand and places may be limited.

MEng in Structural Engineering
MEng in Civil Engineering (Environment and Energy)

ENQUIRIES

Civil Engineering
(Environment and Energy)
Leonard O'Driscoll
Chartered Engineer
T: 021 432 6563
E: leonard.odriscoll@cit.ie

Structural Engineering:
John Justin Murphy
Chartered Engineer
T: 021 432 6741
E: john.justinmurphy@cit.ie

Des Walsh
Chartered Engineer
T: 021 432 6765
E: des.walsh@cit.ie

COURSE CODE

CR_CSTRU_9
CR_CENEN_9

The total Course fee in 2011/12 was €5,000.
For current course fee information please contact the CIT Admissions Office.

The Department offers two taught MEng programmes specialising in the fields of
(i) Structural or
(ii) Civil Engineering (Environment and Energy).

Entry Requirements

Applicants should hold a minimum of a Second Class Honours Grade 2 in a professionally accredited Level 8 Honours Degree programme in Civil or Structural Engineering. Equivalent recognition may be given through the Recognition of Prior learning (RPL) process on an individual case-by-case basis to candidates who have not achieved this academic standard but who can demonstrate significant relevant professional experience in the discipline of Structural Engineering or Civil/Environmental/Energy Engineering for the respective programmes.

Aim:

The taught Master of Engineering programmes are designed to:

- deepen the postgraduate student's technical knowledge, skills and competences in the field of specialisation;
- develop an ability to carry out in depth research in a chosen field of Engineering, to draw conclusions from the research and present research findings;
- broaden knowledge in other areas such as Sustainability, Management, and Business. Additionally, the MEng in Structural Engineering programme will provide preparation for the Institute of Structural Engineers Professional Practice Examinations by developing structural analysis and design skills.

Course Structure

The courses are offered to part-time students under the ACCS scheme. The accumulation of sufficient credits for the award of the MEng is expected to involve two to three years part-time study. Part-time students will be required to attend shared delivery with full-time students on at least one day per week.

Module Information

http://modules.cit.ie
CIT has developed a website which gives full details of all modules for all courses. The website also has information on recommended textbooks, average weekly workload, assessments and exams.

Certificate in Environmental and Energy Engineering

COURSE CODE

CR_EENEN_8

ENQUIRIES

Des Walsh
Chartered Engineer
T: 021 432 6765
E: des.walsh@cit.ie

Denise Barnett
Chartered Engineer
T: 021 432 6766
E: denise.barnett@cit.ie

Dr Niamh Power
T: 021 433 5959
E: niamh.power@cit.ie

The Course Fee payable in 2011/12 was circa €2,225.
For current course fee information please contact the CIT Admissions Office

One academic year, requiring attendance on Tuesdays and Thursdays in both semesters or two academic years with attendance on one day per week.

Environmental & Energy Engineering is the application of scientific and engineering principles to activities which protect, enhance and improve the environment. Energy engineering focuses on hydrology, water resource management, and water and wastewater treatment design. Energy Engineering focuses on wind, wave, tidal, biomass and energy sustainability issues. Energy Engineering and its inextricable relationship to
the environment is an increasingly important aspect of global sustainability.

Entry Requirements

Applicants should hold a minimum of a Level 7 or Level 8 engineering qualification, preferably in Civil Engineering or a cognate discipline. Equivalent recognition may be given through the Recognition of Prior learning (RPL) process on an individual case-by-case basis to candidates who have not achieved this academic standard but who can demonstrate significant relevant professional experience in the disciplineof Environmental and Energy Engineering.

Aim

The Certificate in Environmental & Energy Engineering programme aims to provide an opportunity for engineering degree graduates to acquire advanced skills and knowledge in the specific disciplines of Environmental & Energy Engineering thus enhancing their employment prospects.

The programme covers both the theoretical background and the practical considerations of Environmental & Energy Engineering practices. The content seeks to reflect current and future practice in a broad range of areas including water, wastewater, wind, biomass and ocean energy. It aims to provide the graduate with high level design skills in the environmental and energy areas. The elective options afford the opportunity for the development of skills and competences in areas of the graduate's choosing The programme is targeted at engineering graduates wishing to up-skill in the environmental and sustainable energy areas.

The Student Experience

The learning experience involves a variety of modes, including classroom based lectures, individual and group project work and tutorials. The flexibility in relation to elective choices facilitates a learner centred approach, allowing the learner to direct the focus of his/her own programme of study.

Further Studies

Having successfully completed this programme the student may have the opportunity to progress to a Level 8 BEng (Hons) programme or a Level 9 MEng programme within the Faculty. Such opportunities will be dependent on previous qualifications, experience and programme specific entry requirements. Alternatively, suitable qualified graduates may proceed to a programme of research leading to a MEng or PhD award.

Bachelor of Engineering in Civil Engineering

COURSE FEE	ENQUIRIES		COURSE CODE
€200 per module (inc. exam fee)	Des Walsh Chartered Engineer T: 021 432 6765 E: des.walsh@cit.ie	James O'Byrne T: 021 432 6761 E: james.obyrne@cit.ie	CR_CCIVE_7

2 evenings per week, 6 - 10pm.
1 Saturday per month (average), 9am - 1pm or 2pm - 6pm.

The course is offered on a two year cycle basis. Please note that intake to this course does not occur on an annual basis; the next intake is scheduled for 2013/14.

Entry Requirements

Higher Certificate in Engineering in Civil Engineering (NFQ Level 6). Holders of other relevant qualifications will be considered for admission on an individual basis.

Course Structure

The course is offered under the ACCS scheme. ACCS is an acronym for "Accumulation of Credits and Certification of Modules". This scheme allows students instead of studying an entire course - to study one or more modules of that course. Modules passed, are certified individually, and can be accumulated, leading to an award of a Degree. The accumulation of sufficient credits for the award of the BEng is expected to involve a minimum of two years part-time study and the course modules are offered on that basis.

Module Information

http://modules.cit.ie
CIT has developed a website which gives full details of all modules for all courses. The website also has information on recommended textbooks, average weekly workload, assessments and exams.

Course Content

Module topics include
Mathematics, Structural Analysis, Structural Design (Concrete, Masonry, Steel, Timber), Soil Mechanics & Geology, Geotechnical Engineering, Research Project. Elective modules may be offered in Highway Engineering, Civil Engineering Construction Management, Environmental Engineering.

Further Studies

BEng (Ord.) graduates may be eligible to apply for Honours Civil and Structural Engineering Degree courses (NFQ Level 8). The Engineers Ireland Graduate Diploma is also a possible route of progression to full membership of Engineers Ireland for those holding the appropriate minimum entry requirements.

Award

Bachelor of Engineering in Civil Engineering (NFQ Level 7)

Higher Certificate in Engineering in Civil Engineering

COURSE CODE	COURSE FEE	ENQUIRIES	
CR_CCIVE_6	€200 per module (inc. exam fee)	Des Walsh Chartered Engineer T: 021 432 6765 E: des.walsh@cit.ie	James O'Byrne T: 021 432 6761 E: james.obyrne@cit.ie

2 evenings per week, 6 - 10pm. 1 Saturday per month (average), 9am - 1pm or 2pm - 6pm.

The course is offered on a two year cycle basis. The programme will run subject to sufficient demand.

Entry Requirements

Leaving Certificate Grade D3 (Ordinary Level) in five subjects to include Mathematics and either English or Irish. Special category students (e.g. mature students) will be considered on an individual basis.

Course Programme

http://modules.cit.ie

Stage 1

Module topic areas include Mathematics, Applied Mechanics, Engineering Science, Linear Surveying & Levelling, Engineering Graphics & CAD, and Construction.

Stage 2

Module topic areas include Mathematics, Civil Engineering Materials, Structural Design & Detailing, Structural Engineering, Land Surveying, Water Engineering, Civil Engineering Construction & Management, and Professional Studies.

Course Structure

The course is offered under the ACCS scheme. The accumulation of sufficient credits for the award of the Higher Certificate is expected to involve an average of three years part-time study and the course modules are offered on that basis as follows:

CCIVE_6 Year 1

Modules from Stage 1:
Topics typically include Mathematics, Engineering Science, Engineering CAD, Land Surveying, and Construction.

CCIVE_6 Year 2

Modules from Stage 1 and modules from Stage 2:
Topics typically include Applied Mechanics (Stage 1), Mathematics, Civil Engineering Materials, Land Surveying, Structural Detailing, Civil Engineering Construction & Management, and Professional Studies (Stage 2).

CCIVE_6 Year 3

Modules from Stage 2:
Topics typically include Land Surveying, Structural Engineering, Structural Design, and Water Engineering.

Award

Higher Certificate in Engineering in Civil Engineering (NFQ Level 6).

Further Studies at CIT

Higher Certificate graduates are eligible to apply for the BEng in Civil Engineering (NFQ Level 7).

COURSE FEE	ENQUIRIES	COURSE CODE
CIT fee: €600 (Additional fee may be payable to The Institution of Structural Engineers)	John Justin Murphy Chartered Engineer T: 021 432 6741 E: john.justinmurphy@cit.ie	CR_CISTE_9

10 sessions, every second Monday from 7pm – 10pm.

Courses of study for the examinations of the Institution of Structural Engineers, subject to demand. The proposed course will be targeted primarily at the Examinations. However, it will be open to those who do not wish to sit these but who would like to improve and advance their knowledge of Structural Engineering.

Note: In order to sit the Examinations it is necessary to be enrolled with the Institution in the appropriate grade of membership. Contact the Institution of Structural Engineers for full details (www.istructe.org.uk).

Introduction to Eurocodes

COURSE FEE	ENQUIRIES	COURSE CODE
€500	John Justin Murphy Chartered Engineer T: 021 432 6741 E: john.justinmurphy@cit.ie	CR_CEURO_8

The course is based on the Module Descriptor CIVL8025 Structural Design to Eurocodes. The full Module Descriptor may be viewed at http://modules.cit.ie

The course is likely to run over an eight week period, 6pm-10pm each evening.

This is a short course, comprising a series of practical lectures, intended to familiarise graduates with the requirements of the Eurocodes in relation to Structural Engineering design.

The course is appropriate for holders of a Level 7 or higher qualification in Civil and/or Structural Engineering.

Indicative Course Content

Introduction/Overview of Design
Structural Steel Design
Reinforced Concrete Design
Timber & Masonry Design

Award

Single Module Certification (5 credits at advanced level).

Practical Land Surveying

COURSE CODE	COURSE FEE	ENQUIRIES	
CR_CSURV_7_Y1	€500	Des Walsh Chartered Engineer T: 021 432 6765 E: des.walsh@cit.ie	James O'Byrne T: 021 432 6761 E: james.obyrne@cit.ie

The course is based on the Module Descriptor CIVL7025 Practical Land Surveying.
The full Module Descriptor may be viewed at http://modules.cit.ie

This is a short CPD course for those who have certified competence in Land surveying, linear surveying and leveling. It is particularly suited to construction personnel who are involved with the organisation of surveying and setting out on construction sites.

It is likely that the course will be offered over a number of days, including Saturdays, during the first semester. Exact timetable arrangements remain to be finalised. Typically, the hours may be 6pm-9pm Friday evenings and 9am-4pm Saturdays for a total of four weekends. Information updates may be obtained by contacting the Department of Civil, Structural & Environmental Engineering.

The successful completion of the course will lead to CIT single module certification in Practical Land Surveying (5 credits at intermediate level).

Having completed this subject, an individual would expect to be able to:

- Organise resources, record and process survey data using specialised equipment (eg Total Station, GPS,Digital Level)
- Use computer applications to process and manipulate survey data
- Use specialised equipment (e.g. Total Station, GPS, Digital Level) to set out construction works
- Process and present in an appropriate format the outcomes of survey or setting out exercises
- Work as the leader in a team carrying our surveying exercises

Course Content

Electromagnetic Distance Measurement
Construction and use of equipment. Sources of error and accuracy. Checking adjustment. Field procedures.

Total Stations
Data capture. Setup data. Feature codes, strings and digital ground modelling. Coordinate systems. Software and hardware requirements.

Setting out
Accuracy specification. Stages in setting out. Generation of setting out data. Methods of marking and referencing.

Data Processing
Data formats. Software systems. Digital Terrain Modelling. Data presentation, plans, sections and models. Calculation of volumes.

Global Positioning Systems
Introduction to practical Applications of Global Positioning Systems. Principles of operation. Space, control and user segments. Differential GPS.

Award

Single Module Certification
(5 credits at intermediate level)

Digital Land Surveying and GPS

COURSE FEE	ENQUIRIES		COURSE CODE
€500	Des Walsh, Chartered Engineer T: 021 432 6765 E: des.walsh@cit.ie	James O'Byrne T: 021 432 6761 E: james.obyrne@cit.ie	CR_CSURV_7_Y2

The course is based on the Module Descriptor CIVL7005 Digital Land Surveying and GPS. The full Module Descriptor may be viewed at http://modules.cit.ie

This is a short CPD course for those who have certified competence in Practical Land Surveying. It is particularly suited to construction personnel who are involved with the organisation of surveying and setting out on construction sites.

It is likely that the course will be offered over a number of days, including Saturdays, during the first semester. Exact timetable arrangements remain to be finalised however typically the hours may be 6pm-9pm Friday evenings and 9am-4pm Saturdays for a total of four weekends. Information updates may be obtained by contact the Department of Civil, Structural & Environmental Engineering.

The successful completion of the course will lead to CIT single module certification in Digital Land Surveying and GPS (5 credits at advanced level).

Having completed this subject, an individual would expect to be able to:

- establish survey control of determined accuracy using GPS equipment and OSI reference
- compute setting out data from survey and design information
- manipulate field survey data and incorporate design data using specialised software
- critically evaluate the use of advanced positioning instrumentation for setting out.

Course Content

Ordnance Survey
Coordinate systems: Irish National Grid, Irish Transverse Mercator. Heights & Elevations, Geoid Models, Site Adjustments. OSI services.

Global Positioning Systems
Fundamentals of operation for surveying. Correction and sources of error. Radio regulations. Real time kinematic (RTK), Static and Faststatic operation. Field techniques, RTK and Setting Out.

Data Processing
Data capture. Setup data. Feature codes, strings and digital ground modelling. Software and hardware requirements. Data formats. Software systems. Data transfer, Real time and Post processing systems. Adjustments, data export and reports.

Setting Out
Principles of setting out. Coordinate positioning, total stations and GPS. Controlling verticality. Laser instruments. Machine Control. Quality assurance and accuracy.

Award

Single Module Certification (5 credits at advanced level)

Building Regulatory Engineering

COURSE CODE	COURSE FEE	ENQUIRIES	
CR_CBREG_8	€500	Des Walsh Chartered Engineer T: 021 432 6765 E: des.walsh@cit.ie	Andrew Macilwriath T: 021 432 6203 E: andrew.macilwriath@cit.ie

The course is based on the Module Descriptor CIVL8004 Building Regulatory Engineering.
The full Module Descriptor may be viewed at http://modules.cit.ie

This course addresses many of the key areas of the building regulations, and pays particular attention to the preparation of Fire Safety Certificate applications, together with the recently introduced Disability Access Certificate applications. The lecturer on this course has worked in the area of Fire & Building Control for many years.

The course will be offered over a number of days, including Saturdays. Typically, the hours will be 6pm-9pm Friday evenings and 9am-4pm Saturdays for a total of four weekends. Information updates may be obtained by contacting the Department of Civil, Structural & Environmental Engineering.

The successful completion of the course will lead to CIT single module certification in Building Regulatory Engineering (5 credits at advanced level).

Award

Single Module Certification (5 credits at advanced level)

DEPARTMENT OF CONSTRUCTION

COURSES

- Higher Certificate in Construction
- Bachelor of Science in Construction Management
- Bachelor of Science in Quantity Surveying

The Construction Manager has overall responsibility for the organisation and profitability of a construction project. Construction Managers monitor the progress, cost and quality of the work and supervise and coordinate subcontractors and specialist suppliers.

A number of different terms are used to describe the construction manager's role. These include site manager, site agent, project manager, contracts manager and building manager. Managers of construction projects are also responsible for ensuring that the required materials and plant are available on site and for ensuring that all health and safety obligations are met.

The Quantity Surveyor/Commercial Manager is also known as a Building Economist or Construction Cost Consultant, and undertakes a wide and varied range of work. It includes, the preparation of cost plans and tender documents, advising on the selection of contractors, checking the progress of the work on site and calculating interim payments due to contractors. The advice of the Quantity Surveyor/ Commercial Manager enables the design and construction of the project to be controlled within predetermined expenditure limits. The Quantity Surveyor/ Commercial Manager is also responsible for the measurement and valuation of variations in the construction work during the contract and for the preparation and agreement of the final account.

Career Opportunities

These courses qualify the graduate for a wide range of employment opportunities within the construction sector. Recent graduates have found employment with Local Authorities, Quantity Surveyors, Building Contractors, Sub-contractors and Builders Suppliers.

At Higher Certificate Level

Graduates can be involved in a range of construction activities including: producing working drawings; surveying and setting out; organising and supervising plant and equipment use on site; testing of construction materials; supervising the work of subcontractors and craft operatives; estimating the cost of materials and work completed and liaising with suppliers.

At Ordinary Bachelor Degree Level

The course qualifies graduates for a range of employment opportunities across the entire spectrum of the construction industry. The principal areas of employment are Quantity Surveying practices, Surveying & Estimating Departments of major contractors and Construction Management positions in the Construction Sector.

Higher Certificate in Science in Construction

COURSE CODE	COURSE FEE	ENQUIRIES
CR_CCONE_6	€200 per module (inc. exam fee	Mary Crowley T: 021 432 6203 E: mary.crowley@cit.ie

2 evenings per week 6pm –10pm, depending on modules.

Entry Requirements

Leaving Certificate Grade D3 (Ordinary level) in five subjects to include Mathematics and either English or Irish. Special category applicants (e.g. mature students) will be considered on an individual basis.

Course Structure

This course is offered under the ACCS Scheme. ACCS is an acronym for "Accumulation of Credits and Certification of Modules". This scheme allows students instead of studying the entire course - to study one or more modules of the course. Modules passed, are certified individually, and can be accumulated, leading to an award of the Higher Certificate in Science in Construction. The modules to be offered in any year will be decided in consultation with the students. The accumulation of sufficient credits for the award currently involves an average of three years study for the Higher Certificate in Construction.

Module Information

http://modules.cit.ie
CIT has developed a website which gives full details of all modules for all courses. The website also has information on recommended textbooks, average weekly workload, assessments and exams.

Course Content

Among the areas you would be required to study are:

Stage 1
Construction Technology, Building & Environmental, Measurement and Procedures, Organisation and Management, Construction Mathematics, Construction Graphics and Communications, Construction Industry and Procedures, and Materials and Structures.

Stage 2
Construction Technology, Building and Environmental, Measurement and Estimating, Management, Construction Economics, Construction Law, Cost Planning, and Land Surveying.

Award

Higher Certificate in Construction (NFQ Level 6).

Further Studies at CIT

Qualified students are eligible to apply for the BSc in Quantity Surveying and the BSc in Construction Management.

Bachelor of Science in Construction Management

COURSE FEE	ENQUIRIES	COURSE CODE
€200 per module (inc. exam fee)	Mary Crowley T: 021 432 6203 E: mary.crowley@cit.ie	CR_CCMNE_7

2 evenings per week 6pm –10pm, depending on modules.

Entry Requirements

Higher Certificate in Construction. Holders of other relevant qualifications will be considered for admission on an individual basis.

Course Structure

This course is offered under the ACCS Scheme. ACCS is an acronym for "Accumulation of Credits and Certification of Modules". This scheme allows students instead of studying the entire course - to study one or more modules of the course. Modules passed, are certified individually, and can be accumulated, leading to an award of the Bachelor of Science in Construction Management. The modules to be offered in any year will be decided in consultation with the students. The accumulation of sufficient credits for the award currently involves an average of two years study for the Bachelor of Science in Construction Management.

Module Information

http://modules.cit.ie
CIT has developed a website which gives full details of all modules for all courses. The website also has information on recommended textbooks, average weekly workload, assessments and exams.

Course Content

Among the areas you would be required to study are:

Stage 3
Construction Technology, Management, Development Economics, Construction Finance, Construction Procurement, Construction Contracts, Building and Land Surveying, and Construction Resource.

Award

Bachelor of Science in Construction Management (NFQ Level 7).

Bachelor of Science in Quantity Surveying

COURSE CODE	COURSE FEE	ENQUIRIES
CR_CCECE_7	€200 per module (inc. exam fee)	Mary Crowley T: 021 432 6203 E: mary.crowley@cit.ie

2 evenings per week 6pm –10pm, depending on modules.

Entry Requirements

Higher Certificate in Construction. Holders of other relevant qualifications will be considered for admission on an individual basis.

Course Structure

This course is offered under the ACCS Scheme. ACCS is an acronym for “Accumulation of Credits and Certification of Modules”. This scheme allows students instead of studying the entire course - to study one or more modules of the course. Modules passed, are certified individually, and can be accumulated, leading to an award of the Bachelor of Science in Quantity Surveying. The modules to be offered in any year will be decided in consultation with the students. The accumulation of sufficient credits for the award currently involves an average of two years study for the Bachelor of Science in Quantity Surveying.

Module Information

http://modules.cit.ie
CIT has developed a website which gives full details of all modules for all courses. The website also has information on recommended textbooks, average weekly workload, assessments and exams.

Course Content

Among the areas you would be required to study are:

Stage 3
Construction Technology, Measurement, Cost Planning, Development Economics, Construction Procurement, Construction Contracts, Construction Finance, and a Project.

Award

Bachelor of Science in Quantity Surveying (NFQ Level 7).

SCHOOL OF MECHANICAL, ELECTRICAL AND PROCESS ENGINEERING

Head of School
Matt Cotterell

The School consists of the following Departments:
Department of Mechanical, Biomedical and Manufacturing Engineering which includes the Centre for Advanced Manufacturing and Management Systems (CAMMS)
Department of Electrical and Electronic Engineering
Department of Process, Energy and Transport Engineering
Centre of Craft Studies

DEPARTMENT OF MECHANICAL, BIOMEDICAL AND MANUFACTURING ENGINEERING

Head of Department
Daithí Fallon

Department Secretary
Deirdre Burke
T: 021 432 6505
E: deirdre.burke@cit.ie

COURSES

- Master of Engineering in Mechanical Engineering
- Bachelor of Engineering in Mechanical Engineering (Stage 3)
- Mechanical Engineering Science
- Certificate in 3D CAD and Solid Modelling

Centre for Advanced Manufacturing and Management Systems (CAMMS)
See Page 62

Master of Engineering in Mechanical Engineering

COURSE CODE	COURSE FEE	ENQUIRIES
CR_EMECH_9	Course Fee To be advised	Dr Michael J. O'Mahony T: 021 433 5943 E: michael.jomahony@cit.ie

This is a 90 credit Level 9 taught programme comprising 8 mandatory modules, two free choice 5 credit modules and two project modules (totalling 15 credits).

This programme aims to develop advanced analytical, design and research skills in Mechanical Engineering. Graduates of this programme will be well equipped to meet the challenges of modern industry. The programme balances coverage of underpinning theory and practical design considerations.

The content seeks to reflect current and likely future practice in mechanical analysis, design, design appraisal, experimental techniques and the use of computational tools. It aims to provide the graduate with the advanced conceptual understanding, detailed factual knowledge, and specialist technical skills that are required for success in Mechanical Engineering.

Entry Requirements

Applicants must have achieved a minimum of Second Class Honours in a Level 8 Honours Bachelor Programme in Mechanical Engineering (fully accredited by Engineers Ireland), or equivalent.

Module Information

http://modules.cit.ie
CIT has developed a website which gives full details of all modules for all courses. The website also has information on recommended textbooks, average weekly workload, assessments and exams.

Duration.

It is envisaged that students could complete the programme over 3 years on a part-time basis.

Bachelor of Engineering in Mechanical Engineering (Stage 3)

COURSE FEE	ENQUIRIES	COURSE CODE
€540 per 5 credit module (inc. exam fee)	Tony Kelly T: 021 433 5436 E: tony.kelly@cit.ie	CR_EMECN_7

Three evenings per week per academic year (to be arranged)

This is a 60 credits of the Level 7 degree course, equating to Stage 3 in the full-time programme. It comprises 8 mandatory modules, one free choice 5 credit module and two project modules (totalling 15 credits) It is envisaged that students could complete the programme over 3 years on a part-time basis.

Entry Requirements

Higher Certificate in Mechanical Engineering (NFQ Level 6) or equivalent.

Module Information

http://modules.cit.ie
CIT has developed a website which gives full details of all modules for all courses. The website also has information on recommended textbooks, average weekly workload, assessments and exams.

Course Programme

The following four modules are being offered in 2012/13 academic year:

Semester 1
Modules (September to December 2012)
Technological Mathematics 301 MATH7020
Mechatronics 3 MECH7014

Semester 2
Modules (January to May 2013)
Technological Mathematics 302 STAT7003
Thermofluids 3 INTR7009

Mechanical Engineering Science

COURSE CODE	COURSE FEE	ENQUIRIES
To be advised	€1,200 for the academic year (incl. exam fee)	Dan O'Brien T: 021 433 5425 E: dan.obrien@cit.ie

One evening per week per academic year (to be arranged)

This course provides candidates with the necessary mechanical engineering science knowledge to progress to degree level studies in mechanical engineering on a part time or full time basis.

Entry Requirements

Applicants should have a recognised craft/technician qualification in Mechanical Engineering (or cognate discipline).

Module Information

http://modules.cit.ie
CIT has developed a website which gives full details of all modules for all courses. The website also has information on recommended textbooks, average weekly workload, assessments and exams.

Course Programme

Semester 1
Mechanical Science (Statics, Stress and Strain) MECH 6035
Technological Mathematics101 MATH6012

Semester 2
Mechanical Science (Dynamics and Fluids) MECH 6036
Technological Mathematics201 MATH6040

Awarding Body

Cork Institute of Technology

Certificate in 3D CAD and Solid Modelling

COURSE FEE	ENQUIRIES	COURSE CODE
€840 for the academic year (incl exam fee)	Denis Healy T: 021 433 5436 E: denis.healy@cit.ie	CR_E3DDA_6

One evening per week per academic year (to be arranged

This is a general course suited to those with a background in engineering. It is offered on a part-time basis and requires attendance of one evening per week for the academic year.

Entry Requirements

The applicant should be competent in two-dimensional CAD.

Course Programme

http://modules.cit.ie
CIT has developed a website which gives full details of all modules for all courses. The website also has information on recommended textbooks, average weekly workload, assessments and exams.

