# Continuing Education

COURSES 2014-2015



knowledge at work



Ireland's EU Structural Funds Programmes 2007 - 2013 Co-funded by the Irish Government and the European Union



#### **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 2014-2015



Please note that a special telephone line is available for queries after normal business hours T: 021 433 5900

www.cit.ie

#### **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 2014/2015.

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.