Course Structure

This programme consists of two modules:

Semester 1
Three Dimensional Design using AutoCAD MECH6041

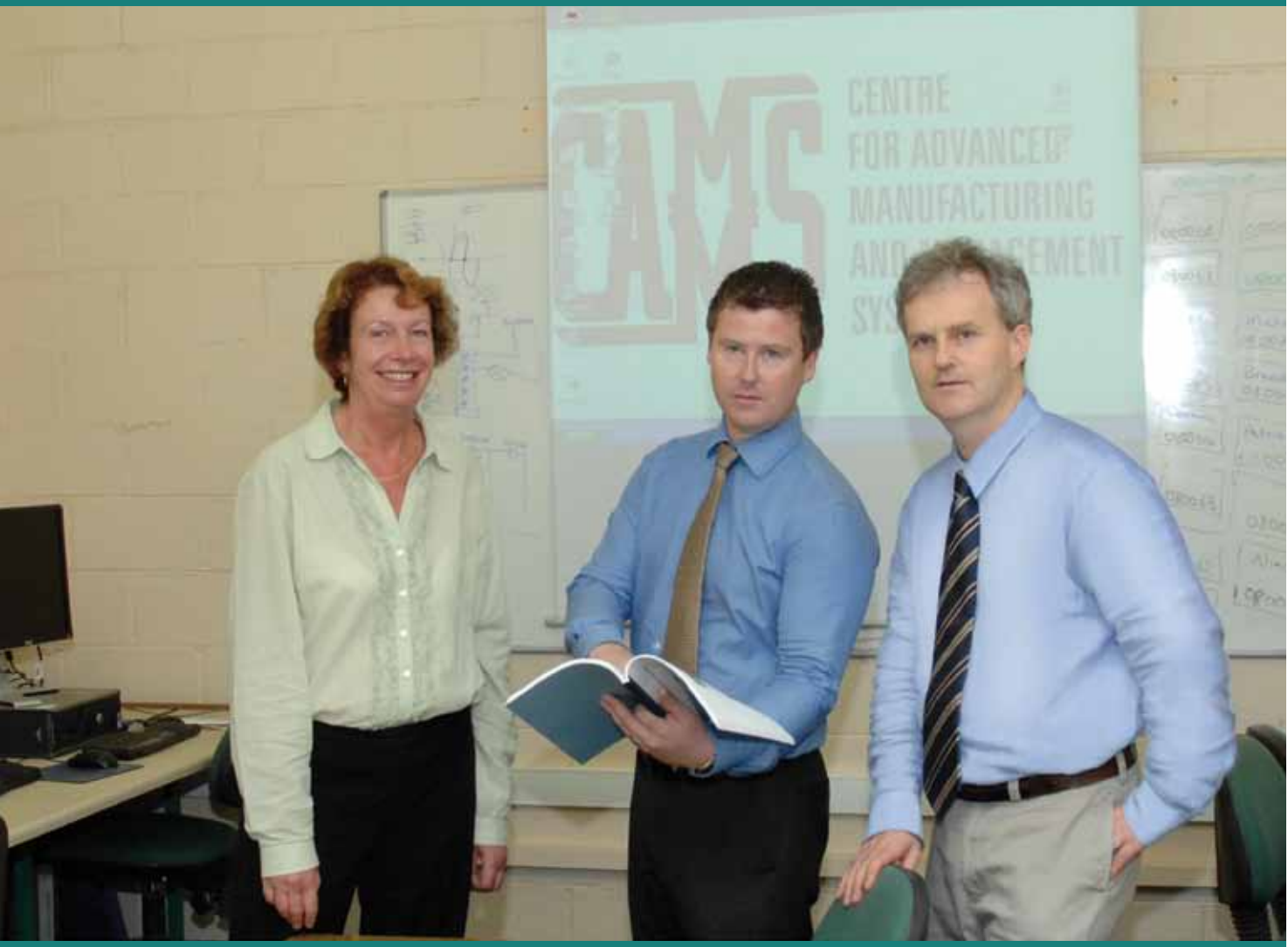
Semester 2
Introductory 3D Parametric Modelling MECH6040

Awarding Body

Cork Institute of Technology

Centre for Advanced
Manufacturing &
Management Systems

CENTRE FOR ADVANCED MANUFACTURING AND MANAGEMENT SYSTEMS



Centre for Advanced Manufacturing & Management Systems

T: 021 432 6264 | F: 021 454 6468
E: camms@cit.ie | www.camms.ie

CAMMS Manager
Paul Keane
CAMMS Director
Daithí Fallon
CAMMS Student Advisor
Michele Kiely

Centre for Advanced Manufacturing & Management Systems

CAMMS is attached to the Department of Mechanical, Biomedical and Manufacturing Engineering at CIT. The Centre uses the design, build, test and validate expertise of the Department in solving problems for industry and in delivering up to date training and education. Certifications available include American Society for Quality, Society of Manufacturing Engineers, and City and Guilds.

CAMMS is currently developing thematic knowledge areas that reflect the strengths of the Faculty.

Themes include:

- Quality
- Project Management
- Control & Automation
- Manufacturing Engineering
- Biomedical Engineering
- Sustainable Technology

The Centre is an Associate Member of the International Institution for Production Engineering Research (CIRP) and a recognised Training Provider for Continuing Professional Development (CPD) to Engineers Ireland.

Tailored courses can be delivered at place of work or at CIT.

Centre for Advanced Manufacturing & Management Systems

Courses

5.1 Continuous Improvement for Production Teams (company based training)
5.2 American Society for Quality Certification Programmes (ASQ)
- Certified Quality Technician (CQT)
- Certified Quality Engineer (CQE)

5.3 Lean and Six Sigma Programmes
5.3.1 1 Introduction to Lean & Six Sigma
5.3.2 Lean Practitioner
5.3.3 Lean Six Sigma Green Belt
5.3.4 Lean Six Sigma Black Belt (Diploma in Six Sigma)
5.4 Project Management Programmes
5.4.1 Diploma in Project Management: Special Purpose Award, Advanced
5.4.2 Project Management Techniques
5.5 Automation and Control Systems Programmes
5.5.1 Automation & Control Systems: Special Purpose Award, Intermediate
- Mechatronics
- SCADA and Automation Systems
- Robotics

5.6 Society of Manufacturing Engineers Certification Programmes (SME)
5.6.1 Certified Manufacturing Technologist (CMfgT)
5.6.2 Certified Manufacturing Engineer (CMfgE)
5.7 Sustainable Energy Programmes
5.7.1 Building Energy Rating (BER) Assessor Training
- BER Domestic Dwellings
- BER Commercial Buildings

5.7.2 Sustainable Energy: Special Purpose Award, Fundamental
- Introduction to Sustainable Energy Systems
- Wind Energy

5.7.3 Sustainable Energy: Special Purpose Award, Intermediate
- Energy Management
- Solar and Geothermal Energy
- Introduction to Wave Energy

5.7.4 Advanced Wind Energy
5.8 Certificate in Safety and Health at Work
5.9 Biomedical Engineering Programmes
5.9.1 Introduction to Biomedical Devices
5.9.2 Anatomy of Biomechanics
6 Bachelor of Science Degrees
6.1 Bachelor of Science (Honours) in Process Plant Technology
6.2 Bachelor of Science (Honours) in Advanced Manufacturing Technology Courses

5.1 Continuous Improvement for Production Teams

(Company based training)

COURSE CODE	COURSE FEE	ENQUIRIES
CR_ECIPT_X	Price will vary on specific company needs.	T: 021 432 6264 E: camms@cit.ie W: www.camms.ie

2 to 4 days delivery, 4 to 6 weeks mentoring.

Centre for Advanced Manufacturing & Management Systems

Continuous improvement is an on-going effort to improve products, services or processes. These efforts can seek "incremental" improvement over time or "breakthrough" improvement all at once. Continuous improvement for production teams involves company based training, concentrating on the forming and development of teams, selecting projects and then mentoring the operators and facilitators to the completion of these projects.

Course Content

In general, the course content and delivery is tailored to suit the company's needs. The course content is a combination of delivered lecture material and actual project focused work. Participants will be introduced to continuous improvement practice using basic quality analysis tools and apply them in a team environment on company targeted improvement areas. The sessions will include:

Team members and Facilitators

- Quality Concepts and Basic Quality Tools
- Small Team project management process
- Project focused work

Facilitators Only

- Mentoring and Facilitation techniques for facilitators

Having completed the course, candidates will be able to apply quality tools and to interpret information and data. In addition, they should be able to apply team concepts both as a member and leader. The Facilitators should be able to understand their role in the process and experience being a facilitator on a given project.

Duration

2 to 4 days delivery, 4 to 6 weeks mentoring.

Certification

Centre for Advanced Manufacturing and Management Systems(CAMMS), CIT.

HETAC credits are available for many CAMMS courses. Please contact CAMMS directly for more details.

5.2 American Society for Quality Certification Programmes (ASQ)

COURSE FEE	ENQUIRIES	COURSE CODE
€1100 – CQT* €1250 – CQE (*Primer included in course fee. ASQ exam fee not included)	T: 021 432 6264 E: camms@cit.ie W: www.camms.ie	CR_ECQTE_6 CR_ECQEN_6

Centre for Advanced Manufacturing & Management Systems

Apply online at
http://www.cit.ie/course/CR_ECQTE_6andCR_ECQEN_6

Tuesday and Thursday, 7pm - 9pm

The awarding body is the American Society for Quality (ASQ),which has more than 100,000 members worldwide dedicated to the advancement of learning, quality improvement and knowledge exchange.

The Certification programmes on offer are:
Certified Quality Technician (CQT)
Certified Quality Engineer (CQE)

Entry Requirements

A candidate must have relevant experience/education and satisfy the membership requirements of the ASQ. There are separate entry requirements and separate examinations for each certification.

Course Content

Each candidate must pass a multiple-choice examination based on the Body of Knowledge for each certification programme*. Some of the topics included are:

- Probability and Statistics
- Statistical Process Control
- Process Capability
- Design of Experiments
- Metrology, Inspection and Testing
- Quality Planning, Management and Product Liability
- Quality Costs Analysis
- FMEA, Design and Analysis
- Reliability, Maintainability and Product Safety
- Project Management
- Lean Enterprise
- For individual examination entry requirements and Body of Knowledge, see http://www.asq.org/certification/

Duration

Two evenings per week for one academic year.

Awarding Body

American Society for Quality (ASQ)
(Examination fees are payable to the ASQ)

* **External Support funding may be available for this course.**
Please contact CAMMS to enquire.
* **Discounts available for groups of three or more**.

5.3 Lean and Six Sigma Programmes

5.3.1 Introduction to Lean & Six Sigma

COURSE CODE	COURSE FEE	ENQUIRIES
CR_EILSS_X	€400* (includes course notes)	T: 021 432 6264 E: camms@cit.ie W: www.camms.ie

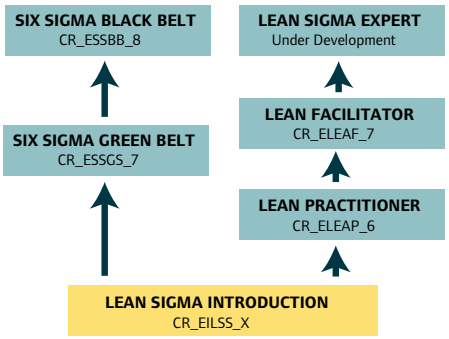
Apply online at
http://www.cit.ie/course/CREILSSX

Centre for Advanced Manufacturing & Management Systems

Duration

2 Day Course
Lean is a generic process management term referring to the identification and steady elimination of waste. It is closely linked with Six Sigma because of the methodology's emphasis on reduction of process variation. Lean Sigma introduces the methods and tools used in both techniques. The course allows participants to select between Lean or Six Sigma, for their own future development and/or as the most appropriate method for their company. Participants have the option of applying for either the Lean Practitioner Programme or the Six Sigma Green Belt Certification Programme.

Note: Introduction to Lean/ Six Sigma is not a pre-requisite to attending the Lean Sigma Practitioner, Lean Six Sigma Green Belt or Lean Six Sigma Black Belt.



Entry Requirements

This programme requires no prior knowledge or experience of Lean or Six Sigma. The programme is suitable for all personnel working within the design, manufacturing, transactional, sales or support environment. It is suitable for management and team leaders through to shop floor personnel and employees directly involved in the process.

Course Content

- Day 1: Introduction to Lean
  Introduce the participants to the background to Lean and introduce the concepts behind reducing waste.
- Day 2: Introduction to Six Sigma
  Explains how Six Sigma targets variation and introduces the concepts.

Certification

Centre for Advanced Manufacturing and Management Systems(CAMMS), CIT

Note: Places are limited for this course. Eligible candidates will be considered on a first come first served basis.

* **External Support funding may be available for this course.**
Please contact CAMMS to enquire.
* **Discounts available for groups of three or more.**

5.3.2 Lean Practitioner

COURSE FEE	ENQUIRIES	COURSE CODE
€1500* (includes course notes and exam fees)	T: 021 432 6264 E: camms@cit.ie W: www.camms.ie	CR_ELEAP_6

Centre for Advanced Manufacturing & Management Systems

Duration: Seven days over three months.

Candidates pursuing the Lean Sigma Practitioner Programme will be capable of applying lean principles and tools to drive improvements and show measurable results. The programme will consist of assessment of theory by examination, as well as assessment of practice by portfolio. The portfolio is based on the achievement of certain project milestones by candidates, as defined by the programme requirements at each level.

Entry Requirements

Candidates must have a total of four years of combined industrial experience, lean experience and academic study

Course Content

- Introduction to Lean principles
- Tools for finding and eliminating waste
- Tools for continuous improvement
- Improving quality, cost, delivery, business and service processes, and business results

Awarding Body

CIT: Five credits at Fundamental Level on National Framework of Qualifications

Note: Places are limited for this course. Eligible candidates will be considered on a first come first served basis.

*** External Support funding may be available for this course. Please contact CAMMS to enquire.**
*** Discounts available for groups of three or more.**

5.3.3 Certificate in Lean Six Sigma Green Belt

Special Purpose Award – Intermediate 10 ECTs Credits

COURSE CODE	COURSE FEE	ENQUIRIES
CR_ESSGS_7	€2055*	T: 021 432 6264 E: camms@cit.ie W: www.camms.ie

Apply online at
http://www.cit.ie/course/CRESSGS7

Centre for Advanced Manufacturing & Management Systems

*8 full days HETAC Awarded Six Sigma Green Belt (includes course notes and HETAC exam fees).

Six Sigma is a very successful methodology for Productivity and Continuous Improvement. It uses a structured approach known as DMAIC (Define, Measure, Analyse, Improve and Control) to reduce variation and improve efficiency. It is being successfully deployed across many sectors and in companies of all sizes in the pharmaceutical, healthcare, medical device, financial and service sectors. This course provides a structured approach to solving problems and putting a sustaining mechanism in place to ensure problems do not re-arise.

Entry Requirements

Candidates should have at least three years experience in a suitable working environment. The course is aimed at all personnel working within the design, manufacturing, transactional, sales or support environment. It is suitable for management and team leaders through to shop floor personnel and employees directly involved in the process.

Duration

Eight full days over three months. Optional two additional days for ASQ preparation.

Course Content

- Introduction to Lean and Six Sigma, DMAIC Methodology
- Facilitating Project Teams
- Defining the Project, Process Mapping
- Variation and Measurement Techniques
- Analysis of Process Data, Introduction to Statistical Tools
- Cause and Effect, FMEA (Failure Mode & Effect Analysis)
- Process Capability using SPC
- Lean Concepts and Tools
- Project Control, Return on Investment, Critical Success Factors

Awarding Body

CIT: Ten credits at Intermediate Level on the National Framework of Qualifications.

Candidates who complete the Six Sigma Green Belt Programme will be eligible to sit the American Society for Quality (ASQ) Six Sigma Green Belt exam. (Examination fees payable to the ASQ).

Note: Places are limited for this course. Eligible candidates will be considered on a first come first served basis.

* **External Support funding may be available for this course.**
  Please contact CAMMS to enquire.
* **Discounts available for groups of three or mo**re.

5.3.4 Diploma in Lean Six Sigma (Six Sigma Black Belt)

Special Purpose Award – Advanced 30 ECTS Credits

COURSE FEE	ENQUIRIES	COURSE CODE
€8,500 (Discounts available for Six Sigma GreenBelt Graduates)	T: 021 432 6264 E: camms@cit.ie W: www.camms.ie	CR_ESSBB_8

Centre for Advanced Manufacturing & Management Systems

Apply online at
http://www.cit.ie/course/CRESSBB8

A certified Six Sigma Black Belt is a professional who is an expert in Six Sigma philosophies and principles, including supporting systems and tools. A Black Belt should demonstrate team leadership, understand team dynamics and assign team member roles and responsibilities. Black Belts have a thorough understanding of all aspects of the DMAIC model in accordance with Six Sigma principles. They have a basic knowledge of Lean enterprise concepts, are able to identify non-value added elements and activities and are able to use specific tools. The course draws heavily on statistical principles including DOE (Design of Experiments) and SPC (Statistical Process Control).

Entry Requirements

A demonstration of several years work experience in a technical role in manufacturing or a service industry is required. A grounding in six sigma principles is desirable.

Course Content

- Introduction to Lean and Six Sigma, DMAIC Methodology
- Change Management, Team Building, Facilitation, Conflict Resolution
- Project Control, Return on Investment, Critical Success Factors
- MINITAB
- Measurement System Analysis
- Hypothesis Testing, Regression, Control Charts, Process Sigma
- Design of Experiments

Mentoring

Throughout their training, and until the completion of their projects, six sigma black belts will receive support and mentoring from their tutor.

Duration

Twenty full days over six months.

Awarding Body

CIT: Thirty credits at Advanced Level on the National Framework Qualifications (subject to approval).w Candidates who complete the Six Sigma Black Belt Programme will be encouraged to sit the American Society for Quality (ASQ) Six Sigma Black Belt exam. Six Sigma Black Belt requires two completed projects with signed affidavits or one completed project with signed affidavit and three years of work experience in one or more areas of the Six Sigma Body of Knowledge.

Note: Places are limited for this course. Eligible candidates will be considered on a first come first served basis.

*** External Support funding may be available for this course.**
Please contact CAMMS to enquire.
*** Discounts available for groups of three or more.**

5.4 Project Management Programmes

5.4.1 Diploma in Project Management

Special Purpose Award – Advanced 15 ECTS Credits including PMP Preparation

COURSE CODE	COURSE FEE	ENQUIRIES
CR_EPMAN_8	€3850 Includes HETAC exam fees, (PMI exam fee not included).	T: 021 432 6264 E: camms@cit.ie W: www.camms.ie

Apply online at
http://www.cit.ie/course/CR_EPMAN_8

CAMMS Centre for Advanced Manufacturing & Management Systems

With the emergence of Project Management as a standalone profession, international accreditation that is accepted across industries is becoming increasingly important. This course is aimed at those who seek to employ Professional Project Management techniques in the Initiation, Planning, Execution, Control and Close-Out of their Projects. The course covers all knowledge areas of the PMBOK© – the Project Management Body of Knowledge, which is the basis for PMP (Project Management Professional) Certification administered by the Project Management Institute (PMI).

The course is suitable for individuals who may have practical experience in managing projects but need to supplement this with the necessary education the Diploma in Project Management and also certification as a PMP. The diploma course includes detailed preparation for those candidates who intend to sit for PMP Certification by combining advanced techniques and methodologies with the real-life experiences of leading project managers from a variety of industries. A Special Purpose Award in Project Management at an Advanced Level, will be issued to all successful candidates.

Duration

15 full time days over 6 months, including a 2 day PMP-exam preparatory `boot-camp' course.

Certification

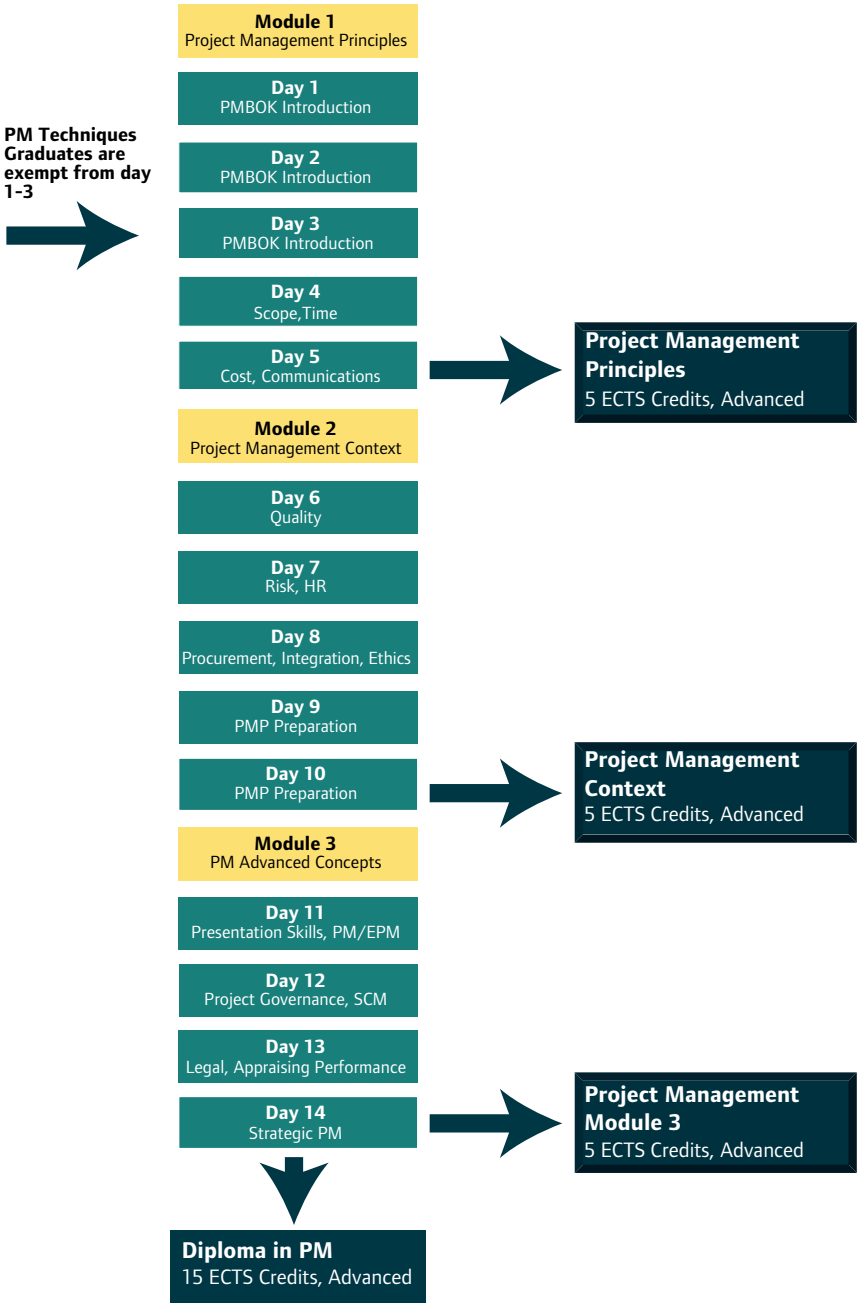
CIT: 15 credits at Advanced Level on the National Framework of Qualifications. Students who complete all three modules, will be entitled to a Diploma in Project Management (Special Purpose Award– Advanced)

Project Management Institute (PMI): Project Management Professional (on successful completion on PMI exam). PMI exam fees are not included

Note: Places are limited for this course. Eligible candidates will be considered on a first come first served basis.

*** External Support funding may be available for this course.**
Please contact CAMMS to enquire.
*** Discounts available for groups of three or more.**

Diploma in Project Management
CR_EPMAN_8



5.4.2 Project Management Techniques

COURSE CODE	COURSE FEE	ENQUIRIES
CR_TPMAN_6	€850*	T: 021 432 6264 E: camms@cit.ie W: www.camms.ie

Apply online at
http://www.cit.ie/course/CR_TPMAN_6

Centre for Advanced Manufacturing & Management Systems

This course is a comprehensive and practical introduction to Project Management. The content and delivery is applicable to all industrial sectors (not just technical projects). The content is based on the Project Management Body of Knowledge (PMBOK©) which is administered by the Project Management Institute (PMI) in the USA. The PMBOK is a worldwide recognised professional standard for the practice of Project Management.

The course is aimed at those involved in a wide range of projects. Participants come from a broad range of sectors and backgrounds and are typically involved in the planning, control and execution of project work in the broadest sense. Lectures are combined with case studies, workshops, simulations and practical projects. Course delegates complete various assignments in the class, as project teams and individual assignments. There are also hands-on computer practical sessions will be used to instruct participants in the key areas of project planning and control. Candidates should have basic computer skills.

In summary, the course focuses on 2 main areas, primarily learning new tools and techniques to manage projects more effectively. Secondly, to gain increased awareness and learning in the area of 'soft skills' (e.g. leadership, team management, motivation, communication, negotiation, etc.) that are essential to effective project management.

Course Content

Participants are expected to work on a project of their own choosing. Some short course assignments to be submitted to achieve certification.

- Introduction to Project Management and the fundamentals
- Project selection & initiation. Defining the Project Charter and Project Scope
- Project Planning and defining the Work Breakdown Structure (WBS)
- Managing Project Scope and Change in projects
- Project Time Management - Activity Definition, Activity Duration Estimating, Activity Sequencing, Schedule Development, Schedule Control
- Project Scheduling Software - Microsoft Project 2010, progress measurement and reporting
- Managing Project Quality and Risk management
- Managing Project Finance and Resources
- Managing People – Team development and the Project Managers Role
- Improving personal effectiveness as a project manager
- Leadership Styles, Communication, Negotiating
- Project Closeout and Evaluation

Awarding Body

Students who successfully complete the course will be entitled to a HETAC certificate worth 5 credits at Level 7 on the National Framework of Qualifications.

Note: Successful participants from the evening class will be eligible to two days exemption from the Diploma in Project Management and a reduced price from €3,850 to €3,250.

Duration

Commencing Thursday 20th September 2012. One evening per week for 12 weeks, every Thursday, 6.30pm - 9.30pm.

Note: Places are limited for this course. Eligible candidates will be considered on a first come first served basis.

*** External Support funding may be available for this course.**
Please contact CAMMS to enquire.
*** Discounts available for groups of three or more.**

5.5 Automation and Control Systems Programme

5.5.1 Certificate in Automation & Control Systems

Special Purpose Award – Intermediate 15 ECTS Credits

Centre for Advanced Manufacturing & Management Systems

Students who successfully complete the modules Mechatronics; Scada & Automation Systems; and Robotics will be entitled to a Certificate in Automation & Control Systems (Special Purpose Award – Intermediate).
Complete programme: Course Code CR_EACSY_7; Overall Fee: €2,800. Apply online at http://www.cit.ie/course/CREACSY7

These modules can also be taken and certified individually.
Please see Course Code, Fee, and online application for each module.

Mechatronics (2800 City & Guilds)

COURSE FEE	ENQUIRIES	COURSE CODE
€1800* (includes exam fee)	T: 021 432 6264 E: camms@cit.ie W: www.camms.ie	CR_EPEPN_6

Apply online at
http://www.cit.ie/course/CREPEPN6

Entry Requirements

Candidates must have at least two years relevant industrial experience and should have obtained their Leaving Certificate or an appropriate craft/technician qualification.

Course Content

Practical

- Pneumatic design and implementation
- Electro-pneumatic design and implementation
- PLC design and implementation
- Mechatronic design and implementation

Theory

- Principles of the "Total Engineering Approach" to production systems
- Principles of typical sensors
- Principles of pneumatic, hydraulic, mechanical and electrical actuation systems
- Principles of embedded control (PLC's, controllers)
- Design, build and fault find on mechatronic systems

This course covers the practical and theoretical requirements for certification by City and Guilds. Certification requires that a candidate provide evidence of competence in the construction, operation and maintenance of pneumatic and electro-pneumatic systems through practical tasks and by meeting knowledge criteria.

Awarding Body

CIT: Five credits at Intermediate Level on the National Framework of Qualifications.
City & Guilds of London Institute: PART 3 Certification in Engineering – Mechatronics.

Duration

One evening per week for one academic year OR nine day intensive course.

Note: Places are limited for this course. Eligible candidates will be considered on a first come first served basis.

*** External Support funding may be available for this course. Please contact CAMMS to enquire.**
*** Discounts available for groups of three or more**.

SCADA & Automation Systems

COURSE CODE	COURSE FEE	ENQUIRIES
CR_ESCDA_7	€850* (includes exam fee)	T: 021 432 6264 E: camms@cit.ie W: www.camms.ie

Apply online at
http://www.cit.ie/course/CRESCDA7

Centre for Advanced Manufacturing & Management Systems

Automation has been an essential tool in enhancing productivity and competitiveness for manufacturing industries. Automation is used to improve manufacturing performance, reduce operational costs and improve quality. Most industrial plants now have some form of automation, which is controlled and monitored by SCADA systems. This course enables participants to adjust, service, maintain and design modern equipment, and to design and develop SCADA control systems.

During the course, real data from a process control rig and flexible assembly line will be utilised in the design of applications.

Entry Requirements

Candidates must have at least two years relevant industrial experience and should have obtained their Leaving Certificate or an appropriate craft/technician qualification.

Course Content

- Computer based automation systems
- Control systems
- Connection and circuit technology for transducers
- PLC configuration and control
- Safety systems
- SCADA (Supervisory Control and Data Acquisition)

Awarding Body

CIT: Five credits at Intermediate Level on the National Framework of Qualifications.

Duration

One evening per week for twelve weeks.

Note: Places are limited for this course. Eligible candidates will be considered on a first come first served basis.

* **External Support funding may be available for this course.**
  Please contact CAMMS to enquire.
* **Discounts available for groups of three or more**.

COURSE FEE	ENQUIRIES	COURSE CODE
€850* (includes exam fee)	T: 021 432 6264 E: camms@cit.ie W: www.camms.ie	CR_EROBT_7

Centre for Advanced Manufacturing & Management Systems

Apply online at
http://www.cit.ie/course/CREROBT7

An industrial robot is defined as “an automatically controlled, reprogrammable, multipurpose device, for use in industrial automation applications.”

This course gives participants an understanding in Industrial Robotics programming and design and an in-depth knowledge of Robotic Sensors.

Entry Requirements

Candidates must have at least two years relevant industrial experience and should have obtained their Leaving Certificate or an appropriate craft/technician qualification.

Course Content

- Robotic cell design
- End effectors
- Robotics programming
- External sensors

Awarding Body

CIT: Five credits at Intermediate Level on the National Framework of Qualifications.

Duration

One evening per week for twelve weeks.

Note: Places are limited for this course. Eligible candidates will be considered on a first come first served basis.

* **External Support funding may be available for this course.**
  Please contact CAMMS to enquire.
* **Discounts available for groups of three or more**.

5.6 Society of Manufacturing Engineers Certification Programmes (SME)

The awarding body is the Society of Manufacturing Engineers (SME), which has 70,000 members world-wide. The SME is dedicated to the dissemination of information and education in the area of manufacturing engineering.

Two levels of Certification are offered:
- Certified Manufacturing Technologist (CMfgT)
- Certified Manufacturing Engineer (CMfgE)

5.6.1 Certified Manufacturing Technologist (CMfgT)

COURSE CODE	COURSE FEE	ENQUIRIES
CR_ECMTE_ 6	€1,000* (does not include exam fees, payable to the SME)	T: 021 432 6264 E: camms@cit.ie W: www.camms.ie

Apply online at
http://www.cit.ie/course/CRECMTE6

CAMS Centre for Advanced Manufacturing & Management Systems

Monday and Wednesday, 7pm - 9pm

Entry Requirements

Candidates must have a minimum of four years manufacturing experience or two years relevant education.

Course Content

- Engineering Mechanics
- Materials and Design
- Production Processes
- Quality Control and SPC
- Management and Production Planning
- Occupational Health and Safety
- Automation
- Maintenance

Duration

Two evenings per week for one academic year.

Awarding Body

Society of Manufacturing Engineers (SME)
(Course fee does not include examination fees, payable to the SME)

Note: This course covers the content for CIT module "ManufacturingTechnologist". Passing a further assessment will earn five credits at Level 6 on the National Framework of Qualifications.

*** External Support funding may be available for this course.**
Please contact CAMMS to enquire.
*** Discounts available for groups of three or more.**

5.6.2 Certified Manufacturing Engineer (CMfgE)

COURSE FEE	ENQUIRIES	COURSE CODE
€840* includes course textbook. (Course Fee does not include exam fee, payable to the SME).	T: 021 4326264 E: camms@cit.ie W: www.camms.ie	CR_ECMEN_6

Centre for Advanced Manufacturing & Management Systems

Apply online at http://www.cit.ie/course/CRECMEN6

Monday and Wednesday, 7pm - 9pm

Entry Requirements

Candidates must have a minimum of eight years manufacturing-related work experience and/or education (a maximum of five years of education may be applied toward the eight-year experience/education requirement).

Course Content

- Manufacturing Planning and Control
- Quality Management and Quality Tools
- Analysis of Manufacturing Processes
- Facility Layout and Planning
- Computer Integrated Manufacturing
- Occupational Health and Safety

Duration

One evening per week for one academic year.

Awarding Body

Society of Manufacturing Engineers (SME)
(Course fee does not include examination fees, payable to the SME)

*** External Support funding may be available for this course. Please contact CAMMS to enquire.**
*** Discounts available for groups of three or more.**

5.7 Sustainable Energy Programmes

5.7.1 Building Energy Rating (BER) Assessor Training

The EU directive on the Energy Rating of Buildings (EPBD) will require that Ireland has a cohort of trained assessors to energy rate both domestic and commercial buildings.

Building Energy Rating (BER) Assessor Training for Domestic Dwellings (New and Existing Dwellings)

COURSE CODE	COURSE FEE	ENQUIRIES
CR_EENRT_7	€2000* (includes course notes and exam fee)	T: 021 4326264 E: camms@cit.ie W: www.camms.ie

Apply online at
http://www.cit.ie/course/CREENRT7

CAMMS Centre for Advanced Manufacturing & Management Systems

The course will focus on the background theory to building energy performance application of this knowledge to the use of the Dwelling Energy Assessment Performance (DEAP) software.

Entry Requirements

N.B. Level 6 (National Certificate/ Higher Certificate) qualification in Building Services, Construction Studies or related discipline such as Civil, Architecture or Structural Engineering.

Application Procedure

Applicants should post or e-mail a CV (clearly indicating educational qualification) to CIT CAMMS centre. Applicants will be dealt with on a first come first served basis.

Duration

Two evenings a week for eight weeks.

Awarding Body

- Successful candidates are awarded five credits at Intermediate Level on the National Framework of Qualifications. Candidates achieving a 70% overall mark for continuous assessments, a short answer question assessment and a practical final exam will be eligible to register with SEI as a BER assessor.
- All graduates must also complete the SEI National Exam

*** External Support funding may be available for this course.**
Please contact CAMMS to enquire.
*** Discounts available for groups of three or more.**

Building Energy Rating (BER) Assessor Training for Commercial Buildings

COURSE FEE	ENQUIRIES	COURSE CODE
€950 (excludes SEI exam fee and registration)	T: 021 432 6264 E: camms@cit.ie W: www.camms.ie	CR_EBERC_7

Centre for Advanced Manufacturing & Management Systems

Apply online at
http://www.cit.ie/course/CREBERC7

The course will focus on the background theory to building energy performance of commercial buildings.

Entry Requirements

Level 7 (National Certificate/Higher Certificate) qualification in Building Services, Construction Studies, or related discipline such as Civil, Architecture or Structural Engineering.

Application Procedure

Applicants should post or e-mail a CV (clearly indicating educational qualification) to Cork Institute of Technology, CAMMS, Bishopstown, Cork.
Applicants will be dealt with on a first come first served basis.

Duration

2½ Days

*** External Support funding may be available for this course. Please contact CAMMS to enquire.**
*** Discounts available for groups of three or more**.

5.7.2 Certificate in Sustainable Energy

Special Purpose Award – Fundamental 10 ECTS Credits

Students who successfully complete the modules Introduction to Sustainable Energy Systems; and Wind Generation and Renewable Energy Systems, will be entitled to a Certificate in Sustainable Energy (Special Purpose Award – Fundamental). Complete programme: Course Code CR_ESUSE_6; Overall Fee: €1,500.
Apply online at http://www.cit.ie/course/CR_ESUSE_6

These modules can also be taken and certified individually. Please see Course Code, Fee, and online application for each module.

Introduction to Sustainable Energy Systems

COURSE CODE	COURSE FEE	ENQUIRIES
CR_ESESY_6	€850* (includes course notes and exam fee)	T: 021 432 6264 E: camms@cit.ie W: www.camms.ie

Apply online at
http://www.cit.ie/course/CR_ESESY_6

CAMMS Centre for Advanced Manufacturing & Management Systems

This course aims to introduce the fundamentals of Sustainable Energy Systems. The course concentrates on energy sources which are directly utilised in building energy systems and small scale electrical generation. An appreciation of the current conditions relating to the Irish energy situation, policies, grants and support structures will be given.

The bulk of the course material will introduce the student to a wide range of potential sustainable energy sources including wind, biomass, geothermal, solar, hydro, and energy efficiency measures. The majority of the sessions will include a visiting specialist from the area, who will have direct experience of installation, economics, planning, and operational issues associated with various energy sources.

Entry Requirements

This course is an introductory level programme and is open to all.

Duration

One evening per week for 12 weeks.

Course Content

- Energy Sources, Use and Policy
- Wind Energy
- Wood Pellet and Chip
- Solar Thermal
- Biofuels and transport Fuels
- Geothermal and Heat Pumps
- Solar PV and Fuel Cells
- Hydroelectricity
- Domestic Energy Ratings BER/DEAP/EPBD
- Energy System Design Study

Participants are expected to work on and present a project of their own choosing.

Awarding Body

CIT: 5 credits at Fundamental Level on the NFQ.

Note: Places are limited for this course. Eligible candidates will be considered on a first come first served basis.

*** External Support funding may be available for this course.**
Please contact CAMMS to enquire.
*** Discounts available for groups of three or more.**

Wind Energy

COURSE FEE	ENQUIRIES	COURSE CODE
€850* (includes course notes)	T: (021) 4326264 E: camms@cit.ie W: www.camms.ie	CR_EWIND_6

Centre for Advanced Manufacturing & Management Systems

Apply online at
http://www.cit.ie/course/CREWIND6

It is envisaged that renewable energy technologies will make a major contribution to electricity production, transport and the industry sector in the near future. This is due to its environmental benefits, increasing competitiveness and the rising costs of fossil fuels. Renewable energy sources such as wind power will be used for the achievement of both national and international targets for the reduction of greenhouse gas emissions and green electricity generation targets.

This course will examine the energy crisis that exists in Ireland today and the need for a greater use of wind power generation. It will introduce the basics of electricity, its generation from wind power, storage and exportation to the national electricity grid. The course aims to teach everything needed for the planning of, purchasing, installation, operation and maintenance of a wind turbine suitable for domestic or small industrial uses. It is aimed at anyone interested in installing such wind turbine and associated technologies. The course will utilise the on-site wind generator at Cork Institute of Technology for both theoretical and laboratory based lessons.

The course is divided into classroom and laboratory work, outside monitoring of renewable energy equipment, two assignments during the module and a final exam.

Entry Requirements

This course is aimed at both an introductory level and to people with a technical background. A background in engineering, mathematics, physics or electrical trade would be an advantage but is not essential. The course fee includes a detailed set of course notes and exam fee.

Course Content

- Wind and renewable energy introduction
- Electrical engineering principals
- Electrical generator aspects
- Wind power theory
- Site selection mathematics
- Wind generator construction, selection and sizing
- Purchasing of equipment, planning requirements and grants
- Electrical power conversion
- Electricity grid connection, transmission and embedded generation
- Commissioning, operation and maintenance
- Prediction and monitoring of wind turbine output

Duration

Three hours per week for 12 weeks.

Awarding Body

CIT: 5 credits at Fundamental Level on the National Framework of Qualifications.

*** External Support funding may be available for this course.**
Please contact CAMMS to enquire.
*** Discounts available for groups of three or more.**

5.7.3 Certificate in Sustainable Energy Special Purpose Award – Intermediate 15 ECTS Credits

Students who successfully complete the modules Introduction to Energy Management; Solar and Geothermal Energy; and Introduction to Wave Energy will be entitled to a Certificate in Sustainable Energy (Special Purpose Award – Intermediate). Complete programme: Course Code CR_ESUSE_7; Overall Fee: €2,100.
Apply online at http://www.cit.ie/course/CR_ESUSE_7

These modules can also be taken and certified individually. Please see Course Code, Fee, and online application for each module.

Energy Management

COURSE CODE	COURSE FEE	ENQUIRIES
CR_EENMG_7	€850* (includes course notes)	T: 021 432 6264 E: camms@cit.ie W: www.camms.ie

Apply online at
http://www.cit.ie/course/CREENMG7

CAMMS Centre for Advanced Manufacturing & Management Systems

This module examines the impact of the generation, distribution, and use of electricity and electrically powered products on the environment, and the management methodologies to be applied to reduce and avoid these impacts.

Module Content

- Environmental Management Systems
- Products: Design for Environment
- Auditing
- Ecomapping
- Legislative Framework
- Impacts of the use of electricity.

Entry Requirements

Students are recommended to first complete the Certificate in Sustainable Energy (Special Purpose Award – Level 6).

Duration

One evening per week for 12 weeks.

Awarding Body

CIT: 5 credits at Intermediate Level on the National Framework of Qualifications.

Note: Places are limited for this course. Eligible candidates will be considered on a first come first served basis.

*** External Support funding may be available for this course.**
Please contact CAMMS to enquire.
*** Discounts available for groups of three or more**

Solar and Geothermal Energy

COURSE FEE	ENQUIRIES	COURSE CODE
€850* (includes course notes)	T: 021 432 6264 E: camms@cit.ie W: www.camms.ie	CR_ESENB_7

Centre for Advanced Manufacturing & Management Systems

Apply online at
http://www.cit.ie/course/CRESENB7

This module includes a study of the energy processes involved in use of solar and geothermal energy; an evaluation of solar and geothermal heating, daylighting, and solar electricity generating technology.

Module Content

- Solar Energy - Principles and Solar Heat Transfer
  Properties of Radiation, Solar Radiation, Electromagnetic Spectrum, Radiation properties of Materials, Radiative Heat Transfer, Passive Solar Applications.
- Solar Thermal Technologies
  Solar Thermal Collectors, Flat Plates, ETCs, Concentrators (CSP), Performance, Energy Balance, Materials
- Solar Photovoltaics
  Photovoltaic Effect, Materials, Cell Types, Cell Performance, Module Properties, Fabrication, Siting Issues, Power Output and Integration, EIA
- Geothermal Energy
  Heat Pump Cycles, Refrigerants, pH diagrams, heat Pump Opertion and Equipment, COP, Installation Issues.
- Lab Cycle
  Solar Thermal, Solar Photovoltaic, Geothermal Energy Equipment Testing, Installation Exercise

Entry Requirements

Students are recommended to first complete the Certificate in Sustainable Energy (Special Purpose Award – Fundamental).

Duration

One evening per week for 12 weeks.

Awarding Body

CIT: 5 credits at Intermediate Level on the National Framework of Qualifications.

Note: Places are limited for this course. Eligible candidates will be considered on a first come first served basis.

*** External Support funding may be available for this course.**
Please contact CAMMS to enquire.
*** Discounts available for groups of three or more**

Introduction to Wave Energy

COURSE CODE	COURSE FEE	ENQUIRIES
CR_EMAST_7	€850* (includes course notes)	T: 021 432 6264 E: camms@cit.ie W: www.camms.ie

Apply online at
http://www.cit.ie/course/CREMAST7

Centre for Advanced Manufacturing & Management Systems

This module deals with the engineering aspects of structures in a marine environment, covering waves and wave action, buoyancy and stability, anchoring and marine corrosion with a particular focus on marine based sustainable energy systems.

Module Content

- Waves
  Wave geometry, wave energy, wave spectra.
- Buoyancy and stability
  Displacement, initial stability, metacentric height, degrees of freedom.
- Corrosion
  Types of corrosion, cathodic protection, protective coatings, materials in a marine environment.
- Seafloor and Marine Soils
  Dense sands, calcareous sands, boulders, overconsolidated silts, silts and clays.
- Anchoring and Mooring
  Deep ocean operation, multicomponent slack mooring, tension mooring, coastal zone operation, multipoint mooring system, deadweight, drag embedment, plate and pile anchors.

Entry Requirements

Students are recommended to first complete the Certificate in Sustainable Energy (Special Purpose Award – Fundamental).

Duration

One evening per week for 12 weeks.

Awarding Body

CIT: 5 credits at Intermediate Level on the National Framework of Qualifications.

Note: Places are limited for this course. Eligible candidates will be considered on a first come first served basis.

*** External Support funding may be available for this course.**
Please contact CAMMS to enquire.
*** Discounts available for groups of three or more**

5.7.4 Advanced Wind Energy

COURSE FEE	ENQUIRIES	COURSE CODE
€1100* (includes course notes)	T: 021 432 6264 E: camms@cit.ie W: www.camms.ie	CR_EAWND_7

Centre for Advanced Manufacturing & Management Systems

Apply online at
http://www.cit.ie/course/CREAWND7

Advanced Wind Energy builds on the module "Introduction to Wind Energy". The course builds on the principles previously outlined and introduces the student to software packages WAsP (Wind Atlas Analysis and Application Program) and GL WindFarmer.

As part of the course, the student will examine the methods used for wind turbine site location. The CIT weather station will be used to gather data and this in turn will be entered into WAsP. A 3D terrain map and data will be used for a particular location in order to determine its suitability for a wind farm using the software package WindFarmer. The software will then be used to select the optimal wind turbine size and location. Based on this optimal site location WAsP will be used to predict wind flow models and to calculate wind speed probability.

Entry Requirements

A background in engineering, mathematics, physics or electrical trade is required. The course fee includes a detailed set of course notes and exam fee.

Course Content

- NRG, WAsP, WindFarmer Software
- Weather station monitoring
- Wind Data interpretation
- 3D Terrain maps
- Optimal Site and Turbine selection
- Wind Flow Models
- Turbine Wake, Noise, Shadow Flicker

Duration

Three hours per week for 12 weeks OR Five full days

Awarding Body

CIT: 5 credits at Intermediate Level on the National Framework of Qualifications.

Note: Places are limited for this course. Eligible candidates will be considered on a first come first served basis.

*** External Support funding may be available for this course.**
Please contact CAMMS to enquire.
*** Discounts available for groups of three or more**

5.8 Certificate in Safety and Health at Work

COURSE CODE	COURSE FEE	ENQUIRIES
CR_ESHWK_6	To be advised	T: 021 432 6264 E: camms@cit.ie

Apply online at
http://www.ucd.ie/apply

CAMMS Centre for Advanced Manufacturing & Management Systems

Entry Requirements

The fee is subject to an annual increase, which will be confirmed circa July 2012. Fees include all tuition and programme materials, as well as the examination fee.

Duration

The programme is a one-year, part-time study programme organised in two semesters over 25 weeks. The programme will be delivered on Friday mornings from 9am - 11am commencing in October 2012 and will run until May 2013.

Entry Requirements

Students are expected to be working while undertaking the programme. Successful applicants are expected to have a good level of upper second level education and to be able to write reports and to have basic computer literacy. Places are offered on a first-come, first-served basis.

Introduction

The Certificate in Safety and Health at Work is produced by University College Dublin (UCD), and will be broadcast live by satellite to 16 centres including CIT. This is a one-year, part-time multidisciplinary Certificate programme and is pitched at Level 7 on the National Qualification Authority of Ireland (NQAI) framework. It is designed for managers, supervisors, safety representatives and others with an interest in safety and health in the workplace

Programme Outline and Aims

In this programme, students will gain a comprehensive introduction to a range of topics relating to safety and health in the workplace including: legislation; risk and safety management; identification of physical, chemical, psycho-social, and ergonomic hazards; occupational health hazard management and occupational safety hazard management.

The programme emphasises practical aspects of hazard control, such as machine guarding, fire prevention and avoidance of occupational illness. Lectures are given by leading experts in each topic, from UCD and other universities, the Health and Safety Authority, and public and private sector industries.

Programme Content

- Principles of Occupational Safety and Health
- Occupational Health Hazard Management
- Occupational Safety Hazard Management
- Occupational Health and Safety Project

Career Opportunities

Students who successfully complete the Certificate in Safety and Health at Work will be able to apply their knowledge to communicate health and safety information to peers and supervisors and to advise management on a range of Occupational Safety and Health (OSH) issues in their workplace.

The UCD Certificate in Safety and Health at Work is accredited by the Institution of Occupational Safety and Health (IOSH) as the academic requirement for the Tech IOSH grade of membership. Applicants for membership will also need to be able to demonstrate five years experience at an appropriate level in health and safety practice. Further information is available atwww.iosh.co.uk

Assessment

The programme is arranged in four modules. Each of these modules is assessed by assignment and/or by examination or in-class test. An Occupational Safety and Health Project module is undertaken in the student's own time, with comprehensive text support. Students who successfully complete the requirements of all four modules will be awarded a Certificate in Safety and Health at Work.

How to Apply

Students apply on line using an UCD application form. To apply online simply click on http://www.ucd.ie/apply and follow the instructions. Students are advised to apply early as places are offered on a first-come, first-served basis. Further information is available from the UCD Centre for Safety and Health at Work,http://www.ucd.ie/cshw/

Awarded by

University College Dublin

Further information

Programme Administrator
UCD School of Public Health and Population Science,
Centre for Safety and Health at Work,
Woodview House, Belfield, Dublin 4.
T: 01 716 3420
E: cshw@ucd.ie
W: http://www.ucd.ie/cshw/
or
T: 021 432 6264
E: camms@cit.ie
W: www.camms.ie

5.9 Biomedical Engineering Programmes

5.9.1 Certificate in Introduction to Biomedical Devices

Special Purpose Award – *Intermediate 10 ECTS Credits*

COURSE CODE	COURSE FEE	ENQUIRIES
CR_EBMDM_7	€1300* (includes course notes and exam fee)	T: (021) 4326264 E: camms@cit.ie W: www.camms.ie

Apply online at
http://www.cit.ie/course/CREBMDM7

Centre for Advanced Manufacturing & Management Systems

This programme has been especially developed for anyone **seeking employment in the Biomedical Devices Sector** or wishing to enhance their general knowledge of the industry. The programme is structured around common medical disorders which are treated by biomedical devices manufactured in Ireland. On completion, participants will be familiar with a range of disorders, the anatomy and physiology associated with these disorders, the devices used in their treatment, and the processes involved in the manufacture of these devices.

The programme also familiarises participants with the engineering requirements and standards that apply to cleanrooms employed in the manufacture of medical devices. The programme looks at the specification of appropriate cleaning, packaging and sterilisation operations for medical devices, the assessment of the safety risks associated with manufacturing operations and the requirements for guaranteeing a safe working environment. The programme also examines the detailed requirements of a Good Manufacturing Practise (GMP) system and the operation of regulatory bodies such as FDA/IMB.

Course Content

- **Anatomy**
  General anatomy, Neuro Anatomy, Cariovascular anatomy, Orthopaedics.
- **Medical Devices**
  Devices used in the treatment of neurovascular, cardiovascular, orthopaedic disorders and product development history.
- **Manufacturing Processes**
  Introduction to manufacturing processes; injection moulding, extrusion, wiredrawing; cathether coating process, embolic coil manufacturing.
- **Cleanroom Technology**
  Cleanroom classification; particle size and counting; filter design and performance, cleanroom layout, materials & standards, cleanroom commissioning and qualification.
- **Cleaning and Sterilisation Technology**
  Requirements for cleaning, soil types, cleaning systems organic/aqueous/semiaqueous), cleaning equipment. Ethylene oxide. Gamma sterilisation, electron beam. Saturated steam - gravity displacement, porous load, ballasted cycles. Dry heat sterilisation/depyrogenation. Microbial inactivation/endotoxin inactivation.

- **Packaging**
  Functions of packaging, packaging requirements for sterilisation, physical & chemical properties of packaging, labelling and packaging control, distribution hazards, production of packages, forming materials and methods, lidding, sealing.
- **GMP**
  Introduction to GMP, GMP documentation - SOPs/regulatory documentation/submissions, Role and requirements of the FDA/IMB/Notified Bodies, introduction to 21 CFR820/Medical Devices Directive, planning for audits. Clasiification of devices. FDA/IMB submissions - 510k/PMA applications.
- **Validation**
  Validation protocols - Installation, operational and performance qualification. Process validation, design qualification, validation of sterilisation system, design verification, design validation. URS/FDS/FAT/SAT master validation plans. Change control.

Duration

Six full days.

Certification

CIT: Certificate in Introduction to Biomedical Devices, Special Purpose Award, 10 credits at Intermediate Level on the National Framework of Qualifications.

Note: Places are limited for this course. Eligible candidates will be considered on a first come first served basis.

*** External Support funding may be available for this course. Please contact CAMMS to enquire.**
*** Discounts available for groups of three or more**

5.9.2 Anatomy of Biomechanics

COURSE CODE	COURSE FEE	ENQUIRIES
CR_EBMEC_8	€1300* (includes course notes and exam fee)	T: 021 432 6264 E: camms@cit.ie W: www.camms.ie

Apply online at
http://www.cit.ie/course/CREBMEC8

Centre for Advanced Manufacturing & Management Systems

This programme covers the anatomical basis of the biomechanics of selected major body systems: the musculoskeletal, nervous and circulatory. The main emphasis is on living, functional anatomy. There will be continual reference to clinical conditions. Course delivery willbe through interactive lectures and tutorials, combined with study of anatomical models.

Course Content

- **Introduction:** Anatomical terminology and organisation of skeletal, muscular, nervous and cardiovascular tissues.
- **Joints:** Classification by form; relationships of form to function; examples from limb joints.
- **Muscle:** Muscle types; skeletal muscle types; structure-function relationships; innervation.
- **Nervous system:** Organisation of brain and spinal cord; somatotopic organisation in the central nervous system; the production of movement.
- **Limbs:** Muscle groups and patterns of muscle organisation; functional anatomy of the principal joints (hip, knee, ankle, shoulder, elbow, wrist).
- **Trunk, head and neck:** Basic body plan; body wall – skeleton, muscles, innervation; organisation and distribution of cardiovascular components; blood supply to heart and brain; heart – morphology and function; coronary circulation; anatomy of stroke.
- **Vertebral column and pelvis:** structure – function relationships, including force transmission.

Duration

Three days

Certification

Centre for Advanced Manufacturing and Management Systems (CAMMS), CIT.

HETAC credits are available for many CAMMS courses.

Please contact CAMMS directly for more details.

Note: Places are limited for this course. Eligible candidates will be considered on a first come first served basis.

*** External Support funding may be available for this course.**
Please contact CAMMS to enquire.
*** Discounts available for groups of three or more**

6.1 Bachelor of Science (Honours) in Process Plant Technology

COURSE FEE	ENQUIRIES	COURSE CODE
See module costing below.	T: 021 4326264 E: camms@cit.ie W: www.camms.ie	CR_EPPTN_8

Centre for Advanced Manufacturing & Management Systems

Apply online at http://www.cit.ie/course/CREPPTN8

Three evenings per week, 7pm - 10pm
One Saturday per month, 10am - 5pm

This course aims to produce graduates who can make a significant contribution to the design, operation, maintenance and management of process plant. The course concentrates on the mechanical aspects of process engineering design and selection, plant construction, condition monitoring, productive maintenance, plant safety, automation and control systems, project management and investment appraisal. This honours degree programme will help participants to develop the skills and knowledge to implement change and to undertake key operational management roles.

Entry Requirements

Merit or better in a relevant Diploma course or equivalent.

Duration

Three evenings per week and one Saturday per month. The course can be completed in two academic years.

Award

The award of the Bachelor of Science (Honours) in Process Plant Technology will be received by students who successfully complete the course programme.

Modules	Annual Fee per Module
Mandatory	
Project	€1300
Quality Engineering	€490
Engineering Project Management	€490
Process Automation & Control	€490
Mathematics and Statistics	€490
Process Plant Services	€490
Process Plant Equipment	€490
Maintenance & Reliability	€490
Facilities	€490
Electives (Choose One)	
Automation Systems	€490
Advanced Materials and Processes	€490

6.2 Bachelor of Science (Honours) in Advanced Manufacturing Technology

COURSE CODE	COURSE FEE	ENQUIRIES
CR_EAMTN_8	See module costing below	021 432 6264 E: camms@cit.ie W: www.camms.ie

Apply online at
http://www.cit.ie/course/CREAMTN8

CAMS Centre for Advanced Manufacturing & Management Systems

Three evenings per week, 7pm - 10pm
One Saturday per month, 10am - 5pm

All industries involved in the production of goods, whether biomedical, pharmaceutical, chemical, process, electronic or aeronautical require manufacturing engineers. These industries invest heavily in the most up to date automation, software and process control equipment as well as utilising the most modern of training and management techniques. This honours degree programme aims to produce graduates who can make a significant contribution to the design, operation, and management of manufacturing systems, as well as to the quality and reliability of manufactured products, parts and equipment.

Entry Requirements

Merit or better in a relevant Diploma course or equivalent.

Duration

Three evenings per week and one Saturday per month. The course can be completed in two academic years.

Award

The award of the Bachelor of Science (Honours) in Advanced Manufacturing Technology will be received by students who successfully complete the course programme.

Modules	Annual Fee per Module
Mandatory	
Project	€1300
Quality Engineering	€490
Engineering Project Management	€490
Automation Systems	€490
Mathematics and Statistics	€490
Product Development	€490
Manufacturing Systems	€490
Maintenance & Reliability	€490
Facilities	€490
Electives (Choose One)	
Process Automation & Control	€490
Advanced Materials and Processes	€490

DEPARTMENT OF ELECTRICAL & ELECTRONIC ENGINEERING

Head of Department
Dr Joe Connell

Department Secretary
Julie O'Shea
T: 021 433 5470
E: julie.oshea@cit.ie

Continuous Professional Development (CPD) and short courses given by the Department of Electrical & Electronic Engineering are shown below. The running of courses will be dependent on a sufficient number of students enrolling on the course. The course may be withdrawn if this requirement is not fulfilled. Please note that there is, in most courses, a laboratory or workshop element to the subject. Some courses may be in the second cycle of their presentation - please check. Also, if your organisation has a need for a specialist in-house course in our general area, please contact the Department Secretary, as many of our lecturing staff are specialist in their own areas.

COURSES

Standard Electrical Engineering Courses:
DC Elementary Electrical Engineering, AC Elementary Electrical Engineering (SEC)
Electro-Technical Technology Certificate (Course 2330/07 C+G)
(C+G: City and Guilds; SEC: State Examinations Commission)

Specialist Courses:
Applications of Programmable Logic Controllers (certificate of attendance)
AutoCAD Electrical (certificate of attendance)
Introduction to Refrigeration and Air Conditioning (certificate of attendance)

Electronic Engineering Courses
Embedded Systems Engineering Award options:
Certificate in Embedded Systems Engineering
Post Graduate Diploma in Embedded Systems Engineering
Master of Engineering in Embedded Systems Engineering
Bachelor of Engineering (Honours) in Electronic Systems Engineering

DC Elementary Electrical Engineering (SEC)
AC Elementary Electrical Engineering (SEC)

COURSE CODE	COURSE FEE	ENQUIRIES
CR_EEEPR_7	€590	James McEnery T: 021 433 5989 E: james.mcenery@cit.ie

Monday 7pm - 10pm CIT Bishopstown campus

Aim

To introduce the course participants to dc and ac circuits as used in the electrical industry.

Entry requirements

Ideally a Leaving Certificate or the first year of an apprenticeship programme.

Duration

One year

Course Content

Syllabus: *DC Elementary Electrical Engineering*
Symbols, Abbreviations and Definitions Introduction (Ohms Law) Circuit Theory, Kirchhoffs Laws, Wheatstone Bridge Calculations Voltage Drop (2 core distribution cable), Resistivity Temperature Coefficient of Resistance, Efficiency, Inductance, Capacitance Instruments, Batteries,DC Motors Power and Energy Specific Heat Capacity.

Syllabus: *AC Elementary Electrical Engineering*
Generation of a Sine Wave. Production of an Alternating Waveform. Angular Velocity and Frequency. Standard Expression for an Alternating Quantity Calculation of Max, Average and RMS value of voltage and current. Peak Factor, Form Factor, Phase and Phase Angle, Phasor Representation.
Series Circuits: RL, RC and RLC. Resonant circuits, Parallel Circuits. Determination by calculation and graphically the total supply current. The Transformer, Principle of Operation Double Wound and Auto Transformer Efficiency. Power, Power Triangle, KW, KVA and Kvar calculations. Power Factor.

Electro-Technical Technology Certificate
(Course 2330/07 C & G)

COURSE FEE	ENQUIRIES	COURSE CODE
€580	Donal Neally T: 021 432 6582 E: donal.neally@cit.ie	CR_EEICC_6

Thursday 7pm - 9.30pm CIT Bishopstown campus

Aim

To assist apprentices to reach the standard of proficiency expected of approved electricians in the electrical installation industry.

Entry Requirements

Apprentices must have at least THREE 'C' grades in their Phase 4 electrical installation theory exams. Holders of other equivalent qualifications are considered on an individual basis.

Duration

One year

Course Content

The course is split between practical and theory and the areas to be covered are: Electrical Principles and Application of Health and Safety Regulations – BS 7671 Inspection, Testing and Commissioning Installation – fault diagnosis and rectification.

Both single and three phase are undertaken, including instrument and power transformers and electronics.

Craft theory will include: earthing, lighting, cable sizing, calculations, motors etc.

Award

Certificate in Electro-Technical Technology 2330 Level 3

Awarding Body

City and Guilds of London Institute.

Application of Programmable Logic Controllers

COURSE CODE	COURSE FEE	ENQUIRIES
CR_TLOGC_6	Course 1 Fee: €780 Course 2 Fee: €795	Gerard Geaney T: 021 433 5982 E: gerard.geaney@cit.ie

Night to be arranged with group and lecturers

Course 1 (Autumn Term) 7pm - 10pm
Course 2 (Spring Term) 7pm - 10pm

Aim

To provide training in the application and programming of programmable logic controllers (PLCs) for technical personnel.

Course Content

Programming of Siemens, Telemecanique, Mitsubishi, and Allen Bradley controllers in practical examples.

Entry to Course 2 is dependent on successful completion of Course 1 or equivalent.

A certificate of attendance will be issued on successful completion of the course.

Autocad Electrical

(Interpretation and design of electrical drawings with the aid of AutoCAD)

COURSE FEE	ENQUIRIES	COURSE CODE
€580	Donal Neally T: 021 432 6582 E: donal.neally@cit.ie	CR_EEICC_6

One evening per week for one academic year.

Aim

To provide the student with:

- An in depth understanding of electrical drawings;
- The ability to produce electrical drawings;
- The competence to read electrical drawings;
- AutoCAD skills.

Entry Requirements

No previous CAD knowledge required.
Minimum electrical knowledge required (applicants may be invited to interview).

Course Content

- Basic AutoCAD principles
- IEC Standards
- Architectural drawings for factory layout, incorporating electrical layouts for lighting, sockets
- Reading and design of line diagrams for incoming supply, main transformer, distribution boards etc.
- Reading and design of circuit diagrams for lighting circuits, socket circuits, heating circuits, lathes, motor control and PLC control diagrams.
- Reading and design of simple electronic circuits, block diagrams, e.g. motor speed control.
- Reading and design of wiring diagrams for lighting circuits, socket circuits, heating circuits, lathes, drilling machines, pumping stations and PLC control diagrams.
- Fault finding with the aid of diagrams.

Note: The running of this course will be dependent on a sufficient number of students enrolling on the course. The course may be withdrawn if this requirement is not fulfilled.

A certificate of attendance will be issued on successful completion of the course.

Introduction to Refrigeration and Air Conditioning

COURSE CODE	COURSE FEE	ENQUIRIES
CR_EIRAC_6	€475	David O'Riordan E: david.oriordan@cit.ie

One evening per week 7pm - 10pm.

Aim

To give the participants an appreciation of the basic fundamentals of the refrigeration system, by utilising both classroom theory and workshop practical applications.

Entry Requirements

Leaving Certificate or a participant who has successfully completed an apprenticeship in an appropriate field (plumbing, electrical or allied).

Course Content

- Basic Refrigeration Cycle
- Heat absorption and rejection
- System components
- Compressor control circuit
- Function of high/low pressure switch
- Pump down cycle
- Electric defrost

Duration

It is proposed to run the course between January and March, 2013. The course will be delivered over a 10 week period from 7pm – 10pm on a week night to be decided.

A certificate of attendance will be issued on successful completion.

Embedded Systems Engineering

COURSE FEE	ENQUIRIES	COURSE CODE
To be advised	Fergus O'Reilly T: 021 433 5465 E: fergus.oreilly@cit.ie	CR_EMBED_9

Subject to numbers: Evening Delivery or Shared Delivery with full-time students.

Options available

CR_EEMSY_9 Certificate in Embedded Systems Engineering
CR_EEMSE_9 Post Graduate Diploma in Embedded Systems Engineering
CR_EMBED_9 MEng in Embedded Systems Engineering

Students who register for a Certificate (30 credits) or Post Graduate Diploma (60 credits) take modules from Terms 1 and 2, see website for details. Successful completion of these award stages allows the student to progress towards final completion of the MEng.

On accumulating 90 credits through part-time or full-time learning the learner is eligible for the MEng in Embedded Systems Engineering.

Aim

a) To provide an opportunity for further development for Level 8 qualification holders who want to specialise in the area of Embedded Systems, i.e. sensor hardware, microprocessor systems, high level programming, network concepts, physical embedding, digital hardware design, middleware and wired/wireless communications. (b) To satisfy the needs of industry at embedded systems level for Level 9 electronic engineering personnel.

Mode

This course is offered under a credit based structure. It consists of three terms over a calendar year, Sept – Sept. Terms 1 and 2 are 30 credits each and consist mostly of taught elements; term 3 involves a 30-credit project to take place in industry or in a department research group.

Entry Requirements

Bachelor of Engineering (Honours) in Electronic Engineering (Level 8) or equivalent or cognate discipline equivalent at merit or distinction level.

Module Information

http://e-eng.cit.ie/MastersIntro.html
The Department of Electrical & Electronic Engineering has developed a website which gives full details of all modules for all courses. The website also has information on recommended textbooks, average weekly workload, assessments and exams.

Further Studies

Graduates of this course may progress to a PhD research programme within the Department of Electrical & Electronic Engineering.

Bachelor of Engineering (Honours) in Electronic Systems Engineering

COURSE CODE	COURSE FEE	ENQUIRIES
CR_EELES_8	€300 per module	Dr Tom O'Mahony T: 021 433 5985 E: tom.omahony@cit.ie

Subject to numbers: Evening Delivery or Shared Delivery with full-time students.

Aim

(a) To provide an opportunity for further development for Level 7 qualification holders who want to continue their education in the areas of Control, Telecommunicatons, and Embedded Systems.
(b) To satisfy the needs of industry at systems level for Level 8 electronic engineering personnel.

Entry Requirements

Bachelor of Engineering in Electronic Engineering (Level 7) or equivalent, at merit or distinction level.

Module Information

http://e-eng.cit.ie
The Department of Electrical & Electronic Engineering has developed a website which gives full details of all modules for all courses. The website also has information on recommended textbooks, average weekly workload, assessments and exams.

Mode

This course is offered under a credit based structure. This Honours Degree programme has 12 modules of 5 credits each. On accumulating 60 credits through part-time or full-time learning, the learner is eligible for the Bachelor of Engineering (Honours) in Electronic Systems Engineering award.

Further Studies

Graduates with distinction or merit may be considered for entry to the Master of Engineering in Embedded Systems Engineering course.

DEPARTMENT OF PROCESS, ENERGY & TRANSPORT

Head of Department
Dr Michael J. O'Mahony
T: 021 433 5943
E: michael.jomahony@cit.ie

COURSES

MEng in Chemical & Biopharmaceutical Engineering
Higher Certificate in Science in Good Manufacturing Practice & Technology (Full-time)
Higher Certificate in Science in Good Manufacturing Practice & Technology (Part-time)
Bachelor of Science in Good Manufacturing Practice & Technology

Master of Engineering in Chemical & Biopharmaceutical Engineering

COURSE CODE	COURSE FEE	ENQUIRIES
CR_ECHBI_9	To be advised	Matt Cotterell T 021 432 6274 E: matt.cotterell@cit.ie

This is a 90 credit Level 9 taught programme comprising 8 mandatory modules, two free choice 5 credit module and two project modules (totalling 15 credits).

Aim

This programme aims to develop advanced analytical, design and research skills in Chemical and Biopharmaceutical Engineering. Graduates of this programme will be well equipped to meet the challenges of modern industry. The programme balances coverage of underpinning theory and practical design considerations. The content seeks to reflect current and likely future practice in process analysis, design, design appraisal, experimental techniques and the use of computational tools. It aims to provide the graduate with the advanced conceptual understanding, detailed factual knowledge, and specialist technical skills that are required for success in Chemical and Biopharmaceutical Engineering.

Entry Requirements

Applicants must have achieved a minimum of Second Class Honours in a Level 8 Honours Bachelor Programme in Chemical and Biopharmaceutical Engineering or equivalent.

Module Information

http://modules.cit.ie
CIT has developed a website which gives full details of all modules for all courses. The website also has information on recommended textbooks, average weekly workload, assessments and exams.

Duration

It is envisaged that students should complete the programme over 3 years on a part-time basis.

Award

Master of Engineering in Chemical & Biopharmaceutical Engineering (Level 9)

Higher Certificate in Science in Good Manufacturing Practice & Technology

(18 months full-time)

COURSE FEE	ENQUIRIES	COURSE CODE
Standard Department of Education & Skills full-time registration fee applies	Elaine Burke T: 021 433 5150 E: elaine.burke@cit.ie	CR_SGMPR_6_Y1

Please contact Elaine Burke for an application form.

An 18-month accelerated technician course, which emphasises Good Manufacturing Practice (GMP) & Technology targeting the Pharmaceutical, Biopharmaceutical and Medical Devices manufacturing sectors. The principal aim of this course is to provide a nationally accredited educational programme in Good Manufacturing Practice and Technology for people keen to work in production, quality assurance or validation roles within leading Pharmaceutical, Chemical, Biotechnology and Medical Devices manufacturing companies.

On completion of the course, students will be capable of:

- Applying safe practices within the industry;
- Assisting during audits of plant facilities and manufacturing operations in accordance with appropriate GMP guidelines;
- Establishing methodological systems of record keeping, file management in printed and electronic form, in keeping with GMP guidelines;
- Writing and using Standard Operating Procedures;
- Applying scientific and regulatory knowledge, obtained during the course, to their work activities;
- Carrying out technical measurements appropriate to their working environment;
- Carrying out appropriate quality control procedures and assisting in quality control audits;
- Using information technology in the workplace;
- Understanding validation, contamination & cleanroom principles;
- Understanding key unit operations in the Pharmaceutical & Medical Devices Industries.

Module Information

http://modules.cit.ie
CIT has developed a website which gives full details of all modules for all courses. The website also has information on recommended textbooks, average weekly workload, assessments and exams.

Indicative Course Content & Duration

December 2012 – January 2013
Selection and orientation of new students

February 2013 – June 2013
Modules include:
Information Technology, Chemistry, Cell and Microbiology, Mathematics for Manufacturing Operations, Occupational Health & Safety/Environmental Management, GMP1/ Quality Assurance, Creativity, Innovation and Teamwork.

June 2013 – January 2014
Modules include:
Industrial Placement/Project and the following modules:
Measurement Science
GMP2/Quality Control
Microbiology

February 2014 – June 2014
Modules include:
Lean Manufacturing, Organic and Inorganic Chemistry, Calibration Science, Contamination Control, Clean Room Management, Manufacturing & Processing Technology, Introduction to Biotechnology or Free Elective.

>>

Higher Certificate in Science in Good Manufacturing Practice & Technology

(full-time) *continued ...*

Further Studies

Students completing the Higher Certificate in Good Manufacturing Practice & Technology have the opportunity to proceed to the Bachelor of Science in Good Manufacturing Practice (Level 7).

Entry Requirements

Individuals under the age of 23 must have obtained at least 5 passes at Ordinary Grade D3 in the Leaving Certificate Examinations to include English and Mathematics. Alternative Mathematics does not qualify applicants on this basis.

Applications are welcome from mature students, over 23 years of age by 1st January of year of entry. Leaving Certificate is desirable but not essential. Relevant work experience; skills gained through experiential learning; and other qualifications, will be considered when assessing applications.

Cost

No tuition fees are payable except by certain categories of student. Student services, registration and examination fees may apply, depending on circumstances of the student.

Note: The Third-Level Training Grant administered by local VEC offices is available for eligible students. The course is also recognised under the Back to Education Allowance Scheme which in certain circumstances permits those participants in receipt of social welfare payments to retain these payments while completing the course.

Exemptions

Applicants who have appropriate experience and knowledge of the Pharmaceutical, Biopharmaceutical or Medical Devices industries may be considered exempt from examination of some modules upon providing evidence via the Recognition of Prior Learning (RPL) scheme of the Institute.

What the students say

"This course gave me the up to date skills and relevant work experience that the pharmachem companies look for when recruiting and I got the job I wanted in one of the biggest pharmaceutical companies here in Cork."

"Being an accelerated course meant we all had to work hard to get through, but it was worth it in the end as the job offers started to come in."

"All the class pulled together and the lecturers were very helpful... everyone wanted us to succeed."

Higher Certificate in Science in Good Manufacturing Practice & Technology (part- time)

COURSE FEE	ENQUIRIES	COURSE CODE
€450 per module	Elaine Burke T: 021 433 5150 E: elaine.burke@cit.ie	CR_SGMPE_6_Y1

Please contact Elaine Burke for an application form.

Detailed Module Information is available at **http://modules.cit.ie**

1 - 4 evenings a week depending on the number of modules taken. A number of daytime workshops to be decided.

A nationally accredited education programme designed to meet the education and training needs of people in the areas of Production, Quality Assurance and Validation in the Biopharmaceutical, Pharmaceutical and Medical Devices industries.

Entry Requirements

Candidates under the age of 23 must have obtained a minimum of Leaving Certificate Grade D3 at Ordinary Level in 5 subjects including Mathematics, and English or Irish, OR an appropriate craft/technician qualification OR non-standard applicants (e.g. mature students – over 23 years) will be considered on an individual basis. Eligible candidates may be interviewed.

Course Outline

This course is designed for existing employees or potential new recruits in the Biopharmaceutical, Pharmaceutical and Medical Devices industries who would like an accredited qualification in any of following areas:

Indicative Content

Modules will include:
cGMP I and QA, Cell and Microbiology, Chemistry, Measurement Science, Information Technology, Maths for Manufacturing Operations, Occupational Health and Safety/ Environmental Management, cGMP II and QC, Total Quality Management, Contamination Control and Cleanroom Management, Manufacturing and Processing Technology, Calibration Science, Introduction to Biotechnology, Industrial Project.

Course Options

Credits and Certificates are awarded for each subject passed, allowing participants to select accredited modules appropriate to skill need and/ or gather credits towards the award of Higher Certificate.

Exemptions

Applicants who have appropriate experience and knowledge of the Pharmaceutical or Medical Devices industries may be considered exempt from examination of some subjects in Stage 1 or Stage 2 upon providing evidence via the Recognition of Prior Learning (RPL) scheme of the Institute.

Further Studies

Students completing the Higher Certificate in Good Manufacturing Practice & Technology have the opportunity to proceed to a Bachelor of Science in Good Manufacturing Practice (Level 7). Please contact Louise Byrne for more details.

Note: The running of individual modules will be dependent on a sufficient number of students enrolling on the course. The module may be withdrawn if this requirement is not fulfilled.

Bachelor of Science in Good Manufacturing Practice & Technology

COURSE CODE	COURSE FEE	ENQUIRIES
CR_SGMPE_7_Y1	€500 per module	Elaine Burke T: 021 433 5150 E: elaine.burke@cit.ie

3 modules each night from 6.30pm - 9.30pm

Entry Requirements

Candidates are required to have a Higher Certificate or higher in an Engineering or Science Discipline to undertake the complete programme.

Course Content

To commence September 2012
3 modules each night from 6.30pm - 9.30pm
- Validation Science (Mandatory)
- Chemical Applications (Mandatory)
- Biopharmaceutical Upstream (Elective)

To commence February 2013
3 modules each night from 6.30pm - 9.30pm
- Maintenance and Utilities (Mandatory)
- Technology Transfer (Mandatory)
- Environmental Management (Elective)
- Project (Mandatory)*

*Project can be undertaken once 7 modules have been completed.

A nationally accredited degree designed to meet the education and training needs of supervisors and higher technicians in the areas of Production, Quality Assurance and Validation in the Pharmaceutical, Biopharmaceutical, Chemical and Medical Device Industries. The programme comprises of 12 modules and a Project. To complete the programme, each student must take the 7 mandatory modules and 3 elective modules as well as the project. The project is undertaken towards the end of the degree programme, when the student has completed most of the modules. The programme can be taken over 2 years or spread out over 3 or more years.

There is a considerable element of continuous assessment. Laboratory experiments are included in appropriate modules.

Module Information

http://modules.cit.ie
CIT has developed a website which gives full details of all modules for all courses. The website also has information on recommended textbooks, average weekly workload, assessments and exams.

Indicative Content

- Validation Science
- Manufacturing Operations
- Chemical Applications for the Pharmaceutical Industry
- Technology Transfer
- Maintenance, Utilities and Facilities
- Biopharmaceutical Fermentation
- People Management
- Process Improvement
- Biopharmaceutical Downstream Processing
- Environmental Management
- Capstone Project
- Medical Devices
- Invitro Diagnostic Technology
- Formulation

Note: The running of individual modules will be dependent on a sufficient number of students enrolling on the course.

CENTRE OF CRAFT STUDIES

Head of Centre
John Twohig
T: 021 433 5912
E: john.twohig@cit.ie

Centre Secretary
Geraldine Mahon
T: 021 433 5910
E: geraldine.mahon@cit.ie

COURSES

Welding Courses:
Welding Course (Basic)
Coded Welding Course Mags Welding
Coded Welding Course Tags Welding
Coded welding Course Arc Welding
Coded Welding Course European Standard EN287
165 Certificate in Welding & Fabrication Practice

Transport Courses:
Motor Dealer Organisation
Automotive Technology 1
Automotive Technology 2
Automotive Technology 3
Skills Updating for Automotive Technicians

Welding Course (Basic)

COURSE CODE	COURSE FEE	ENQUIRIES
To be advised	€400	Finbarr O'Keeffe T: 021 433 5940 E: finbarr.okeeffe@cit.ie

6 x 3.5 hour evenings, practical training classes

This course provides a practical introduction to three common welding processes which are used in industry.

Structure

Candidates may take any or all of the following Welding Processes:

- Manual Metal-Arc Welding (MMA) rutile electrodes;
- Metal-Arc Gas Shielded welding (MAGS) solid wire;
- Tungsten Arc Gas Shielded welding (TAGS) carbon steel/stainless steel.

Award

A Certificate of attendance for candidates on successful completion of the course.

Coded Welding Course
Mags Welding

COURSE FEE	ENQUIRIES	COURSE CODE
€400 (excl. test fee €65 per specimen sent for NDT)	Finbarr O'Keeffe T: 021 433 5940 E: finbarr.okeeffe@cit.ie	CR_MAGS_6-1

7 x 3.5 hour evenings, practical training classes and one night for testing

This course is geared towards Craft persons/welders and other suitable candidates working in general steel fabrication plate/pipe and construction industry who wish to gain a coded welding qualification in the **MAGS** Welding process to EN 287/ASME IX, standard.

Admission Requirements

A good working knowledge of the appropriate welding process is necessary.

Structure

Candidates may take any or all of the following Welder Qualification tests:

- Metal-Arc Gas Shielded welding (MAGS) solid wire, butt and fillet welds in plate, vertical up position;
- Metal-Arc Gas Shielded welding (MAGS) solid wire, butt and fillet welds in plate, horizontal/vertical position;
- Metal-Arc Gas Shielded welding (MAGS) flux cored wire, fillet welds in plate horizontal/vertical position.

Award

A Welder Qualification Certificate to EN 287 & ASME IX will be awarded to candidates on successful completion of any of the above tests to the required standard.

Coded Welding Course
Tags Welding

COURSE CODE	COURSE FEE	ENQUIRIES
CR_TAGS_6-1	€400 (excl. test fee €65 per specimen sent for NDT)	Finbarr O'Keeffe T: 021 433 5940 E: finbarr.okeeffe@cit.ie

6 x 3.5 hour evenings, practical training classes and one night for testing

This course is geared towards Craft persons/welders and other suitable candidates working in general steel fabrication plate/pipe and construction industry who wish to gain a coded welding qualification in the **TAGS** Welding process to EN 287/ASME IX, standard.

Admission Requirements

A good working knowledge of the TAGS welding process is necessary.

Structure

Candidates may take any or all of the following Welder Qualification tests:

- Tungsten Arc Gas Shielded welding (TAGS) stainless steel pipe Æ48 mm x 2.77 mm wall thickness;
- Tungsten Arc Gas Shielded welding (TAGS) carbon steel pipe Æ89 mm x 5.5 mm wall thickness.

Award

A Welder Qualification Certificate to EN 287 & ASME IX will be awarded to candidates on successful completion of any of the above tests to the required standard.

Coded welding Course
Arc Welding

COURSE FEE	ENQUIRIES	COURSE CODE
€400 (excl. test fee €65 per specimen sent for NDT)	Finbarr O'Keeffe T: 021 021 433 5940 E: finbarr.okeeffe@cit.ie	CR_ARC_6-1

7 x 3.5 hour evenings, practical training classes and one night for testing.

This course is geared towards Craft persons/welders and other suitable candidates working in general steel fabrication plate/pipe and construction industry who wish to gain a coded welding qualification in the MMA Welding process to EN 287/ASME IX, standard.

Admission Requirements

A good working knowledge of the appropriate welding process is necessary.

Structure

Candidates may take any or all of the following Welder Qualification tests:

- Manual Metal-Arc Welding (MMA) rutile electrodes, butt and fillet welds in plate, vertical up position;
- Manual Metal-Arc Welding (MMA) basic electrodes, butt and fillet welds in plate, vertical up position.

Award

A Welder Qualification Certificate to EN 287 & ASME IX will be awarded to candidates on successful completion of any of the above tests to the required standard.

Coded Welding Course
European Standard EN287

COURSE CODE	COURSE FEE	ENQUIRIES
CR_WELD_6-1	€1,250 (excl. test fees)	Michael Cotter T: 021 433 5789 E: michael.cotter@cit.ie

Two evenings per week - Monday (27) and Tuesdays (8)

This course provides a coded welding qualification to EN 287/ASMEIX, for tradespersons/ welders and other suitable candidates working in general steel fabrication plate/pipe and construction industry.

Entry Requirements

A good working knowledge of the appropriate welding process is necessary.

Duration

The course is presented over one full academic year September 2012 to June 2013
27 Monday evenings, practical training; and 8 Tuesday evenings, theoretical classes

Structure

Candidates may take any or all of the following Welder Qualification tests:

- Metal-Arc Gas Shielded welding (MAG) solid wire, plateV butt and fillet welds in vertical up position;
- Metal-Arc Gas Shielded welding (MAG) solid wire, plateV butt fillet welds in horizontal/vertical position;
- Metal-Arc Gas Shielded welding flux cored wire, plate fillet welds in horizontal/vertical position;
- Manual Metal-Arc Welding (MMA) rutile electrodes, plateV butt and fillet welds in vertical up position;
- Manual Metal-Arc Welding (MMA) basic electrodes, plateV butt and fillet welds in vertical up position;
- Tungsten Arc Gas Shielded welding (TIG) carbon steel pipe Ø89 mmx 5.5 mm wall thickness;
- Tungsten Arc Gas Shielded welding (TIG) stainless steel pipe Ø 48mm x 2.77 mm wall thickness.

Qualification test fee of €65 will be applied for each test specimen sent for NDT, no test fees are included in the course fee.

A theory test may be taken for each process, this test is not mandatory.

Award

A Welder Qualification Certificate to EN 287 & ASME IX will be awarded to candidates on successful completion of any of the above tests to the required standard.

165 Certificate in Welding & Fabrication Practice

COURSE FEE	ENQUIRIES	COURSE CODE
€1,250 (excl. test fees)	David Lynch T: 021 433 5789 E: david.lynch@cit.	CR_EW165_6

Two evenings per week (to be arranged

This revised 165 scheme has been developed to replace the old 165City & Guilds of London Institute Welding Craft Practice Scheme. The revision has taken place with the full involvement and support of the Welding Institute. The scheme is intended to assist students/trainees to reach a standard of practical proficiency in welding related to that specified in EN 287 – BS 4872. The scheme is suitable for a wide range of students and craft persons, for example: the self-employed, adults wishing to pursue single units and young people who are new entrants to the industry.

The scheme is presented in unit form at levels 1, 2 and 3.

Structure

Level 1, 2 and 3
Unit 1 Gas Welding and Cutting
Unit 2 Manual Metal-Arc Welding
Unit 3 Metal-Arc Gas Shielded Welding
Unit 4 Tungsten Arc Gas Shielded Welding
Unit 5 Fabrication Processes
Unit 6 Related Studies
Unit 7 Engineering Drawing

Certificates will be awarded for any four units to include at least two different welding processes. Additional units may be taken as endorsements.

Records of achievement will be awarded for individual units successfully completed.

Note: Examination fees are payable to the awarding body. These are not included in the course fee.

Awarding Bodies

Awarding Body Consortium (ABC)
The Certificate and Records of Achievement will be endorsed by the Welding Institute.

Motor Dealer Organisation

COURSE CODE	COURSE FEE	ENQUIRIES
To be advised	€520 (inc. exam fee)	Pat O'Shaughnessy T: 021 433 5944 E: pat.oshaughnessy@cit.ie

One night per week for two semesters

Entry Requirements

Leaving Certificate or relevant craft qualification.

Course Content

The course will consist of TWO modules in motor dealer organisation.

The modules will address the issues covering site selection and setup of a motor dealership. It will also cover the legal, administrative, warranty, personnel and safety matters encountered in practice by service advisors and service managers.

Award

Level 6 Special Purpose Award (10 credits).

Awarding Body

Cork Institute of Technology

Automotive Technology 1

COURSE FEE	ENQUIRIES	COURSE CODE
€580 (inc. exam fee)	Michael O'Riordan T: 021 432 6329 E: michael.oriordan@cit.ie	To be advised

One night per week for two semesters.

Entry Requirements

Leaving Certificate or relevant craft qualification.

Course Content

The course will consist of TWO modules covering the fundamentals of automotive technology and automotive electricity. The areas covered will include engines, transmissions, brakes, suspension, steering and automobile electrical components, circuits and systems. This is a classroom-based course.

Award

Level 6 Special Purpose Award (10 credits).

Awarding Body

Cork Institute of Technology

Automotive Technology 2

COURSE CODE	COURSE FEE	ENQUIRIES
To be advised	€580 (inc. exam fee)	Gary O'Neill T: 021 432 6329 E: gary.oneill@cit.ie

One night per week for one academic year.

Entry Requirements

Automotive Technology 1 or equivalent.

Course Content

The course will consist of TWO modules covering more advanced aspects of automotive electrical components and systems. The course will include coverage of engine construction, timing diagrams diesel and petrol systems, transmission systems, gearboxes, drive layouts, steering, suspension and brake systems. It will also cover electrical circuit principles, sensors, actuators displays, fault-finding ignition/injection systems, lighting and cooling systems, ABS Braking and SRS Systems. This is a classroom-based course

Award

Level 6 Special Purpose Award

Awarding Body

Cork Institute of Technology

Automotive Technology 3

COURSE FEE	ENQUIRIES	COURSE CODE
€580 (inc. exam fee)	Noel O'Halloran T: 021 432 6329 E: noel.ohalloran@cit.ie	To be advised

One night per week for one academic year.

Entry Requirements

Automotive Technology 2 or equivalent.

Course Content

The course will consist of TWO modules covering more advanced aspects of automotive electrical components and systems. The course will include coverage of emission controls, rotary engines, valve timing, CVT and wheel drive, power-assisted steering, traction control, air conditioning and safety restraint systems (SRS). It will also address electronic ignition, engine alignment systems, lighting systems, CAN bus, cruise control, instruments, displays and climate controls. This is a classroom-based course

Award

Level 6 Special Purpose Award

Awarding Body

Cork Institute of Technology

Skills Updating for Automotive Technicians

COURSE CODE	COURSE FEE	ENQUIRIES
To be advised	€480 (inc. exam fee)	Noel O'Halloran/Gary O'Neill T: 021 432 6329 E: noel.ohalloran@cit.ie or gary.oneill@cit.ie

One night per week for one semester.

Entry Requirements

Qualified automotive mechanic or technician.

Course Content

The course will review recent advances in automotive electronics and controls and the use of modern diagnostic and fault-finding equipment. The course will feature classroom instruction and practical activities.

Award

A certificate of attendance will be issued.

Awarding Body

Cork Institute of Technology

SCHOOL OF SCIENCE & INFORMATICS

Head of School
Dr Hugh McGlynn

The School consists of the following Departments:
Department of Applied Physics and Instrumentation
Department of Biological Sciences
Department of Chemistry
Department of Mathematics
Department of Computing

DEPARTMENT OF APPLIED PHYSICS & INSTRUMENTATION

Head of Department
Dr Liam McDonnell

Department Secretary
Mary Phelan
T: 021 433 5870
E: mary.phelan@cit.ie

COURSES

Higher Certificate in Science in Industrial Measurement & Control
Bachelor of Science in Applied Physics & Instrumentation
Bachelor of Science (Honours) in Instrument Engineering

Short Course
Introduction to Astronomy

Specialist Courses and Minor Awards in Industrial Automation
Short Courses for Industry

www.physics.cit.ie **www.instrumentation.cit.ie**

Higher Certificate in Science in Industrial Measurement & Control

COURSE CODE	COURSE FEE	ENQUIRIES
CR_SIMCT_6	€200 per 5 credit module (inc. exam fees)	Conor O'Farrell T: 021 433 5870 E: conor.ofarrell@cit.ie

Apply online at
http://www.cit.ie/course/CR_SIMCT_6

ACCS Mode

Cycle B: Modules will be offered on three evenings per week. The modules listed are subject to change.

Note: This Level 6 programme is currently delivered over three academic years. Selected stage 1 and stage 2 modules are offered each year. Each year consists of two semesters: the first semester runs from September to January; and the second semester runs from February to June.

Aim

This programme of 120 credits is designed to enable skilled craftspersons working in industry to upgrade their qualifications and skills. Applications are also invited from candidates who wish to take specific modules from the programme.

Minimum Entry Requirements

1. Leaving Certificate with grade D3 at Ordinary or Higher level in five subjects, including Mathematics and English or Irish;
2. Mature and other special category applicants will be admitted according to CIT regulations for part-time enrolment;
3. Applicants holding a relevant FETAC Advanced Certificate, National Craft Certificate or equivalent, other relevant Level 6 (or higher) qualifications or having relevant industrial experience will be eligible for exemptions from certain modules.

Course Content

Cycle A Modules

- Introduction to Programming
- Process Instrumentation 1
- Graphics & Engineering Design
- Sensors & Systems
- Practical Computer Technology
- Mathematics for Science 2.1
- Technological Mathematics 2

Cycle B Modules

- Mathematics for Science 2.2
- Process Instrumentation 2
- Industrial Automation 1
- Instrument Calibration
- Introduction to Physics
- Digital Instrumentation
- Technological Mathematics 2

Cycle C Modules

- Mathematics for Science 2.1
- Essential Mathematical Skills
- Introduction to Chemical and Electrical Systems
- Introduction to Process Control
- Communications & Safety
- Industrial Automation Project
- Instrument Measurement
- Fundamental Physics

Note: Exemptions from certain modules on this programme are automatically granted to holders of FETAC Advanced Certificates or equivalent, in a relevant craft and are not listed above. Other applicants may have to take additional modules.

Award

Single module certification within the Higher Certificate in Science in Industrial Measurement & Control. The major award of the Higher Certificate in Science in Industrial Measurement & Control will be received by students who successfully complete the course programme.

Further Studies at CIT

Students who pass the Higher Certificate in Science in Industrial Measurement & Control may proceed onto the Level 7 Bachelor of Science in Applied Physics and Instrumentation, subject to availability of places.

Bachelor of Science in Applied Physics & Instrumentation

COURSE FEE	ENQUIRIES	COURSE CODE
€200 per 5 credit module (inc. exam fee	Harvey Makin T: 021 433 5870 E: harvey.makin@cit.ie	CR_SPHYE_7

Apply online at http://www.cit.ie/course/CR_SPHYE_7

ACCS Mode

Cycle A: Modules will be offered on three evenings per week.

Note: This Level 7 programme is delivered over two academic years. In the academic year 2012/2013 Cycle A modules are offered. Each year consists of two semesters: the first semester runs from September to January; and the second semester runs from February to June.

Aim

This programme of 60 credits provides advanced specialist education in measurement and control technology that broadens the perspective of the student and helps to develop design capabilities in instrumentation. The course also helps to consolidate the basic foundation in the discipline for students wishing to pursue the Bachelor of Science (Honours) in Instrument Engineering (please see below for information on this title change)

Minimum Entry Requirements

1. Higher Certificate in Science in Applied Physics and Instrumentation or the Higher Certificate in Science in Industrial Measurement & Control;
2. Holders of other relevant Level 6 qualifications, including City & Guilds Course No. 275, will also be considered on an individual case basis;
3. Applicants holding relevant Level 7 (or higher) qualifications or having relevant industrial experience may be eligible for exemptions from certain modules.

Course Content

Cycle A Modules

- Mathematics for Science 3.1
- Digital Systems & Interfacing
- Process Control & Electrical
- Industrial Automation & SCADA
- Quality Systems
- Project Part A

Bachelor of Science in Applied Physics & Instrumentation

Cycle B Modules

- Programming for Measurement
- Process Engineering
- Industrial Communications & Networks
- Telemetry
- Project Part B (10 credits)

Awards

Single module certification within the Bachelor of Science in Applied Physics & Instrumentation. The major award of the Bachelor of Science in Applied Physics & Instrumentation will be received by students who successfully complete the course programme.

Validating Body

Higher Education Training & Awards Council.
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.

Further Studies at CIT

To progress from the Bachelor of Science in Applied Physics & Instrumentation to the Bachelor of Science (Honours) in Instrument Engineering, candidates must achieve a pass with at least an average mark of 50%. Progression is subject to the availability of places.

Bachelor of Science (Honours) in Instrument Engineering

COURSE FEE	ENQUIRIES	COURSE CODE
€300 per 5 credit module (inc. exam fees)	James Barrett T: 021 433 5870 E: james.barrett@cit.ie	CR_SINEN_8

Apply online at http://www.cit.ie/course/CR_SINEN_8

IMPORTANT CHANGE OF AWARD TITLE

With effect from September 2012, the part-time course leading to the Bachelor of Science (Honours) in Applied Physics and Instrumentation award is changed to the Bachelor of Science (Honours) in Instrument Engineering award. New students will receive the latter award on satisfactory completion of the programme. Current students may change their registration to the new award or remain with the old award. The programme content is largely unaltered.

ACCS Mode

Cycle A: Modules will be offered on three evenings per week.

Note: This Level 8 course is delivered over two academic years. In the academic year 2012/2013 Cycle A modules are offered. Each year consists of two semesters: the first semester runs from September to January; and the second semester runs from February to June.

Aim

This programme of 60 credits aims to meet the requirements of industry for professionally qualified personnel in instrumentation and to satisfy the demands of students for a qualification in Instrument Engineering to the highest undergraduate level.

Minimum Entry Requirements

1. Bachelor of Science in Applied Physics and Instrumentation with a minimum average mark of 50%;
2. Holders of other Level 7 qualifications in a relevant Science or Engineering discipline with a minimum average mark of 50%;
3. Applicants holding relevant Level 8 qualifications or having relevant industrial experience may be eligible for exemptions from certain modules.

Course Content

Cycle A Modules

- Engineering Project Management
- Labview for Instrumentation
- Process Analytical Technologies
- Instrument System Design
- Project (Research Phase or Implementation* phase as appropriate) * 10 credit module

Cycle B Modules

Advanced Programming for Measurement

- Advanced Signal Processing
- Advanced Industrial Automation
- Advanced Process Control
- Statistics and Quality Methods
- Project (Research Phase or Implementation* phase as appropriate) * 10 credit module

Awards

Bachelor of Science (Honours) in Instrument Engineering (Single module certification is possible)

Validating Body

Higher Education Training & Awards Council.

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.

Further Studies at CIT

Graduates are eligible to apply for a post-graduate degree at Masters (MSc) or Doctoral (PhD) levels.

Introduction to Astronomy (PHYS6010)

COURSE CODE	COURSE FEE	ENQUIRIES
CR_SASTR_6	€200 (inc. exam fees)	Eva Norris T: 021 433 5870 E: eva.norris@cit.ie

Module Information
http://modules.cit.ie

CIT has developed a website which gives full details of all modules for all courses. The website also has information on recommended textbooks, average weekly workload, assessments and exams.

This 5 credit module provides an introduction to both the theoretical and practical aspects of astronomy. The module will include practical work at the CIT Observatory at Blackrock Castle.

This module may be presented, subject to enrolment and resources, over one evening (3 hours) a week during one of the semesters in the academic year 2012/2013.

Specialist Courses and Minor Awards in Industrial Automation

COURSE FEE	ENQUIRIES
€825 per 5 credit module (inc. exam fees)	Harvey Makin T: 021 433 5870 E: harvey.makin@cit.ie

These specialist courses may be presented, subject to enrolment and resources.

One evening (3 hours) a week for one semester (13 weeks) in the academic year 2012/2013. Class sizes are strictly limited with each learner being assigned an individual computer workstation.

Introduction to Industrial Automation

Course Code CR_SINDA_6
This is a hands-on module that introduces the learner to the programmable logic control and associated instrumentation, including applications in process industries. No prior knowledge in this area is required.

Industrial Automation

Course Code CR_SINDA_7
This is a specialised hands-on module that encompasses applications of programmable logic controllers (PLCs) as well as a thorough introduction to DCS, SCADA and Delta V. The learner will be expected to have a relevant Level 6 qualification or relevant industrial experience. This module presumes that the learner will have met the learning outcomes of Introduction to Industrial Automation (above).

Advanced Industrial Automation

Course Code CR_SINDA_8
This is a specialised hands-on module that deals with essential topics for today's automation engineers. The module has a heavy emphasis on practical programming of a range of automated processes using a range of software tools such as DeltaV and SCADA. The learner will be expected to have a relevant Level 7 qualification or relevant industrial experience. This module presumes that the learner will have met the learning outcomes of Industrial Automation (above).

Level 8 Certificate in Advanced Industrial Automation

Course Code CR_SINAU_8
This minor award is available to students who successfully complete the above modules and two additional project modules as listed below:

- Introduction to Industrial Automation
- Introduction to Industrial Automation Project
- Industrial Automation
- Advanced Industrial Automation
- Advanced Industrial Automation Project*

*10 credit module

Level 6 Certificate in Process Control and Automation

Course Code CR_SPRCA_6
This minor award is available to students who successfully complete the following modules from the part-time Higher Certificate in Science in Industrial Measurement & Control. These modules are also available during the day, thereby enabling students to accelerate completion of the award.

- Practical Computer Technology
- Introduction to Process Control
- Introduction to Industrial Automation
- Introduction to Programming for Measurement Applications
- Digital Instrumentation
- Technological Maths 2

Short Courses for Industry

Short courses in instrumentation, measurement and control, optics, sensors and cognate areas can be offered from the modules within our validated programmes. Costs, location of courses and scheduling are negotiable.

DEPARTMENT OF BIOLOGICAL SCIENCES

Head of Department
Dr Brendan O'Connell

Department Secretary
Frances Lynch
T: (021) 433 5885
E: frances.lynch@cit.ie

COURSES

Master of Science in Biomedical Science
Master of Science in Computational Biology

Master of Science in Biomedical Science

COURSE FEE	ENQUIRIES	COURSE CODE
To be advised	Michael Healy T: 021 433 5407 E: michael.healy@cit.ie	CR_SBMSC_9

Module Information
http://modules.cit.ie

The Taught MSc Degree in Biomedical Science is a part-time course aimed at Biomedical Science and Life Science graduates. It is particularly suitable for Medical Scientists working in a clinical setting, but is equally relevant to individuals interested in any area of Medical Diagnostics for example in the Biotech or Biopharmaceutical sectors.

Entry Requirements

1. Entry to the MSc in Biomedical Science will require a minimum of a second-class grade II honours degree in the BSc in Biomedical Science.
2. Applications will also be considered from candidates with other relevant Level 8 qualifications in disciplines such as Biochemistry, Dentistry, Microbiology and Medicine, together with having a minimum of three years proven, relevant experience.
3. Candidates with substantial proven and relevant biomedical experience will be considered for places through approved processes for recognition of prior learning (RPL).
4. Delivery of the programme is designed to facilitate participation by students in current employment,

Course Programme

The programme will consist of lectures, a substantial research project which will be presented as a dissertation, tutorials, and case studies, data analysis and assignments. A significant portion of case studies, data analysis and assignments will be carried out by the student in his/her own time in accordance with directed learning guidelines provided. The research project will usually be carried in the work place of the candidate. The MSc Degree in Biomedical Science is awarded to successful candidates who complete the coursework examinations and dissertation aspects of the programme.

Module Information

http://modules.cit.ie
CIT has developed a website which gives full details of all modules for all courses. The website also has information on recommended textbooks, average weekly workload, assessments and exams.

Master of Science in Computational Biology

COURSE CODE	COURSE FEE	ENQUIRIES
CR_SCMPB_9 CR_SCMBI_9 (Post-graduate Diploma – embedded award)	To be advised	Dr Roy Sleator T: 021 433 5405 E: roy.sleator@cit.ie

Module Information
http://modules.cit.ie

The Taught MSc Degree in Computational Biology is a one year (3 semester) full-time course open to application from graduates with either a science or computing background.

Entry Requirements

1. Entry to the MSc in Computational Biology will normally require a minimum of a second-class grade II honours degree (level 8 or higher) in Science, Computing or a related area (e.g. Engineering, Maths etc)
2. Candidates with relevant experience will be considered for places through approved processes for recognition of prior learning (RPL).

Course Programme

The programme will consist of lectures, a substantial research project which will be presented as a dissertation, tutorials, online peer assisted learning, case studies, data analysis and assignments. A significant portion of case studies, data analysis and assignments will be carried out by the student in his/her own time in accordance with directed learning guidelines provided.

Student who successfully complete the taught elements of the course (usually comcluded in the first two semesters will be awarded a Postgraduate Diploma in Computational Biology. The MSc Degree in Computational Biology is awarded to successful candidates who complete the coursework examinations and dissertation aspects of the programme.

Module Information

http://modules.cit.ie
CIT has developed a website which gives full details of all modules for all courses. The website also has information on recommended textbooks, average weekly workload, assessments and exams.

DEPARTMENT OF CHEMISTRY

Head of Department
Dr John Wood

Department Secretary
Mary Phelan
T: 021 433 5870
E: mary.phelan@cit.iecit.ie

COURSES

Bachelor of Science in Analytical and Pharmaceutical Chemistry (Level 7)
Bachelor of Science (Honours) in Analytical Chemistry with Quality Assurance (Level 8)
Certificate in Quality Assurance – Special Purpose Award (Level 6)
Diploma in Quality Management – Part I
Diploma in Quality Management – Part 2

Bachelor of Science
in Analytical and Pharmaceutical Chemistry

COURSE CODE	COURSE FEE	ENQUIRIES
CR_SCHEM_7_Y2 CR_SCHEM_7_Y3	€200 per module (inc. exam fee)	Dr John Wood T: 021 433 5872 (or Department Secretary) E: john.wood@cit.ie

Module information
http://modules.cit.ie

Entry Requirements

Applicants for semester 1 or 2 modules must have Leaving Certificate Grade D3 (Ordinary or Higher Level) in five subjects (which must include Mathematics and either Irish or English), or have equivalent approved qualifications (supported by official documentary evidence). Individual module requirements must also be met where appropriate. Applicants for semester 3 or 4 modules must have completed the modules of semesters 1 and 2, or have equivalent approved qualifications (supported by official documentary evidence). Individual module requirements must also be met where appropriate.

Applicants for semester 5 or 6 modules must have completed the modules of semesters 1, 2, 3, and 4, or have equivalent approved qualifications (supported by official documentary evidence). Individual module requirements must also be met where appropriate.

Delivery of these modules on a part-time/evening basis will be subject to demand resulting in the creation of viable class groups. Otherwise, successful applicants will be invited to join the cohort of full-time day students taking their respective modules (subject to availability of places and other constraints). Currently, there is no separate part-time/evening class group for this course. Semester 1, 3, and 5 modules for fulltime students are completed between September and January, while semester 2, 4, and 6 modules are completed between February and June. Applications should be made to the Admissions Office of the Institute before 1st June 2012.

Applicants should quote the appropriate course code (above), indicating that they are applying as Part-time/ ACCS* students. Offers of places for semester 3, 4, 5 and 6 modules will be made at the end of June; offers of places for semester 1 and 2 modules will be made in September. Late applications may be considered at the Institute evening class enrolment sessions in early September.

*ACCS is an acronym for “Accumulation of Credits and Certification of Modules”. This scheme allows students - instead of studying an entire course - to study one or more modules of that course. Modules passed, are certified individually, and can be accumulated, leading to an award of a Degree.

Course Content

Modules marked ‘M’ are mandatory for completion of the stage or award; those marked ‘E’ are elective modules.

Part-time students may apply for individual modules. In general, 6 modules must be completed in order to complete a semester, and 12 modules constitute a stage.

Semester 1
M Chemical Principles
M Introduction to Physics
M Essential Mathematical Skills
M Biomolecules and Cells
M Laboratory Practices
M Creativity, Innovation & Teamwork

Semester 2
M Fundamental Physical Chemistry
M Organic Chemistry Fundamentals
M Calculus and Statistics for Biological Science
M Computing Skills
M Introduction to Biotechnology
E Physics
E Microbes, Enzymes and Energy

Semester 3
M Organic Chemistry
M Inorganic Chemistry
M Analytical Chemistry 1
M Industrial Chemistry
M Fundamentals of Microbiology
E Quality, Validation, and Regulatory Affairs
E Structural Biochemistry
E Cellular Biotechnology

Semester 4
M Pharmaceutical Chemistry
M Physical Chemistry
M Analytical Chemistry 2
M Calculus and Statistics 2
M Instrumentation & Computing
E Quality, Validation, and Regulatory Affairs
E Structural Biochemistry
E Cellular Biotechnology

Semester 5
M Spectroscopic and Chromatographic Methods
M Topics in Organic Chemistry
M Inorganic & Physical Chemistry 1
M Quality Assurance for the Chemical Industry
M Experimental Chemistry
E Chemical Applications for the Pharmaceutical Industry
E Analytical Microbiology
E Industrial Biotechnology

Semester 6
M Environmental Analysis
M Pharmaceutical Applications
M Inorganic & Physical Chemistry 2
M Industrial Placement

Note: Late Applications for places will be taken at the Institute evening class enrolment sessions in early September.

Bachelor of Science (Honours) in Analytical and Pharmaceutical Chemistry

COURSE CODE	COURSE FEE	ENQUIRIES
CR_SACQA_8_Y4 (semester 7 and semester 8 modules)	€300 per module (inc. exam fee)	Dr John Wood T: 021 433 5872 (or Department Secretary) E: john.wood@cit.ie

Module information
http://modules.cit.ie

Entry Requirements

Applicants for semester 7 or semester 8 modules must have completed the BSc in Analytical and Pharmaceutical Chemistry with an overall average final mark of 50%, or have equivalent approved qualifications (supported by official documentary evidence). Individual module requirements must also be met where appropriate.

Delivery of these modules on a part-time/evening basis will be subject to demand resulting in the creation of viable class groups. Otherwise, successful applicants will be invited to join the cohort of full-time day students taking their respective modules (subject to availability of places and other constraints). Currently, there is no separate part-time/evening class group for this course. Semester 7 modules for full-time students are completed between September and January, while semester 8 modules are completed between February and June.

Applications should be made to the Admissions Office of the Institute before 1st June 2012. Applicants should quote the appropriate course code (above), indicating that they are applying as Part-time/ACCS* students. Offers of places for semester 7 and 8 modules will be made at the end of June. Late applications may be considered at the Institute evening class enrolment sessions early September.

* ACCS is an acronym for "Accumulation of Credits and Certification of Modules". This scheme allows students - instead of studying an entire course – to study one or more modules of that course. Modules passed, are certified individually, and can be accumulated, leading to an award of an Honours Degree.

Course Content

Modules marked 'M' are mandatory for completion of the degree; those marked 'E' are elective modules. Part-time students may apply for individual modules. In general, 6 modules must be completed in order to complete a semester, and 12 modules are required to complete the degree.

Semester 7
M Methodology & Experimental Analytical Chemistry
M Advanced Chromatographic Methods
M Electrochemical, Thermal & Particle Analysis
M Quality Management Systems for Chemists
M Statistical Quality Control
E Specialist Topics (Immunoassays, Philosophy of Science)
E Molecular Biotechnology
E Pharmaceutical Microbiology

Semester 8
M Advanced Spectroscopic Methods
M Analytical Applications
M Chemical Informatics
M Pharmaceutical Quality Management
M Experimental Project

Certificate in Quality Assurance

Special Purpose Award (Level 6)

COURSE FEE	ENQUIRIES	COURSE CODE
€400 per module (includes registration and exam fee)	Dr Mary McCarthy T: 021 433 5878 (or Department Secretary) E: mary.mmccarthy@cit.ie	CR_SQASS_6

Monday or Tuesday or Wednesday, 7pm - 10pm

This is designed as a first course in quality assurance and control. Graduates will have the ability to apply and maintain quality assurance/quality control systems in an industrial environment to support delivery of a quality product or service. The course emphasises everyday practical aspects concerning the use of basic quality techniques in industry, and will be useful both to those who require some basic methodology of quality, and those who hope to progress within the world of quality management.

Course Content

Module 1
Fundamentals of Quality Assurance

- The function of quality assurance in manufacturing and service
- The role of quality control
- Human aspects of quality
- Regulatory requirements
- Documentation for quality assurance
- Calibration concepts

Module 2
Introduction to Quality Management, Validation, and Statistical Quality Control

- Quality costing methods
- Sampling inspection
- Design and use of quality control charts
- Understanding variability in processes
- Validation: theory, role, and application
- Managing quality assurance systems

Entry Requirements

Applicants should normally have a technician level qualification, or work experience in the quality area together with an appropriate educational background. Other applicants will be considered on an individual basis.

Duration

One evening per week for one academic year. Module 1 is delivered and examined during semester 1, and module 2 is then completed during semester 2.

Award

Certificate in Quality Assurance – Special Purpose Award (Level 6).

Awarding Body

Cork Institute of Technology.

Note 1: Applications for places will be taken at the Institute evening class enrolment session in early September.

Note 2: This course has been devised to replace the City & Guilds Certificate in Quality Assurance, which is no longer offered by the City & Guilds of London Institute.

Diploma in Quality Management Part 1

COURSE CODE	COURSE FEE	ENQUIRIES
CR_SQMAN_Y1	€700 (payable to CIT) Exam fee: €140 (payable to EIQA)	Dr Mary McCarthy T: 021 433 5878 (or Department Secretary) E: mary.mmccarthy@cit.ie

Monday or Tuesday or Wednesday, 7pm - 10pm

Entry Requirements

Applicants are required to have the CIT Certificate in Quality Assurance Special Purpose Award or an equivalent qualification. Experience in quality management will be taken into account. Applications on an “equivalent” basis are considered on an individual basis. As coursework on this programme involves a significant quantity of both oral and written reports, examinations, and presentations, applicants must be competent in spoken and written English.

Course Content

Setting up a quality system, the elements of a quality system, basic management theory, auditing, problem solving and quality improvement, product and service quality, quality costs, implementing TQM and documentation control. The format of this course is that typical of a management course i.e. it involves discussion and background reading; essay type answers are required in the written examination and the course is partially examined by project work.

Duration

One evening per week for one academic year.

Award

Diploma in Quality Management – Part 1.

Awarding Body

Excellence Ireland Quality Association (EIQA)

Note: Applications for places will be taken at the Institute evening class enrolment session in early September.

Diploma in Quality Management Part 2

COURSE FEE	ENQUIRIES	COURSE CODE
€800 (payable to CIT) Exam fee: €140 (payable to EIQA)	Dr Mary McCarthy T: 021 433 5878 (or Department Secretary) E: mary.mmccarthy@cit.ie	CR_SQMAN_Y2

Monday or Tuesday or Wednesday, 7pm - 10pm

Entry Requirements

Applicants are required to have the Diploma in Quality Management – Part 1 (or the Certificate in Quality Management, which was the previous title of the course).

As coursework on this programme involves a significant quantity of both oral and written reports, examinations, and presentations, applicants must be competent in spoken and written English.

Course Content

- Introduction to Total Quality
- Quality Management Philosophies
- Managing for Quality
- Review of Quality Standards
- Quality Awards
- Leadership
- Human Resource Development
- Teamwork
- Process Management
- Strategic Information Management
- Developments in Total Quality

The format of this course is typical of a management course involving participation, discussion and background reading. The project constitutes a very important part of the year's work and marks are awarded accordingly.

Duration

One evening per week for one academic year.

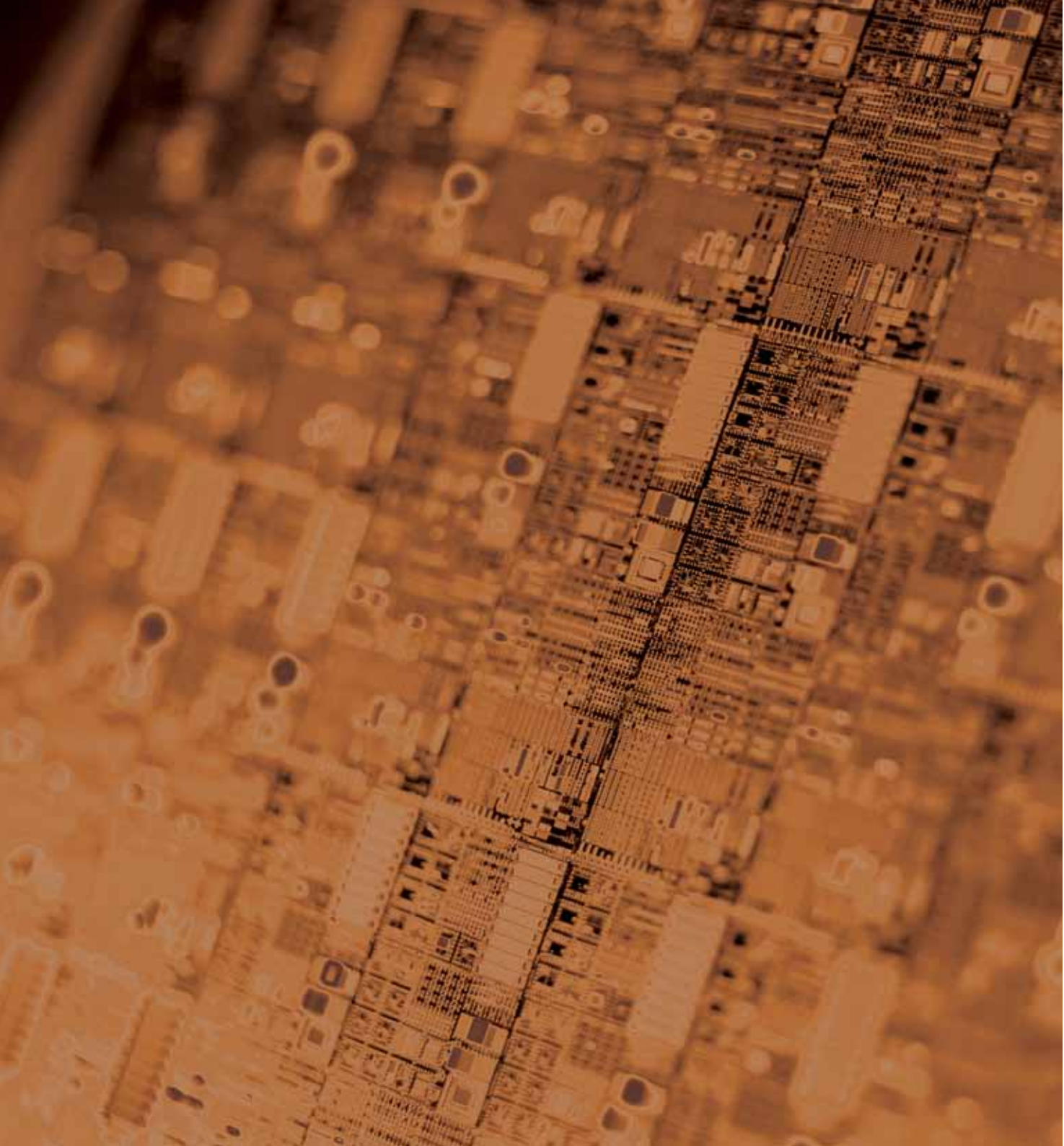
Award

Diploma in Quality Management – Part 2.

Awarding Body

Excellence Ireland Quality Association (EIQA).

Note: Applications for places will be taken at the Institute evening class enrolment session in early September.



DEPARTMENT OF COMPUTING

Head of Department
Jim O'Dwyer

Enquiries
T: 021 433 5160
E: it@cit.ie

COURSES

Higher Certificate in Science in Computing*
Bachelor of Science in Computing
Bachelor of Science in Information Technology Support
Bachelor of Science (Honours) in IT Management
Bachelor of Science (Honours) in Cloud Computing

Postgraduate
MSc in Cloud Computing
MSc in Software Development*
MSc in Networking and Security

Cisco Network Academy
CISCO Certified Network Associate
CISCO Certified Network Professional

CompTIA
CISCO IT/Essentials 1/CompTIA A+
CompTIA Security+
CompTIA Network+

Novell
Novell's Certified Linux Professional (CLP)

VMware IT Academy
VMware Vsphere ESXi 5.0 Install, Configure and Manage

Please note: Course content is subject to change due to current academic review.

Higher Certificate in Science in Computing

COURSE CODE	COURSE FEE	ENQUIRIES
CR_KCOME_6	Department Secretary T: 021 433 5160 E: it@cit.ie	€200 per module (inc. exam fee)

Apply online at
http://www.cit.ie/course/CR_KCOME_6

The programme is designed to provide the student with the education and skills needed to pursue a career as a Software or Computer Technician.

Entry Requirements

Non-Standard Applicants: Mature Students, FETAC (NCVA Level 2) Second Chance etc., are particularly welcome.

Standard Applicants: Leaving Certificate grade D3 at Ordinary or Higher Level in 5 subjects including Mathematics and either English or Irish.

Closing Date

Closing date for application is early September 2012. Late applications may be considered should any places become available.

Module Information

http://modules.cit.ie
CIT has developed a website which gives full details of all modules for all courses. The website also has information on recommended textbooks, average weekly workload, assessments and exams.

Duration

At least six semesters, depending on the number of modules taken per semester.

Award

Higher Certificate in Science in Computing
(Single module certification possible).

Course Content

Among the areas you would be required to study are:

- Programming
- Computer Architecture
- Computer Networks
- Database Systems
- Operating Systems
- Mathematics & Statistics
- Web Development

Progression

On successful completion of this programme there are progression opportunities open to further Higher Education Qualifications at Ordinary Degree and Honours Degree Level.

Please note: Course content is subject to change due to current academic review.

This programme is supported under the National Development Fund

Bachelor of Science in Computing

COURSE FEE	ENQUIRIES	COURSE CODE
€300 per module (inc. exam fee)	Department Secretary T: 021 433 5160 E: it@cit.ie	CR_KCOME_7

Apply online at
http://www.cit.ie/course/CR_KCOME_7

This programme is designed as a follow on programme from the Higher Certificate in Science in Computing.

Closing Date

Closing date for application is early September 2012. Late applications may be considered should any places become available.

Entry Requirements

To be eligible to undertake the programme or a single module you must hold a Higher Certificate in Science in Computing or equivalent. The Department operates a policy of recognising prior learning (RPL) in compliance with the overall Institute policy of RPL. www.cit.ie/rpl

Module Information

http://modules.cit.ie
CIT has developed a website which gives full details of all modules for all courses. The website also has information on recommended textbooks, average weekly workload, assessments and exams.

Course Content

The modules will be offered on a cyclical basis over two academic years.

Among the areas you would be required to study are:

- Programming
- Analysis and Design
- Systems Administration
- Web based System development
- Business Management
- Project

Award

Bachelor of Science in Computing
(Single module certification possible).

Please note: Course content is subject to change due to current academic review.

Bachelor of Science in Information Technology Support

COURSE CODE	COURSE FEE	ENQUIRIES
CR_KITSE_7	€300 per module (inc. exam fee)	Department Secretary T: 021 433 5160 E: it@cit.ie

Apply online at
http://www.cit.ie/course/CR_KITSE_7

NDP National Development Plan Transforming Ireland

Entry Requirements

To be eligible to undertake the programme or a single module you must hold a Higher Certificate in Science in Information Technology Support or equivalent. The Department operates a policy of recognising prior learning (RPL) in compliance with the overall Institute policy of RPL. www.cit.ie/rpl

Closing Date

Closing date for application is early September 2012. Late applications may be considered should any places become available.

Course Content

The modules will be offered on a cyclical basis over two academic years.

Among the areas you would be required to study are:

- Systems Administration
- Internet and Network Services
- Network Security
- WAN Technologies
- Project Management
- Computer Services Management
- Project

Elective areas include:

- e-Business
- Database Administration
- Object-Oriented Programming
- Wireless Technologies

Module Information

http://modules.cit.ie
CIT has developed a website which gives full details of all modules for all courses. The website also has information on recommended textbooks, average weekly workload, assessments and exams.

Award

Bachelor of Science in Information Technology (Single module certification possible).

Please note: Course content is subject to change due to current academic review.

This programme is supported under the National Development Fund

Bachelor of Science (Honours) in IT Management

COURSE FEE	ENQUIRIES	COURSE CODE
€365 per module (inc. exam fee)	Department Secretary T: 021 433 5160 E: it@cit.ie	CR_KCSME_8

Apply online at http://www.cit.ie/course/CR_KCSME_8

Entry Requirements

To be eligible to undertake the programme or a single module you must hold a Bachelor of Science in Information Technology Support or equivalent. The Department operates a policy of recognising prior learning (RPL) in compliance with the overall Institute policy of RPL. www.cit.ie/rpl

This programme is designed as a follow-on programme from the BSc in Information Technology Support. The programme is designed to provide the student with the knowledge needed for the planning, implementation and management of computing resources and service delivery. A student must take 9 modules, each of 5 credits, and the 15 credit project to complete the programme.

Course Content

The modules will be offered on a cyclical basis over two academic years.

Among the areas you would be required to study are:

- Strategic IT Planning
- Strategic IT Management
- IT Service Design
- IT Service Management
- IT Security
- Project

Elective areas include:

- Management
- Business Intelligence

Module Information

http://modules.cit.ie

CIT has developed a website which gives full details of all modules for all courses. The website also has information on recommended textbooks, average weekly workload, assessments and exams.

Award

Bachelor of Science (Honours) in IT Management (Single module certification possible).

Closing Date

Closing date for application is early September 2012. Late applications may be considered should any places become available.

Please note: Course content is subject to change due to current academic review.

Bachelor of Science (Honours) in Cloud Computing

COURSE CODE	COURSE FEE	ENQUIRIES
KCLDC_8_Y4	€9600 in total but may be paid in 3 installments of €3200 each.	Tim Horgan E: cloud@cit.ie

Apply online at
http://www.cit.ie/course/CR_KCLDC_8

NDP National Development Plan Transforming Ireland

This course is available online only. All classes are delivered over the internet and all practical work is completed using CIT's cloud infrastructure.

Duration

18 months (3 semesters) is a minimum duration.

Closing date

Completed applications should be lodged with CIT by 5pm on Friday 27th July 2012. Classes will commence in September 2012.

Entry Requirements

To be eligible to undertake the programme applicants must hold a Level 7 ordinary degree in Computing or in a cognate discipline with the necessary experiential or certified learning.

Course Content

This one year add-on honours Bachelor of Science in Cloud Computing degree aims to develop students both technically and personally and produce broad based graduates of high academic and practical standards to match the needs of both the Irish and international IT industry. An emphasis is placed on cloud computing throughout and this focus is supported by the addition of modules in networking, virtualisation, storage, security, application development, data mining and individual multidisciplinary projects. This combination of modules along with practical and laboratory workshops provides graduates with an ideal education that will enable them to seek entry to a wide variety of roles and levels of responsibility within the workforce

Module Information

http://modules.cit.ie
CIT has developed a website which gives full details of all modules for all courses. The website also has information on recommended textbooks, average weekly workload, assessments and exams.

Modules

Mandatory
Cloud Architectures
Data Mining
Data Centre Virtualisation
Cloud Application Development
Project - Research Phase
Network Security
Converged Networks
Enterprise Storage Systems
Project - Implementation Phase
Elective
Any two 5 credit modules of the student's choice.

Further Studies

Graduates from the programme may apply for the taught MSc in Cloud Computing. Graduates may also apply to study for a research based MSc or PhD.

This programme is supported under the National Development Fund

Master of Science in Cloud Computing

COURSE FEE	ENQUIRIES	COURSE CODE
€10,800 in total. Three instalments of €3,600 are possible	Tim Horgan E: cloud@cit.ie	KCLDC_9_Y5

Apply online at
http://www.cit.ie/course/CR_KCLDC_9

This course is available online only. All classes are delivered over the internet and all practical work is completed using CIT's cloud infrastructure.

Duration

18 months (3 semesters) is a minimum duration

Closing Date

Completed applications should be lodged with CIT before 5pm on 27th July 2012. Classes will commence in September 2012

Entry Requirements

A Level 8 degree in Computing or in a cognate discipline. Industrial experience in IT is desirable.

Course Content

The programme aims to provide the graduate with the advanced conceptual understanding, detailed factual knowledge, and specialist technical skills that are required for success in Cloud Computing. Graduates of this programme will be well equipped to meet the challenges associated with the major changes currently occurring in the IT industry. In this context the programme covers both theoretical background and practical design considerations.

Modules

Mandatory

Cloud Strategy Planning & Management
Computing Research & Practice
Managing Virtual Environments
Data Centre Networking
Cloud Storage Infrastructures
Cloud Security
Soft Dev Research Project

Elective (choose 2)

Scripting for System Administration
App. Development Frameworks
Data Analytics
Software Engineering
Software Dev. for the Cloud

Master of Science in Software Development

COURSE CODE	COURSE FEE	ENQUIRIES
KCLDC_8_Y4	€420 per 5 credit module (inc. exam fee)	Dr John Creagh T: 021 433 5113 E: it@cit.ie

Apply online at
http://www.cit.ie/course/CR_KSDEV_9

NDP National Development Plan Transforming Ireland

Two evenings and Saturday mornings.

Entry Requirements

Applicants will normally have a primary honours degree with first or second class honours or its equivalent, in a computing discipline. Other applicants may be accepted if they have at least four years experience in Software Development and can satisfy CIT that they possess an adequate background for the programme.

Applicants may be interviewed by an admission panel. Particular attention will be paid to the applicants' software development experience and motivation, as well as their formal knowledge of object oriented technologies. Applicants may be directed to undertake bridging studies before commencing the programme. The interview will also be used to explore the applicant's CPD plan.

Aim

The programme is designed to provide the postgraduate student with the advanced theoretical knowledge and skills necessary for their continuing professional development (CPD) in the software industry. The main focus is in the area of software development with particular emphasis on current software design principles and methods and software quality.

Module Information

http://modules.cit.ie
CIT has developed a website which gives full details of all modules for all courses. The website also has information on recommended textbooks, average weekly workload, assessments and exams.

Course Content

The programme requires the graduate to take four mandatory and four elective taught modules. A Research Project must also be completed.

Mandatory Modules
Software Engineering
Software Quality
Advanced Object Technology
Computing Research & Practice
Research Project

Elective Modules
Artificial Intelligence
Computer Simulation & Modelling
Security and Cryptography
Distributed Object Technology
Formal Methods
Human Computer Interaction
Interactive Graphics
Web-Based Systems
Real Time Systems
Telecommunications
Parallel Computing
Storage Technology

The Research Project, which may include the design and implementation of a high quality nontrivial software application, is also mandatory. The modules will be taught by CIT staff, experts from industry and other educational institutions. Modules may be substituted at the discretion of CIT subject to approval by the validating authority.

Duration

There are two taught semesters of 13 weeks each, 12 weeks of lectures followed by 1 week of assessment, normally September to January, and February to May. Each taught module is scheduled for 2 hours lectures, 1 hour laboratory/ tutorial per week. At least two modules will be offered each semester, 6pm – 10pm two evenings per week with Saturday mornings available for laboratories if and when required. Typical student progress will be:

Year 1
1st Semester
2nd Semester
1 Core and 1 Elective Module
2 Core and 1 Elective Module

Year 2
1st Semester
2nd Semester
1 Core and 1 Elective Module
1 Elective and Research

Project

The Research Project will normally commence in February and be assessed in September.

Award

Masters of Science in Software Development
(Single module certification is possible).

Application

An application form can be obtained from and should be returned to the Admissions Office, Cork Institute of Technology, Bishopstown, Cork. Closing date for completed application forms is early September 2012. Late applications may be considered should any places become available.

Please note: Course content is subject to change due to current academic review.

This programme is supported under the National Development Fund

Master of Science in Networking and Security

COURSE CODE	COURSE FEE	ENQUIRIES
CR_KNSCE_9	€420 per 5 credit module (inc. exam fee)	Vincent Ryan T: 021 433 5160 E: vincent.ryan@cit.ie E: it@cit.ie

Apply online at
http://www.cit.ie/course/CR_KNSCE_9

NDP National Development Plan Transforming Ireland

In part-time mode, students attend up to 2 -3 evenings per week depending on the modules selected.

Entry Requirements

An honours primary degree in a Computing Discipline or equivalent. Applicants must have a good knowledge of Computer Networking basics.

Aim

This 90-credit taught Masters is designed to provide the graduate student with the advanced theoretical knowledge and skills in the interrelated areas of Computer Networking and Computer Security.

Module Information

http://modules.cit.ie
CIT has developed a website which gives full details of all modules for all courses. The website also has information on recommended textbooks, average weekly workload, assessments and exams. Modules marked 'M' are mandatory for the completion of the Stage or Award, those marked 'E' are elective modules. The number of credits associated with the module is shown in brackets beside the module name.

Mandatory
Network Security & Penetration Testing (10)
Security Management, Law & Compliance (10)
Advanced Networking (10)
Cryptography (5)
Scripting for System Administrators (5)
Enterprise Network Management (5)
Computing Research & Practice (5)
Network & Security Research Project (30)

Electives
Students will take 10 credits from the following list of electives:
Malware Analysis and Internet Investigations (10)
Computer Forensics (10)
Cloud Security (5)
Software Security (5)
Network Design (5)
Mobile Networking (5)

Duration

One year full-time (12 calendar months) or two years part-time

Award

Master of Science in Networking and Security

Closing Date

Closing date for completed application is early September 2012. Late applications may be considered should any places become available.

Please note: Course content is subject to change due to current academic review.

This programme is supported under the National Development Fund

CISCO is the major multinational company that produces routers, switches and software that power the Internet and global telecommunications. As such Cisco Certification is recognised worldwide. Cisco has a certification program for engineers, which they independently verify. There are many Cisco certification tracks, but the two most popular are CCNA (Cisco Certified Network Associate) and CCNP (Cisco Certified Network Professional).

CIT is a Cisco Regional Network Academy for Ireland (the first such Cisco Networking Academy in Europe). As such, CIT trains and prepares students to take these two certification exams. It does so with tuition in a classroom surrounding, and hands-on practical training on switches and routers in our two fully equipped networking laboratories. CIT provides all students with remote access to our Netlab training pods, so that the student can practice their practical techniques while working from home or at work. CIT also provides, on request, group courses by Cisco certified trainers leading to participants being able to sit CCNA and CCNP examinations.

These qualifications are part of the Cisco hierarchy of professional qualification (http://www.cisco.com/go/certification).

CISCO Certified Network Associate

COURSE FEE	ENQUIRIES	COURSE CODE
€2,250 (excludes VUE exam fee)	Jonathan Sherwin E: jonathan.sherwin@cit.ie E: cisco@cit.ie W: http://cisco.cit.ie	CR_KCNAS_6

Apply online at
http://www.cit.ie/course/CR_KCNAS_6

Lectures every Wednesday night.
Lab will take place either on Thursday/Friday night or Saturday morning.

Aim

This programme aims to offer the student the training necessary, in both theory and hands-on practical work, to achieve the Cisco qualification of Network Associate. This programme, which consists of four modules, is designed to teach the objectives of the CCNA qualification, from a basic overview level of networking in module 1 to an advanced discussion of prescribed networking topics in modules 3 and 4, e.g. ACLs, Frame Relay, VLANs, etc. On completion of module 4, the student will have the requisite knowledge to sit the VUE test (#640-802), which awards the CCNA qualification.

>>

CISCO
Certified Network Associate

Module Information

Module 1

Network Fundamentals

This module introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. It uses the OSI and TCP layered models to examine the nature and roles of protocols and services at the application, network, data link, and physical layers.

The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. Labs use a "model Internet" to allow students to analyse real data without affecting production networks. Packet Tracer (PT) activities help students analyse protocol and network operation and build small networks in a simulated environment. At the end of the module, students build simple LAN topologies by applying basic principles of cabling; performing basic configurations of network devices, including routers and switches; and implementing IP addressing schemes.

Module 2

Routing Protocols and Concepts

This module describes the architecture, components, and operation of routers, and explains the principles of routing and routing protocols. Students analyse, configure, verify, and troubleshoot the primary routing protocols RIPv1, RIPv2, EIGRP, and OSPF. By the end of this module, students will be able to recognise and correct common routing issues and problems.

The Routing Protocols and Concepts module also presents configuration, implementation, and troubleshooting labs. Packet Tracer (PT) activities reinforce new concepts, and allow students to model and analyse routing processes that may be difficult to visualise or understand.

Module 3

LAN Switching and Wireless

This module helps students develop an in depth understanding of how switches operate and are implemented in a LAN environment for small and large networks. Beginning with a foundational overview of Ethernet, this module provides detailed explanations of LAN switch operation, VLAN implementation, Rapid Spanning Tree Protocol (RSTP), VLAN Trunking Protocol (VTP), Inter-VLAN routing, and wireless network operations. Students analyse, configure, verify, and troubleshoot VLANs, RSTP, VTP, and wireless networks. Campus network design and Layer 3 switching concepts are introduced.

Module 4

Accessing the WAN

This module explains the principles of traffic control and access control lists (ACLs) and provides an overview of the services and protocols at the data link layer for wide-area access. Students learn about user access technologies and devices and discover how to implement and configure Point to- Point Protocol (PPP), Point-to- Point Protocol over Ethernet (PPPoE), DSL, and Frame Relay. WAN security concepts, tunnelling, and VPN basics are introduced. The module concludes with a discussion of the special network services required by converged applications and an introduction to quality of service (QoS).

Entry Requirements

None, but a basic knowledge of computer networking would be an advantage.

Duration

Mid-September 2012 to mid-June 2013.

Validating Body

CISCO

Closing Date

Closing date for application is early September 2012.

CISCO
Certified Network Professional

COURSE FEE	ENQUIRIES	COURSE CODE
€1,350 per module, €1,250 for previous CIT CCNA Networking Academy student. (excludes VUE exam fees)	E: cisco@cit.ie W: http://cisco.cit.ie	CR_KCNPR_7

Apply online at
http://www.cit.ie/course/CR_KCNPR_7

Aims

This programme aims to offer the student the training necessary, in both theory and hands-on practical work, to achieve the Cisco qualification of Network Professional. The programme will be delivered in three modules; each module will be a preparation programme for one of the three exams necessary to obtain the CCNP qualification.

Modules

Module 1
Implementing Cisco IP Routing (ROUTE)
Pearson VUE exam: 642-902 ROUTE

Module 2
Implementing Cisco IP Switched Networks (SWITCH)
Pearson VUE exam: 642-813 SWITCH

Module 3
Troubleshooting and Maintaining Cisco IP Networks (TSHOOT)
Pearson VUE exam: 642-832 TSHOOT

Duration

These modules are run as mini-bootcamps. There is six weeks of online lectures (using Webex) prior to the bootcamp, duration 1.5-2 hours each session. The bootcamp is run as a 5-day, onsite training session in the college. The modules are run in rotation, two per year, one in June/July and then another in January.

Validating Body

CISCO

CompTIA

Computing Technology Industry Association has been dedicated to advancing the growth of the Information Technology (IT) industry and those working in it. With more than 19,000 members in 89 countries, CompTIA is the leading Global IT Trade Association with influence in all areas of the IT industry worldwide.

CIT is the first CompTIA E2C (Education to Careers Centre) to be set up in Ireland and, with its close relationship with Cisco Systems Networking Academy, delivers the Cisco sponsored IT Essentials 1 and 2 Programmes which enable students to gain the CompTIA A+ and Server + Accreditations. Other accreditations that may be attained from CompTIA are CompTIA Network +, Security + and INet +.

CISCO
IT Essentials 1/CompTIA A+

COURSE CODE	COURSE FEE	ENQUIRIES
CR_KHOST_6	€1,200 per module (excludes exam fees)	E: cisco@cit.ie W: http://cisco.cit.ie

Apply online at
http://www.cit.ie/course/CR_KHOS_6

Two evenings per week: Monday 6.30pm - 9.30pm and Wednesday 6.30pm - 9.30pm

Core Hardware and Operating Systems Technologies
The IT Essentials 1 Programme is a curriculum sponsored by Hewlett Packard delivered through the Cisco Networking Academy Programme. It maps to CompTIA's A+ Certification.

Aim

IT Essentials 1 /COMPTIA A+ will prepare students for both Examinations which make up COMPTIA A+ Certification;
-A+ Essentials;
-A+ 220 – 602.

Students who successfully complete this programme will also receive Cisco IT Essentials 1 Certificate. On completion, the student has the requisite knowledge to sit the COMPTIA A+ Pearson VUE Examinations which are necessary to achieve Certification.

Programme Modules

- Information Technology Basics
- Computer Assembly
- Operating System Fundamentals
- Windows 98/NT/2000/XP Operating Systems
- Networking Fundamentals
- Printers/Printing
- Multimedia
- Maintenance and Upgrades
- Troubleshooting

Achieving A+ Certification will illustrate that you have attained a broad base of knowledge and competency in Core Hardware and Operating Systems Technologies.

Industry Support for CompTIA A+®

The technology community identifies CompTIA A+ certification as the perfect entry point into an IT career. Technology and certification companies including Microsoft, Hewlett-Packard, Cisco, Novell and Certiport recognise CompTIA A+ Certification as part of their certification programmes. Top technology companies including CompuCom, CompUSA and IBM have also made CompTIA A+ certification mandatory for their service technicians.

Additionally, more than 100 companies now require CompTIA A+ certification as a prerequisite to qualify for their corporate and vendor-specific training programmes.

Entry Requirements

None, but is best suited to someone in IT Support or who wants to enter the field of Information Technology.

Duration

September 2012 to December 2012 (approximately 12 weeks). Closing date for receipt of applications is Wednesday 5th September 2012.

Validating Body

Computer Technology Industry Association

CompTIA Security+

COURSE CODE	COURSE FEE	ENQUIRIES
CR_KSECY_6	€1,200 per module (includes exam fees)	Department Secretary T: 021 433 5160 E: it@cit.ie or E: pat.mccarthy@cit.ie

Apply online at
http://www.cit.ie/course/CR_KSECY_6

Two evenings per week: Tuesday 6.30pm - 9.30pm and Thursday 6.30pm - 9.30pm

Networking Principals & Networking Technologies
This programme is designed for PC users who wish to add knowledge of network and server security to their career in IT, be it in Networking Support or System Administration. The programme will provide the student with a good level of knowledge of the fundamentals of security and provide them with an entry level certification in Security, so that they may pursue advanced qualifications in this area such as CISSP or CSSP.

The CompTIA Security+ certification is an internationally recognised validation of the technical knowledge required of foundationlevel security practitioners. A CompTIA Security+ certified individual has successfully proven holding a foundation level of skill and knowledge in General Security Concepts, Communication Security, Infrastructure Security, Basics of Cryptography, and Operational/Organisational Security. Candidates are recommended to have two years experience in a networking role with pre-existing knowledge of TCP/IP, experience in a security related role.

Resources & Materials

All learning resources required to successfully complete this programme are included. Students are also provided with as much personal tuition and support from our experienced Instructors as they require throughout the programme.

Aim

CompTIA® Security+ Certification will prepare students for the CompTIA Security+ Certification Exam. On completion, the student has the requisite knowledge to sit COMPTIA Security+ Exam which is necessary to achieve Certification.

Programme Topics

- General Security Concepts
- Communication Security
- Infrastructure Security
- Basics of Cryptography
- Operational / Organisational Security
- Network Security
- Network Installation
- Wireless Security
- Firewalls

Programme Objectives

Understand security concerns and concepts of the following types of devices:

- Firewalls, Routers, Switches, Wireless, RAS (Remote Access Server).
- VPN (Virtual Private Network), IDS (Intrusion Detection System), Network Monitoring Diagnostics, Workstations, Servers, Mobile Devices.
- Understand the concepts behind the following kinds of Security Topologies.
- Security Zones, DMZ (Demilitarised Zone), Intranet, Extranet, VLANs (Virtual Local Area Network), NAT (Network Address Translation),Tunnelling.

- Differentiate types of intrusion detection such as Network Based, Active Detection, Passive Detection, Host Based, Honey Pots, Incident Response.
- Be able to identify and explain each of the following different kinds of cryptographic algorithms, Hashing Symmetric and Asymmetric.
- Cryptography Confidentiality, Integrity, Digital Signatures, Authentication, Non-Repudiation, Digital Signatures, Access Control.

The technology community identifies CompTIA Security+ certification as the perfect entry point into a Security Analyst career. Technology and certification companies including Microsoft, Hewlett-Packard, Cisco, Novell, Symmantec, Trend Micro and others recognise CompTIA Security+ Certification as a valuable certification to have.

For more information please consult the following web page http://certification.comptia.org/resources/objectives/Security_Objectives.pdf

Entry Requirements

Best suited to someone in IT Support, Network or Server Administration or someone working in a network/security role who wishes to attain certification.

Duration

September 2012 to January 2013 (approximately 12 weeks).

Closing Date

Closing date for application is Wednesday 5th September 2012.

CompTIA Network+

COURSE CODE	COURSE FEE	ENQUIRIES
CR_KINET_6	€1,200 per module (includes exam fees)	Department Secretary T: 021 433 5160 E: it@cit.ie or E: pat.mccarthy@cit.ie

Apply online at
http://www.cit.ie/course/CR_KSECY_6

Two evenings per week: Monday 6.30pm - 9.30pm and Wednesday 6.30pm - 9.30pm

Networking Principals & Networking Technologies
This programme is designed for PC users who wish to pursue a career in Networking Support or Administration. The programme is an excellent primer in networks and will provide the student with a good level of knowledge so that they may pursue other accreditations such as Certified Cisco Network Associate (CCNA) and Microsoft Certified Professional.

The Network+ Certification programme will give you a good understanding of how network connectivity devices function including network cards, hubs, bridges, routers, gateways and wireless devices.

The programme also addresses TCP/IP and its utilities, covering such topics as IP addressing, subnetting, routing and DHCP. Network maintenance security and troubleshooting are also discussed in detail.

Resources & Materials

All learning resources required to successfully complete this programme are included. Students are also provided with as much personal tuition and support from our experienced Instructors as they require throughout the programme.

Entry Requirements

None, but is best suited to someone in IT Support who wants to enter the field of Networking.

Aim

CompTIA® Network+ Certification will prepare students for the CompTIA Network+ Certification Exam. On completion, the student has the requisite knowledge to sit the COMPTIA Network+ Exam which is necessary to achieve Certification.

Programme Modules

- Networking Design & Concepts
- Network Functions
- Network Installation
- Wireless Communications
- TCP/IP and WAN Technologies
- Network Security

Programme Objectives

- Understand the functions of various network connectivity devices.
- Implement a Network installation and use network applications.
- Work with client/server and multi-vendor environments.
- Examine the TCP/IP suite, WAN technologies and remote connectivity.
- Install and support Windows NT and establish network printing.
- Learn how to maintain network security and troubleshoot Industry

Support for CompTIA Network+:

The technology community identifies CompTIA Network+ certification as the perfect entry point into a Networking career. Technology and certification companies including Microsoft, Hewlett-Packard, Cisco, Novell and Certiport recognise CompTIA Network+ Certification as part of their certification programmes.

Duration

February 2013 to May 2013 (approximately 12 weeks).
Closing date for receipt of applications is early February 2013.

Validating Body

Computer Technology Industry Association

NOVELL

Today, with more than 20 years of experience, Novell's software for the open enterprise continues to deliver increased operating flexibility at a lower total cost of ownership, by providing enterprise-class solutions and support for proprietary and open source software to over 50,000 enterprises in 43 countries around the globe. With SUSE Linux, Novell now offers the full range of Linux solutions, from the server to the desktop, with additional enterprise-grade networking services and technical support unmatched by any other Linux vendor.

In August 2005, Novell launched www.openSUSE.org, aimed at promoting the adoption of Linux worldwide, by providing free and easy access to the world's most usable Linux distribution, SUSE™ Linux

Novell's Certified Linux Professional (CLP)

COURSE CODE	COURSE FEE	ENQUIRIES
CR_KLNUX_6	€1,200 for Module 1 (can be taken separately) (Exam Fee Not Included) €2,000 for Modules 2 and 3 (Novell Certified Linux Professional)	Department Secretary T: 021 433 5160 E: it@cit.ie or E: pat.mccarthy@cit.ie

Apply online at
http://www.cit.ie/course/CR_KLNUX_6

One evening per week, usually Wednesday nights
6.30pm - 9.30pm

Aim

Students work with multiple lab exercises to help them practically apply course concepts and reinforce their proficiency with features and management utilities in SLES 11. These are advanced administrative skills common to an experienced administrator in an enterprise environment. Students who successfully complete this programme will have acquired the knowledge needed to become a full Novell CLP, the ideal certification for people interested in become Linux administrators.

Module 1 (3064)

Getting Started with Linux: Novell's Guide to Comptia's Linux+
The Getting Started with Linux is a curriculum sponsored by Novell and maps to CompTIA's Linux+ Certification.

Programme Modules

- Install SLES 11
- Linux Basics
- Linux Desktop
- Linux Help Resources

- Linux Administration
- Linux Shell and Command Line
- Linux Directories and Files
- Linux Text Editors
- Linux Processes
- Network configuration and hardware
- Linux Services
- Security

Module 2 (3072)

Novell's SuSe Linux Administration

Novell's Suse Linux Administration is a curriculum sponsored by Novell and maps to Novell's Certified Linux Administrator Certification.

Programme Modules

- Update and monitor a SLES 11 server
- Configure the Network Manually
- Perform administrative tasks with YaST
- Manage users and groups
- Provide basic system security
- Manage the Linux file system
- Manage software installation
- Manage system initialisation, processes, and services
- Remotely access a SLES 11 server

Module 3 (3073)

Novell's Advanced SuSe Linux Administration

Novell's Advanced Suse Linux Administration is a curriculum sponsored by Novell and maps to Novell's Certified Linux Professional Certification.

Programme Modules

- Provide basic network services (such as printing and web access)
- Configure Network Services
- Secure a SLES 11 Server
- Manage Backup and Recovery
- Develop Shell Scripts
- Compile Software from Source
- Health Check and Performance Tuning
- Manage Hardware and Component Changes

Programme Details

Training Options: Instructor Led
Lecture/Lab: All certification and product knowledge include both lectures and hands-on labs.

Entry Requirements

None, but is best suited to someone in IT Support or who wants to enter the field of Linux Administration.

Duration

Module 1: September 2012 to December 2012 (approximately 12 weeks).

Closing date for receipt of applications is the end of September 2012.

Modules 2 & 3: January 2013 to May 2013 (approximately 12 weeks).

Validating Body

Computer Technology Industry Association
Novell® Testing
Novell® Certified Linux Professional 11 (Novell CLP 11)

VMWare Vsphere ESXi 5.0
Install, Configure and Manage

COURSE CODE	COURSE FEE	ENQUIRIES
CR_KVMWR_6	€2,100	Department Secretary t: 021 433 5160 E: it@cit.ie

Apply online at
http://www.cit.ie/course/CR_KVMWR_6

Two evening per week, Tuesday and Wednesday
6.30pm – 9.30pm

Delivery Method

Instructor-led training

Duration

12 weeks which is equivalent to five days of instructor-led training: 60% lecture, 40% hands-on lab.

Target Audience

Network Engineers
System administrators
Storage Administrators
Systems engineers
Technical support engineers with other relevant qualification such as CCNA or CompTIA Server +,Linux + or Network +
Operators responsible for VMware® ESX™, ESXi, and VMware vCenter™ Server

Entry Requirement

System administration experience on Microsoft Windows or Linux operating systems. Technical Support, Developer and Network Engineer role.

This hands-on training course explores installation, configuration, and management of VMware vSphere™, which consists of ESX/ESXi and vCentre Server.

The course is based on ESXi 5.0 and vCentre Server 5.0. Completion of this course satisfies as a prerequisite to take the VMware Certified Professional 4 exam. Students who complete this course may enrol in any of several more advanced vSphere courses. See www.vmware.com/education for advanced course options.

Course Objectives

At the end of the course, you should gain an understanding of the functionality in VMware vSphere 5.0 and be able to:

- Install and configure ESXi
- Install and configure vCentre Server components
- Configure and manage ESX/ESXi networking and storage using vCenter Server
- Deploy, manage, and migrate virtual machines
- Manage user access to the VMware infrastructure
- Use vCentre Server to monitor resource usage
- Use vCentre Server to increase scalability
- Use VMware vCentre Update Manager to apply ESX/ESXi patches
- Use vCentre Server to manage higher availability and data protection.

Modules

- Course Introduction
- Introduction to VMware Virtualisation
- VMware ESX and ESXi
- VMware vCentre Server
- Networking
- Storage
- Virtual Machines
- Access Control
- Resource Monitoring
- Data Protection
- Scalability
- High Availability
- Patch Management.

NATIONAL MARITIME COLLEGE OF IRELAND

Location: Ringaskiddy, Co. Cork.

Head of College
Michael Delaney

Department Secretary
Noreen Kelleher
T: 021 497 0643
E: admissions@nmci.ie
W: www.nmci.ie

COURSES

Bachelor of Business in Supply Chain and Transport Management
Yachtmaster (Offshore) Certificate, Shore-Based Course
Yachtmaster (Ocean) Certificate, Shore-Based Course
Foundation Diploma in Shipping

ENROLMENT

Evening courses for the 2012/13 academic year will commence in late September. Registration will take place in Cork Institute of Technology, Bishopstown Campus on Wednesday 5th September 2012 from 6.00pm to 8.30pm.

NMCI also offers

- CAO Full-time Courses Level 7 and Level 8
- Professional Maritime Short Courses
- GAC Training & Service Solutions (GTSS)
- Off-shore courses

See www.nmci.ie for details

Bachelor of Business in Supply Chain and Transport Management

COURSE CODE	COURSE FEE	ENQUIRIES
CR_BSCTM_7	€2,800	Jane M. O'Keeffe T: 021 497 0627 E: jokeeffe@nmci.ie

www.nmci.ie

Supply Chain Management has matured from a compelling method of deriving competitive advantage, to now being a baseline expectation for any organisation, both in the private and public sector, wishing to compete in the 21st Century, and with that the professions and occupations comprising Supply Chain Management are now firmly entrenched in the armoury of essential business executives.

Entry Requirements

This qualification is a one year step up degree for participants holding the Chartered Institute of Logistics and Transport (CILT) or IIPMM (Procurement and Supply Chain Management) Diploma, Graduateship or degree in Supply Chain Management or an equivalent Level 6 qualification in a relevant discipline.

Benefits

You will be one of the elite few

- who will possess a degree in Supply Chain and Transport Management;
- who, as a result, will secure challenging, better paid and more fulfilling positions in the Logistics and Supply Chain;
- who will be empowered with the knowledge and skills to implement the latest best practices in Supply Chain Management in your organisation.

Module Information

http://modules.cit.ie

CIT has developed a website which gives full details of all modules for all courses. The website also has information on recommended textbooks, average weekly workload, assessments and exams.

Modules

Semester 1

Quality and Lean Operations
Managing Performance Measurement
Warehousing and Inventory Control in the Supply Chain
Business and Supply Chain Strategy
Transport and Distribution in the Supply Chain
Supply Chain Management Accounting and Managerial Finance

Semester 2

Supply Chain Purchasing
Organisational Structure and Human Resource Development
Supply Chain Leadership and Communications
Supply Chain IT and E-Commerce
International Trade and Customs Law
Advanced Operations Management

Commencement Date

September 2012

Yachtmaster (Offshore) Certificate

Shore-Based Course

COURSE FEE	ENQUIRIES	COURSE CODE
€550	Badiul Alam T: 021 497 0643 E: badiul.alam@nmci.ie	CR_MYMOF_6

www.nmci.ie

Monday 7pm - 9pm

This course is an important part of the ISA Yachtmaster Training Scheme, and is intended for all who seek a recognised Yachtmaster qualification. Although there is no specific qualification for admission to the course, it is desirable that students should have achieved the Day Skipper level of competence.

Aim

The course is designed to teach students the basic principles and navigational skills necessary for the safe conduct of coastal and offshore passages.

Duration

24 weeks

Yachtmaster (Ocean) Certificate

Shore-Based Course

COURSE FEE	ENQUIRIES	COURSE CODE
€450	Badiul Alam T: 021 497 0643 E: badiul.alam@nmci.ie	CR_MYMOC_6

www.nmci.ie

Wednesday 7pm - 9pm

This course is designed for experienced sailors and is primarily intended for persons holding the ISA Yachtmaster (Offshore) Certificate. Successful completion of the course leads to the award of the Yachtmaster (Ocean) Certificate. As the course content is almost entirety confined to astro or celestial navigation, it may also appeal to those yachtsmen who wish to take their navigational skills to a more advanced level.

Aim

The course is designed to teach students the elementary navigational skills necessary for the safe conduct of ocean passages.

Duration

16 Weeks

Foundation Diploma in Shipping

COURSE CODE	COURSE FEE	ENQUIRIES
CR_MSHIP_6	€1,010	Roddy Cooke T: 021 497 0641 E: roddy.cooke@nmci.ie

www.nmci.ie

One night per week 7pm - 9pm

This diploma is offered as an evening course in NMCI and is accredited by the Worldwide Institute of Chartered Shipbrokers, a professional organisation for Shipbrokers and Port Agents. It is suitable for those involved in the world of shipping, transport, freight forwarding, port operations and ship agency work.

This course, under the auspices of the Institute of Chartered Shipbrokers in London (www.ics.org.uk), is suited to those involved in the world of shipping, transport, freight forwarding, port operations and ship agency work.

Content

- Introduction to Shipping
- Port Agency

Duration

Approximately 24 weeks

CIT CORK SCHOOL OF MUSIC

Union Quay, Cork T: 021 480 7310

Director of School
Dr Geoffrey Spratt | E: geoffrey.spratt@cit.ie

Head of School
Aiveen Kearney | E: aiveen.kearney@cit.ie

The School consists of the following Departments:
Department of Keyboard Studies
Department of String Studies
Department of Wind, Percussion, Voice & Drama Studies
Department of Musicianship & Academic Studies

Head of the Department of Keyboard Studies
Dr Gabriela Mayer | E: gabriela.mayer@cit.ie

Head of the Department of String Studies
Joan Scannell | E: joan.scannell@cit.ie

Head of the Department of Wind, Percussion, Voice & Drama Studies
John O'Connor | E: john.oconnor@cit.ie

Head of the Department of Musicianship & Academic Studies
Maria Judge | E: maria.judge@cit.ie

Choral Groups

Fleischmann Choir

Instrumental Groups

Wind Ensemble
Jazz Big Band
Symphony Orchestra

Musicianship Skills for Adults
Individual Tuition
Recitals and Concerts

Choral Group

Fleischmann Choir
Rehearsals for this large, mixed-voice choir take place on Monday evenings from 7.45pm - 10.15pm.

The conductor is Dr Geoffrey Spratt (Director of the CIT Cork School of Music and Founder- Conductor of the Irish Youth Choir, Fleischmann Choir & Canticum Novum). This group specialises in singing large-scale works for choir and orchestra. In recent years it has performed Beethoven's Mass in C, Berlioz's Grande Messe des morts [Requiem] (in both Wales and Ireland) and Te Deum, Borodin's "Polovtsian Dances" from Prince Igor, Brahms' Ein deutsches Requiem & Nänie, Bruckner's Te Deum, Angel Climent's Missa solemne & Motet: Caro mea, Dvorák's Mass, Fauré's Requiem, Fleischmann's Clare's Dragoons & Song of the Provinces, Grieg's Incidental Music for Peer Gynt, Handel's Messiah, Zadok the Priest & Chandos Anthem No.1, Haydn's Missa in tempore belle, The Seasons & The Creation, Hummel's Alma virgo, Bryan Kelly's Africa, Mathias's Ave Rex, Mozart's Requiem, Orff's Carmina Burana, Poulenc's Gloria, Stainer's The Crucifixion, Vaughan Williams' Serenade to Music, Verdi's Missa da Requiem (in both Germany and Ireland) and Vivaldi's Dixit Dominus & Gloria, as well as music by J. S. Bach, Beethoven, Bernstein, Bizet, Britten, Clucas, Donizetti, Elgar, Holst, Mascagni, Mathias, Mozart, Parry, Puccini, Purcell, Stanford, Tchaikovsky, Vaughan Williams and Verdi, carols, folksong arrangements, gospel arrangements, Negro spirituals and opera choruses. The choir's programme for the 2008-2009 season included the first complete performances in Cork of Haydn's The Seasons with the RTÉ Concert Orchestra and a team of internationally-renowned soloists.

Details of the programme for the 2012-2013 season will be available from the CIT Cork School of Music's Public Office on or after 1 September 2012. The former will include performances of Britten's St Nicholas and Puccini's Messa di Gloria with the CSM Symphony Orchestra.

Membership is open to enthusiastic and committed choral singers; auditions are held if the number of applications exceeds the number of vacancies for any given section. Applicants should complete the application form available from the School's Public Office T: 021 480 7301.

Instrumental Groups

Wind Ensemble
The Wind Ensemble rehearses on Wednesday nights from 8pm - 10pm and is directed by John O'Connor (Head of the CIT Cork School of Music's Department of Wind, Percussion, Voice & Drama Studies). The Wind Ensemble is a flexible group of up to forty members that caters for wind and percussion players of at least Grade VIII standard. The ensemble explores advanced repertory written specifically for wind groups, ranging from the wind serenades of Mozart to contemporary works.

Details of the programme for the 2012-2013 season will be available from the School's Public Office on or after 1 September 2012. Applications are welcome from external players who may be members of other bands; entry is subject to audition.

Applicants should complete the relevant application form available from the School's Public Office T: 021 480 7310 .

Jazz Big Band
Rehearsals for this 20-piece ensemble take place on Monday nights from 8pm - 10pm under the direction of John O'Connor (Head of the CIT Cork School of Music's Department of Wind, Percussion, Voice & Drama Studies). The Big Band repertory ranges from the classic scores of Duke Ellington and Count Basie right up to the most revolutionary contemporary works. The Band performs regularly and has toured England, France, Holland, Italy, and the USA. Musicians of a good standard between the ages of 16yrs and 25yrs are welcome to apply.

Symphony Orchestra
Rehearsals take place on Tuesday nights from 7.30pm - 10pm.

The conductor is Dr Geoffrey Spratt, (Director of the CIT Cork School of Music and Founder-Conductor of the Irish Youth Choir and Fleischmann Choir). All the members are of at least Grade VIII standard and the orchestra performs the 19th- and 20th Century literature for large orchestra, regularly accompanies distinguished instrumental soloists, and performs the oratorio repertory with the School's Fleischmann Choir. The orchestra also undertakes other

projects as they arise; for example, the highlights of its 2008-2009 season were performance of concertos by Samuel Barber (for violin) and John Tavener (The Protecting Veil for cello), Elgar's "Enigma" Variations and Ravel's The Bolero.

Details of the programme for the 2012-2013 season will be available from the CIT Cork School of Music's Public Office on or after 1 September 2012. The former will include music by Malcolm Arnold and Gordon Jacob, Tchaikovsky's Symphony No. 6 ("Pathétique") and Puccini's Messa di Gloria with the Fleischmann Choir.

Applications are welcome from external players who may be members of other orchestras; entry is subject to audition. Applicants should complete the relevant application form available from the School's Public Office T: 021 480 7310.

Musicianship Skills for Adults

Adults who wish to become musically literate may enrol for this weekly 1 hour long class. Participants are introduced to the elements of pitch and rhythm through music-making. Learners also are afforded the opportunity to perform class material on Percussion Instruments, Recorder and Keyboard in addition to Singing. There are currently three levels of Musicianship Skills for Adults. Beginners (no experience necessary) may progress from Level 1 to 2 and then 3 where more advanced concepts are introduced. Classes take place after 6pm on Monday or Wednesday and the 2011/12 fee was €105/term x 2 terms (2012/13 fee to be confirmed).

Individual Tuition

A limited number of vacancies may arise for individual tuition in singing, speech, theory of music and certain instruments. Whilst enrolments normally take place in April and are subject to audition/ interview, enquiries about vacancies are welcome at any time. Where possible, late applications will be considered. Applicants should consult the School's Enrolment Information Booklet, then consult the relevant Head of Department, and, finally, complete the relevant application form(s) available from the School's Public Office.

Recitals and Concerts

The CIT Cork School of Music hosts a wide-ranging series of recitals and concerts throughout the year. The School also presents many performances by its own performing groups – most of which take place within the School's premises, others of which take place in venues throughout both Cork city and the country as a whole. Full details are to be found in the Music Diaries distributed free of charge by the School and Cork Orchestral Society each term/session.

Further information may be obtained from the CIT Cork School of Music, Union Quay, Cork. T: 021 480 7310.

CIT CRAWFORD COLLEGE OF ART & DESIGN

Sharman Crawford Street, Cork.
T: 021 433 5220 | F: 021 496 2267

Head of College
Orla Flynn | E: orla.flynn@cit.ie

Head of College
Orla Flynn | E: orla.flynn@cit.ie

The College consists of the following Departments:
Department of Fine Art & Design
Department of Art & Design Education
Department of Art Therapy & Continuing Visual Education
Department of Media Communications

Head of Department of Fine Art & Design
Trish Brennan | E: trish.brennan@cit.ie

Head of Department of Art & Design Education
Albert Walsh | E: albert.walsh@cit.ie

Head of Department of Art Therapy & Continuing Visual Education
Ed Kuczaj | E: ed.kuczaj@cit.ie

Head of Department of Media Communications
Rose McGrath | rose.mcgrath@cit.ie

COURSES

MA in Art and Design Education
MA in Teaching Visual Arts
MA in Art Therapy

Fine Art Textiles - HETAC Level 8 Special Purpose Award
Higher Diploma in Arts in Public Relations - HETAC Level 8
Certificate in Media Production - HETAC Level 6
Certificate in Broadcast Media - HETAC Level 6
Certificate in Digital Media Design and Development HETAC Level 8

WEEKEND COURSES

Art Therapy Summer School
Certificate in Principles of Art Therapy (Foundation Course)
Certificate in Arts in Group Facilitation
Certificate in Arts Participation and Global Development
Art Therapy Introductory Weekend Workshops
Folder Preparation Course
Crawford Art Summer School

SHORT COURSES

Life Drawing
Drawing/Painting
Textiles
Photography
Stained Glass
Pottery

The evening courses generally run on week nights, one night per week over 20 weeks from October to April. It is our intention to run, if possible, a number of accredited modules in the Fine Arts within the next academic year. Further details will be available on the day of enrolment.

For more information, please view: www.cit.ie/courses

The Crawford College also run occasional short Art courses in the above areas. These are advertised on **www.cit.ie**

SPECIAL CONDITIONS

Course fees are inclusive of cost of practice materials only. Students undertaking individual projects are required to provide their own materials.

Senior citizens (over 65 years) will be entitled to a 50% reduction. Evidence of entitlement may be required.

People enrolling for a course paid for by a Community Employment Scheme (or similar) must produce at enrolment written undertaking of payment by scheme.
All courses will run subject to minimum enrolment.
All course fees must be paid in full on enrolment.
Course lecturing staff may be subject to change.

Please note that all times are subject to change.

ENROLMENT

Enrolment will take place at the CIT Crawford College of Art & Design on Thursday, 6th September 2012, from 6.00pm to 8.30pm. All fees must be paid in full on enrolment.

Registration forms must be completed in full. It is particularly important that each applicant clearly identifies the course and subjects for which he/ she is registering. The onus is on each applicant to ensure that this information is accurate.

Early registration is advisable as numbers of places on courses are limited.

For enrolment details please contact
CIT Crawford College of Art & Design,
Sharman Crawford Street,
Cork.
T: 021 433 5220
E: ccad.enquiries@cit.ie

Master of Arts in Art and Design Education

COURSE CODE	COURSE FEE	ENQUIRIES
CR_AATDE_9	€3780	Albert Walsh T: 021 433 5247 E: albert.walsh@cit.ie

Application closing date 25th May, 2013
Website: http://media.cit.ie/maarteducation/

Part-time Course Duration

No. of semesters: 5
No. of weeks per semester: 13
No. of timetable hours per week: 6 – 8

Entry Requirements

Applicants whom have a minimum of an Honours 2.2 (or equivalent) are eligible to apply for the programme. Graduates from other subject areas are invited to apply provided they meet the entry requirements. Applicants who hold a Level 8 award at pass level or a Level 7 award (or equivalent) may be considered on the basis of significant relevant experience. Those holding a Level 8 Honours Bachelor Degree in Fine Art and either:

- Higher Diploma in Arts for Art and Design Teachers or equivalent i.e. an older qualification or a recognised teaching qualification from another country or
- BA/BEd in Art and Design Education (Level 8) or
- An equivalent qualification in art and design education.

Aims

This programme is aimed specifically at:

- Art and design educators at second-level, both experienced or newly qualified, who wish to further develop expertise in teaching art and design and who wish to advance their qualifications to MA Level.
- Community professionals with suitable qualifications with similar aspirations with regard to teaching visual arts.
- The programme is aimed at art educators working within a wide range of educational sectors.

Course Structure

The programme offers a flexible and accessible framework and delivery and is offered on a full-time or part-time basis subject to applicants' needs and module demand. The programme offers modules that will collectively explore the relevance of the visual arts, primarily, in the education of adolescents and adult learners. It exposes students to the crucial factors that impact on these processes.
It is designed to provide students with a wide range of theoretical and practical insights into how individuals learn through art and design. It is delivered through a flexible framework of formal lectures, tutorials and practical art and craft workshops. It offers students the opportunity to further develop their knowledge and skills in art and design teaching to meet curriculum requirements or to develop effective teaching programmes in more informal educational settings.

The programme content provides the following themes of study:

- Educational Policy and the arts in education
- Curriculum development and evaluation for art and design
- Visual Arts Practice, traditional and technological
- Aesthetics and Art Criticism
- Art Therapy
- Inclusive and Special Needs Education through Visual Arts
- Research Methodologies

Module Information

http://modules.cit.ie
CIT has developed a website which gives full details of all modules for all courses. The website also has information on recommended textbooks, average weekly workload, assessments and exams.

Award

Master of Arts in Art and Design Education

Master of Arts
in Teaching Visual Arts for Primary and Early Years Education

COURSE FEE	ENQUIRIES	COURSE CODE
€3780	Albert Walsh T: 021 433 5247 E: albert.walsh@cit.ie	CR_ATAPE _9

Application closing date 25th May, 2013
Website: http://media.cit.ie/mateachvisualart

Part-time Course Duration

No. of semesters: 5
No. of weeks per semester: 13
No. of timetable hours per week: 6 – 8

Entry Requirements

- A BEd for primary school teaching or equivalent recognised qualification or
- A Bachelor of Arts (Honours) in Early Childhood Care and Education or
- An equivalent qualification in primary, early years or special education

Aims

This programme is aimed specifically at

- Educators at Primary level, both experienced or newly qualified, who wish to develop expertise in teaching visual arts and who wish to advance their qualifications to MA Level.
- Childcare professionals with suitable qualifications with similar aspirations with regard to teaching visual arts.
- Those involved in other specific education programmes.

Course Structure

The programme content provides the following themes of study.

- The role of the Visual Arts in child development
- Planning and managing visual arts learning activities
- Visual Arts Practice, traditional and technological
- Art History and Appreciation
- Art Therapy
- Inclusive and Special Needs Education through Visual Arts
- Information and Communications Technology (ICT)
- Research Methodologies.

Module Information

http://modules.cit.ie
CIT has developed a website which gives full details of all modules for all courses. The website also has information on recommended textbooks, average weekly workload, assessments and exams.

Award

Master of Arts in Teaching Visual Arts in Primary & Early Years Education

Fine Art Textiles

(Level 8 Special Purpose Award)

COURSE CODE	COURSE FEE	ENQUIRIES
CR_ATEXT_8	€1,450 for each academic year, basic materials are included)	Pamela Hardesty T: 021 433 5255 E: pamela.hardesty@cit.ie

Please note that intake to this course does not occur on an annual basis, the next intake is scheduled for September 2012.

Duration

Two years part-time, weekdays combining 1/2 days of Textiles History and Theory (Wednesday morning) with one full day of Textiles Studio (Thursday) per week for two 13-week semesters each year.

Entry Requirements

Applicants should have a Level 6 FETAC qualification in Textiles, or equivalent experience in textiles techniques. Equivalency will be determined by portfolio at the interview stage.

Early Assessment

Interviews take place in May/June at the CIT Crawford College of Art & Design. The portfolio should have previous textiles experience and any other art-related work (drawing, photography, sculpture, etc.) Large scale and/or heavy items can be documented as photographs.

Course Programme

- Do you have a Level 6 textiles qualification and wish to progress toward a higher level?
- Or do you have many years of self-taught expertise in textiles, and have been active in producing art textiles– and would like to join a challenging group to learn more about conceptual development in the context of historical and critical research?
- Would you like to enter third-level, but would prefer a part-time option due to work/family commitments, or just as a 'taster' and as a possible route toward Degree?
- Or are you a practicing artist who has encountered the potential of textiles methods and concerns in the development of your work, and would like to gather skills and knowledge in the textiles area as a kind of post-grad option?

In the Crawford, we have existing Fine Art Textiles modules taught as an option to our Degree students. The course makes these available to new part-time students, and combines these with new modules in textiles history and critical theory, to provide a challenging programme to answer many perceived needs.

Students will be registered fully within the Crawford, with full access to Library and technical facilities (Print, Metal, Wood, IT, Photography).

Offering a range of textiles processes: stitch, print, dye, feltmaking, papermaking, weaving, basketry in a free experimental approach encouraging innovation based on conceptual development toward a personal language.

Module Information

http://modules.cit.ie
CIT has developed a website which gives full details of all modules for all courses. The website also has information on recommended textbooks, average weekly workload, assessments and exams.

Award

Fine Art Textiles (Level 8 Special Purpose Award).
30 Credits will be earned transferable towards a Degree.

DEPARTMENT OF ART THERAPY & CONTINUING VISUAL EDUCATION

Head of Department of Art Therapy & Continuing Visual Education
Ed Kuczaj
E: ed.kuczaj@cit.ie

POSTGRADUATE COURSE

Master of Arts in Art Therapy

EVENING COURSES

Life Drawing
Drawing/Painting
Textiles
Photography
Stained Glass
Pottery

WEEKEND COURSES

Art Therapy Summer School
Certificate in Principles of Art Therapy (Foundation Course)
Certificate in Arts in Group Facilitation
Certificate in Arts Participation and Global Development
Art Therapy Introductory Weekend Workshops
Folder Preparation Course
Crawford Art Summer School

The evening courses generally run on week nights, one night per week over 20 weeks from October to April.

Enrolment will take place at the CIT Crawford College of Art & Design on Thursday, 6th September 2012, from 6.00pm to 8.30pm. All fees must be paid in full on enrolment.

Master of Arts in Art Therapy

COURSE CODE	COURSE FEE	ENQUIRIES
CR_ATHPY_9	€7,560	Ed Kuczaj T: 021 433 5246 E: ed.kuczaj@cit.ie

Closing/starting date: application closing date 30th April/start date September
Website: www.artincontext.eu

Part-time course duration

3 years

Entry Requirements

An Honours degree, or equivalent. Minimum of one year, or equivalent, full-time clinical/care work in an area relevant to art therapy, paid or voluntary. This work may be, for example, in Health or Social Services, Special Education, Community Care or Day Centres, with clients who have a mental illness, learning or physical disability.

- Strong portfolio of personal artwork showing an understanding of an appropriate art form, the art-making process and use of a broad range of materials
- Two satisfactory references from clinical and professional persons who have knowledge of the candidate's education, training and experience
- Pre-course experience in personal therapy or counselling is useful
- Maturity and life experience are seen as valuable assets for training
- Willingness to enter weekly personal therapy, which is mandatory, for the duration of training
- An understanding of the implications of becoming a therapist and a willingness to further self–exploration and development

Early Assessment

Because of the clinical placement component of this course, it is a condition of entry that all successful applicants who gain a place on the course will be subject to a Garda Clearance procedure carried out by the Garda Clearance facilitator at CIT.

Course Structure

This is a 90 credit modular course which on completion of the training allows individuals to then register with the professional body for the Creative Therapies in Ireland, IACAT (Irish Association of Creative Arts Therapists). The training can be completed over either a full-time period of two years or ACCS (part-time mode) of three years.

What Does the Training Entail?

- Attendance of four days per week on the full time course (two college days and two clinical placement days) and two days per week on the part time/ ACCS course (one college day and one clinical placement day)
- Personal Therapy
- Theoretical, Experiential and Clinical components comprising:

Theoretical Studies

The theoretical foundation of art therapy is drawn from the history of art making, creativity and the psychotherapies. Models and approaches within the field of art therapy are discussed and debated within the framework of lecture and seminar series throughout the training. There is also an introduction to developmental psychology and psychiatry.
Experiential Art Therapy Training

Students will be able to integrate theory and practice through participation in Experiential Workshops, a Training Group and Studio Practice. This gives a forum for engagement in the art therapy process, self-exploration and continuing personal development and creativity.

Clinical Placement and Professional Studies
Students are allocated clinical placements where they are encouraged to conceptualise their personal experiences and theoretical understanding in relationship to a variety of client groups. Supervision of the clinical experience is central to the art therapy training and is provided in small groups at Crawford College and individually on placement. Students are encouraged to experience a number of differing placement situations over the course of their training. Please note that students must have their placements in a new setting and not at their workplace.

Art therapists work in a wide variety of HSE and social care settings, including – adult and child psychiatry, education, palliative care, addiction services and community day centres. Many also work in private practice.

Module Information

http://modules.cit.ie
CIT has developed a website which gives full details of all modules for all courses. The website also has information on recommended textbooks, average weekly workload, assessments and exams.

Award

Master of Arts in Art Therapy

Evening Courses
Course Fee €400

Life Drawing – Beginners

Course Code CR_AR004
Tutor Helle Helsner

Monday 7pm - 9.30pm
This beginner's course is a basic course in objective drawing from the model in various media including, pencil, ink, charcoal, etc.

Life Drawing – Advanced

Course Code CR_AARTS_X_Y1
Tutor Helen Farrell
Enquiries
Helen Farrell
E: Helen.farrell@cit.ie

Wednesday 7pm - 9.30pm
The advanced life drawing course is an accredited module intended for artists and students who already have basic drawing skills. The course will explore new approaches to observational drawing as well as working with traditional drawing methods. This will enable students to work through the various problems that arise through the process of life drawing within a contemporary art context. Applicants should be familiar with gesture drawing and have a basic understanding of proportion and perspective. The first period of the course from October to December will be bridging studies leading to embarking then on to the module itself in the 2nd semester.

Drawing/Painting

Course Code CR_AR012
Tutor Eileen Healy

Tuesday & Thursday 7pm - 9.30pm
A drawing course for beginners and those with some experience who wish to improve their drawing skills. This course deals with improving visual concentration and eye to hand co-ordination in the studio. The course incorporates the use of colour, still life and life model. The painting course begins with the essential practice of drawing and gradually leads to painting in acrylic or oil. The course deals with colour mixing, use of materials, and painting techniques while using still life and the model as subject matter.

Textiles

Course Code CR_AR013
Tutor Caroline Smith

Tuesday evenings 7pm - 9.30pm
This course offers a wide variety of Textile techniques including silk screen-printing and print techniques such as weaving, felt making, batik and paper making. The course is ideal for beginners or people with previous experience, and is suitable for all ages.

Photography – Beginners/Advanced

Course Code CR_AR005/CR_AR006
Tutor Roseanne Lynch

Wednesday evenings 7pm - 9.30pm
The basic course for beginners is concerned with developing the student's ability to operate camera controls to produce composed, sharp pictures under normal and studio lighting conditions. Developing and printing of black and white photographs is an integral part of the course. The advanced course builds on and develops the skills of the student further and students enrolling for the advanced course should have completed the beginner's course.

Stained Glass

Course Code CR_AR010
Tutor Sue Wainwright

Tuesday 7pm - 9.30pm
A practical course in glass design. Techniques for cutting, painting, firing, leading and soldering are covered. Please note that there is an extra costing (not included in the Course Fee) for the materials used in the class.

Pottery – Beginners

Course Code CR_AR008a Beginners
Tutor Mary Timmons

Monday 7pm - 9.30pm
The beginner's course is specifically designed for the novice to clay and will incorporate basic coil and slabbuilding techniques, with a brief introduction to the potter's wheel. A variety of decoration methods and glaze applications will also be considered.

Pottery – Advanced

Course Code CR_AR009a Advanced
Tutor Mary Timmons

Tuesday 7pm - 9.30pm
The advanced course is geared towards those who have already explored the basic processes of working with clay. Therefore an emphasis on the designing of each piece, from start to finish and particular attention to decoration and glaze application will assume greater importance.

Art Therapy Summer School 2013

Enquiries

Louise Foott
E: louise.foott@cit.ie
W: www.artincontext.eu

This is a five-day experiential art therapy workshop exploring a theme and one's personal journey therein. This course is highly recommended. It will run for five days in July or August 2013 (dates to be announced).

Certificate in Principles of Art Therapy (Foundation Course) 2012 - 2013

Course Code **CR_AATPY_8_Y1**

Enquiries

Louise Foott
E: louise.foott@cit.ie
W: www.artincontext.eu

This 10 credit Level 8 course offers a further introduction to Art Therapy, from October to April (Saturday 10am - Sunday 3pm, to accommodate travel arrangements). It usually falls on the second weekend of the month and runs over eight weekends. Each weekend students will participate in experiential workshops with qualified arts therapists. A variety of approaches to Art Therapy is introduced through workshops, lectures and seminars.

Entry to this course is by interview. Closing date for application is the end of April 2012.

Certificate in Arts in Group Facilitation 2012 - 2013

Course Code **CR_AGRPA_8_Y1**

Enquiries

Louise Foott
E: louise.foott@cit.ie
W: www.artincontext.eu

This 10 credit Level 8 course is a community arts training programme, involving training in visual arts, drama and movement, group facilitation skills and disability equality. It explores the potential of creativity in a group setting, within the context of disability equality and self-advocacy training. The course aims to facilitate the participation of people with and without disabilities who have an interest and commitment to the development of their creativity and group skills.

It is run one weekend a month for ten weekends from September through to June, (Friday or Saturday, 10am; Sunday, 3.30pm) including six three day weekends. There will be a total of 26 training days. Participants will also carry out approximately 10 hours of work practice in their own time.

Closing date for application is the end of April 2012.

Certificate in Arts Participation and Development:

Creative Approaches to Global Education and Action

Course Code CR_AARPD_8_Y1

Enquiries
E: ccad.globalarteduc@cit.ie

This 10 credit Level 8 course explores the use of creativity in approaching issues of participation in global educational and action issues. The course combines presentations, case studies and group participation with a focus on experiential learning. The course is aimed at artists, youth workers, community workers, teachers, educators and volunteers who are interested in developing a global perspective in their practice. It runs over 8 weekends including three 3 day weekends (Fri – Sun).

Art Therapy Introductory Weekend Workshops

Enquiries
Louise Foott
E: louise.foott@cit.ie
W: www.artinconetx.eu

Each weekend will consist of an exploration of the theory and practice of Art Therapy, together with an opportunity to work experientially. Introductory weekends are normally held in November, March and May each year.

Folder Preparation Course

Course Code CR_AR015
Course Fee €480

Saturdays 10am - 1pm (Max. 22)
This is a 15-week course suitable for those seeking art college entry. It will take place on Saturdays from 10am - 1pm. Participants will be tutored in composition, observational drawing, life drawing, painting, and developing a sketchbook.

Other activities, such as photography, collage, 3D, and gallery visits are covered during the course. Tuition will be given in developing a well balanced portfolio.

Enrolment by post or in person on Thursday, 6th September 6.30 – 8.30pm

Crawford Art Summer School 2012

Enquiries
Ed Kuczaj
T: 021 433 5246
E: ed.kuczaj@cit.ie
E: ccad.enquiries@cit.ie

CCAD offers a one-week summer school in Painting, Drawing, and other visual activities subject to demand. This programme is designed to reach out to all ages and abilities. It provides an atmosphere in which to learn, enjoy and experiment in the arts.

From May 2013 a brochure will be available for the course. Please check the CIT website or contact the college.

DEPARTMENT OF MEDIA COMMUNICATIONS

Head of Department
Rose McGrath

Department Secretary
Maud Coffey
T: 021 433 5810
E: maud.coffey@cit.ie

Information/Registration for the Department of Media Communications part-time courses for the academic year beginning September 2012 will take place at the CIT's Bishopstown Campus on Tuesday 4th September 6.00pm - 8.30pm.

Registration forms must be completed in full. It is particularly important that each applicant clearly identifies the course and subjects for which he/she is registering. The onus is on each applicant to ensure that this information is accurate. Early registration is advisable as numbers of places on courses are limited.

Please note: all courses run by the Department of Media Communications take place at the CIT's Bishopstown Campus.

COURSES

Higher Diploma in Arts in Public Relations - HETAC Level 8
Certificate in Media Production - HETAC Level 6
Certificate in Broadcast Media - HETAC Level 6
Certificate in Digital Media Design and Development HETAC Level 8

Higher Diploma in Arts in Public Relations
(HETAC Level 8)

COURSE FEE	ENQUIRIES	COURSE CODE
€1500	Emmett Coffey T: 021 433 5409 E: emmett.coffey@cit.ie	CR_BPURE_8

http://www.cit.ie/course/CR_BPURE_8

Monday and Tuesday, 7.00pm - 10.00pm

Aim

The Higher Diploma in Arts in Public Relations aims to offer learners the opportunity to develop their communication skills within a challenging, supportive and easily accessible framework.

The course is designed to provide learners with a critical awareness of the theories and practice of professional communications as they relate to contemporary public relations and a comprehensive understanding of the role and workings of the mass media.

Graduates of this course will be able to

- Demonstrate detailed knowledge of the strategic function of public relations as a key form of communication by organisations;
- Apply the techniques of public relations to achieve planned PR objectives;
- Apply a range of media writing techniques required in the practice of PR;
- Demonstrate a theoretical awareness and practical application of personal presentation skills including uses and applications of multimedia tools;
- A critical appreciation of specialist areas central to the work of the public relations practitioner and of the ethical and legal issues involved in PR.

Assessment will be carried out through examination and continuous assessment (individual and group work).

Who can apply?

Candidates would be expected to be degree holders in cognate disciplines including arts and business. It is anticipated that many applicants will be in subject related employment and wishing to up-skill with a view to job diversification or promotion. With this in mind, Recognition of Prior Learning (RPL) will be applicable for candidates entering from the workplace or applying for admission from other institutes, www.cit.ie/rpl.

Module Information

http://modules.cit.ie
CIT has developed a website which gives full details of all modules for all courses. The website also has information on recommended textbooks, average weekly workload, assessments and exams.

Duration

1 Year Part-time.

Note: A small number of weekend workshops will also be held throughout the year. The course is delivered through a combination of formal lectures, practical's, tutorials and workshops.

Award

Higher Diploma in Arts in Public Relations
(HETAC Level 8).

Certificate in Media Production (HETAC Level 6)

COURSE CODE	COURSE FEE	ENQUIRIES	
CR_HMEDP_6	€400 per module	Brian Doyle T: 021 433 5409 E: brian.doyle@cit.ie	Rose McGrath T: 021 433 5812 E: rose.mcgrath@cit.ie

Apply online at
http://www.cit.ie/course/CR_HMEDP_6

Aim

To provide stand-alone modules for those who wish to gain knowledge in Media Design Production or to expand on their range of expertise in this area. Converting the part-time evening courses into a HETAC Certificate, Level 6; the modules facilitates employers and employees and those wishing to upgrade their skills by offering individual or multiple modules in an easily accessible, learner centred manner.

Graduates of this course will be able to

- Demonstrate a practical and theoretical knowledge of design for print;
- Demonstrate digital image creation and manipulation;
- Present video production knowledge of the process of shooting and editing video;
- Apply a range of interactive media, design and technical skills in the production and management of media types, which can be delivered via the web.

Entry Requirements

Candidates would be expected to have successfully completed the Leaving Certificate (or equivalent). Basic computer and keyboard skills are necessary. Recognition of Prior Learning (RPL) will be applicable for candidates, http://www.cit.ie/rpl.

Modules are:

Design for Print
Introduction to Video
Digital Imaging
Web Design and Interactive Media

Duration

1 Year Part-Time

Award

Certificate in Media Production (HETAC Level 6).

Please note this course is delivered on Apple Mac computers.

Please note that all courses run by the Department of Media Communications take place at the CIT's Bishopstown Campus.

Modules Description

Design for Print

Tuesday and Thursday, 7pm – 9pm. **Semester 1**

Aim

This module provides training and practical experience in the process of design for print. Students will be introduced to the principles of design as they relate to print production. Using industry standard software packages, this module covers the approaches that can be used in the design, lay-out and production of various printed materials, for example brochures, flyers, newsletters and posters.

On successful completion of this module the learner will be able to

- Describe the function and operation of the hardware and software involved in print based design and production;

- Apply the principles of design in the creation of a range of printed materials using a combination of type and image;
- Demonstrate effective communication of information in printed form using a combination of type and image to the requirements of a provided brief;
- Demonstrate the stages involved in preparing designed material for commercial offset and digital printing.

Introduction to Video

Monday and Wednesday, 7pm – 9pm. **Semester 1**

Aim

This module is intended as an introduction to the video production process. It provides an overview of the technology as well as an examination of the process of shooting and editing video. This module will provide the student with the knowledge required to create video content of competent quality which could be used in project or thesis work.

On successful completion of this module the learner will be able to

- Interpret the processes involved in the production of professional video;
- Demonstrate the ability to create a coherent plan for a video production;
- Construct using non-linear editing software a piece of edited footage using simple cut sequences;
- Demonstrate a clear understanding of basic video camera operation;
- Create a simple authored video film from shot material.

Digital Imaging

Tuesday and Thursday, 7pm - 9pm. **Semester 2**

Aim

This module provides practical experience in the process of digital image creation and manipulation. Students will be introduced to the principles of digital imagery. Using industry standard software packages, this module covers the approaches that can be used in the creation of digital images for output in print or screen form.

On successful completion of this module the learner will be able to

- Demonstrate the function and operation of hardware and software involved in digital imaging;
- Demonstrate the application of visual language through the production of effective images;
- Use appropriate software applications for the creation, correction, retouching and manipulation of digital images;
- Identify and discuss the technical issues associated with digital image storage and output for print and screen.

Web Design and Interactive Media

Tuesday and Thursday, 7pm – 9pm. **Semester 2**

Aim

The module provides an introduction to interactive media design. It covers how to analyse and evaluate interactive multimedia. It also deals with the design and technical considerations for the production and management of media types such as text, graphics, audio and video content, which can be delivered via the web.

On successful completion of this module, the learner will be able to

- Identify the stages involved in interactive media design and production;
- Analyse and evaluate interactive media products in terms of visual, technical and functional design;
- Demonstrate the technical issues related to the function and operation of hardware and software components, media storage and delivery involved in interactive media production;
- Demonstrate the application of design and development skills and competencies through the production of effective interactive products as applicable to set project.

Certificate in Broadcast Media
(HETAC Level 6)

COURSE CODE	COURSE FEE	ENQUIRIES
CR_HBRME_6	€400 per module	Brian Doyle T: 021 433 5409 E: brian.doyle@cit.ie Frank O'Donovan T: 021 433 5409 E: frank.odonovan@cit.ie Rose McGrath T: 021 433 5812 E: rose.mcgrath@cit.ie

Pending Validation

Aim

This is a one-year, two-semester programme in Broadcast Media, incorporating a work placement in the second semester. The course contains modules that facilitate employers and employees and those wishing to upgrade their skills by offering individual or multiple modules in an easily accessible, learner-centered manner.

The programme will equip its graduates with the knowledge, skills, and competencies to develop as broadcasters in a fast-growing media rich and technically advanced environment. It has a strong focus on developing students' broadcasting skills and giving them a good understanding of the principles and practices of reporting, practical broadcasting and audio-visual broadcasting technology.

The programme will draw from staff expertise within the Department of Media Communications, which brings with it extensive experience of audio-visual production, journalism and new media. The Department is home to a new Master of Arts in Journalism with New Media and the staff from this programme will be delivering this special purpose award. The Department of Media Communications has extensive in-house expertise and facilities with regard to broadcast media and CIT's radio station will be available for use for the course.

A number of local and national broadcasting industries and local community radio stations have been contacted to participate in the industry placement from which we have received a very positive response.

Graduates of this programme will be able to

- Demonstrate the technical and production knowledge of audio-visual broadcasting technology.
- Present broadcasting practical knowledge and application.
- Demonstrate a theoretical knowledge of broadcasting and reporting.
- Apply a range of broadcasting principles and technical skills in an industry placement.

Entry Requirements

Candidates would be expected to have successfully completed the Leaving Certificate (or equivalent). Basic computer and keyboard skills are necessary. Recognition of Prior Learning (RPL) will be applicable for candidates, http://www.cit.ie/rpl.

Modules are
Introduction to Audio Visual Broadcasting Technology
Journalism Writing Principles
Practical Broadcasting Skills
Broadcasting Industry Placement
Duration
1 Year Part-Time

Award

Certificate in Broadcast Media (HETAC Level 6).

Please note this course is delivered on Apple Mac computers.

All courses take place at the CIT's Bishopstown Campus.

Modules Description

Introduction to Audio Visual Broadcasting Technology

Tuesday, 6.30pm – 9.30pm. **Semester 1** (13 weeks)

Aim

This module will provide an introduction audio visual recording and processing for broadcast purposes. Students develop a fundamental knowledge of the properties and use of audio video recording, storage and editing equipment and processes

On successful completion of this module the learner will be able to

- Demonstrate the use of audio visual technology, software, hardware and exchange formats.
- Analyse requirements of broadcast media and workflow.
- Plan and manage projects intended for broadcast.
- Demonstrate problem solving skills in the implementation of audio/visual solutions.
- Prepare material for internet broadcasting.

Journalistic Writing and Principles

Wednesday, 7pm - 9pm. **Semester 1** (13 weeks)

Aim

The aim of this module is to give students a fundamental knowledge of the principles of journalism and news. It will also enable students to learn the techniques and principles of Broadcast Journalism. The module will develop students' news reporting skills and their ability to source news, develop stories, and build good contacts.

On successful completion of this module the learner will be able to:

- Write clear and concise news stories
- Be a part of a journalistic team and manage the delivery of work to an industry standard and to specified deadlines
- Identify and overcome common news writing faults
- Develop good writing skills and develop a knowledge of grammar
- Identify differing sources of news, and develop appropriate copy based on identified requirements and for specific audiences

Certificate in Broadcast Media
(HETAC Level 6)

Practical Broadcasting Skills
Monday, 6.30pm – 9.30pm. **Semester 2** (13 weeks)

Aim
This module will equip students with the fundamental practical skills required by a broadcasting journalist. These skills include researching news items and feature ideas, recording and editing interviews, writing scripts in a format appropriate for broadcast, creating and presenting bulletins. Students will gain an understanding of how a newsroom operates, how editorial decisions are made, and how tasks are prioritised. They will learn through a combination of practical real-life tasks, class presentation, and self-directed learning.

On successful completion of this module the learner will be able to:
- Write news stories appropriate to target audience
- Construct and edit radio bulletins
- Learn presenting skills
- Record and edit audio material for use in radio news bulletins
- Learn what the role of the editor is and the process of story choice

Broadcasting Industry Placement
Thursday 7pm - 9pm. **Semester 2** (13 weeks)
(First meeting – arrangements for work placement will then be scheduled)

Aim
For this module the learner will undertake a relevant work placement in a radio station. The placement programme will familiarise the student with work practices and procedures and provide him/her with the opportunity to observe the practical application of theoretical knowledge gained on his/her course. The placement is supported by a member of academic staff in CIT together with a workplace mentor. The aim of the industrial placement is to introduce the learner to structured employment in a radio station and to develop in the learner an understanding of the organisation, its procedures and technologies.

On successful completion of this module the learner will be able to:
- Critically analyse the enterprise, its culture and the organisation
- Use effective and professional communication skills within the workplace
- Demonstrate initiative and leadership skills when working alone and in teams
- Apply knowledge, skills and competencies acquired during the programme of study to the analysis and solution of workplace problems
- Reflect on and analyse the learning experience resulting from the work placement.

Certificate in Digital Media Design and Development
(HETAC Level 8)

COURSE FEE	ENQUIRIES		COURSE CODE
€400 per module	Gearóid Ó Súilleabháin T: 021 433 5933 E: gearoid.osuilleabhain@cit.	Rose McGrath T: 021 433 5812 E: rose.mcgrath@cit.ie	HDMTE_8

Pending Approval

Aim

This is a single semester programme in Digital Media Design and Development leading to the award of a Level 8 Certificate. Under the ACCS scheme, students can gain credits for each module successfully completed and accumulate those credits over time.

The aim of this programme is to equip participants with the knowledge, skills, and competences to design, develop, implement, and research a wide range of digital media technologies and solutions in response to the needs and requirements of clients and users. Graduates will leave the programme with a critical awareness of contemporary and emerging issues in the wider industry and be able to operate as recognised professionals in the field.

This programme would suit:

- Applicants coming from a different field or industry who wish to enrich their own practice with skills and knowledge in this area or those from a different field who may now find themselves increasingly working with digital media developers.
- Applicants wishing in some way to break into the field of digital media design and development.
- Applicants from a different background who would like a bridging route to pursuing a full master's degree in the area of E-learning Development or Digital Media.

The programme will draw from extensive in-house expertise and facilities within the Department of Media Communications with regard to digital media production and post-production, programming and application development, user experience research, interaction design etc. The Department is home to a number of cognate programmes, in particular the BA (Hons) in Multimedia, the MA in Journalism & New Media, the MA in Public Relations with New Media, the MA in Digital Media, and a planned MA in E-learning Development. The programme also draws from expertise in CIT's DEIS Department of Education Development where there is extensive experience of commercial and grant-aided e-learning development work (see http://deis.ie)

Entry Requirements

Candidates would be expected to have successfully completed a Level 8 degree or equivalent. Basic computer and keyboard skills are essential. Familiarity with social media and media sharing platforms and services are desirable too, as well as an interest in video production, graphic design and/or interactive media.

Recognition of Prior Learning (RPL) will be applicable for candidates with existing skills or knowledge in any of the programme modules (see http://www.cit.ie/rpl for further information on this process).

Modules

Semester 1 – Mandatory Modules
Multimedia Production
E-Learning: Theory and Technology
Basics of Computer Science
Moving Image & Sound
Creative Strategies

>>

Certificate in Digital Media Design and Development

Semester 1 – Elective Modules (choose one only)
Interface Design
Interpreting Sound & Music
Marketing & Media Law
The Analogue & Digital Domain
Equality: Policy & Practice
Introduction to Digital Media
Digital Culture

Duration

1 Semester full-time (13 weeks).

Award

Certificate in Digital Media Design and Development (HETAC Level 8)

Please note this course is delivered predominantly on Apple Mac computers.

The above modules take place at the CIT's Bishopstown Campus during the day.

PUBLISHED BY
Cork Institute of Technology,
Bishopstown, Cork, Ireland.

EDITOR: Anne Twohig

PHOTOGRAPHY: Barry O'Sullivan, CIT; Shane Cronin, CIT; Roseanne Lynch; John MacMonagle, Raven Design; and Anne Twohig.

NOTE: Every effort has been made to ensure that the information herein is accurate. However, this Handbook does not infer or impose any legal obligations on Cork Institute of Technology to provide courses or other services to students. It does not constitute an offer to supply modules, courses or subjects. Syllabi, fees, regulations or other information may be altered, cancelled or otherwise amended at any time. This Handbook does not confer any rights on any student registered in the Institute.

N.B. Fees quoted relate to the academic year 2012/2013 only.

E&OE

Ireland's EU Structural Funds
Programmes 2007 - 2013

Co-funded by the Irish Government
and the European Union

EUROPEAN UNION
STRUCTURAL FUNDS

The development of Cork Institute of Technology has been supported by the European Union. This support has contributed to staffing, running costs, and student grants, allowing the Institute to play a major part in the social and economic development of the country.

Design & Layout: Raven Design Ltd.
Print: W & G Baird Ltd.

CIT

Continuing Education

Information/Registration Evening
4th / 5th / 6th September
See inside for details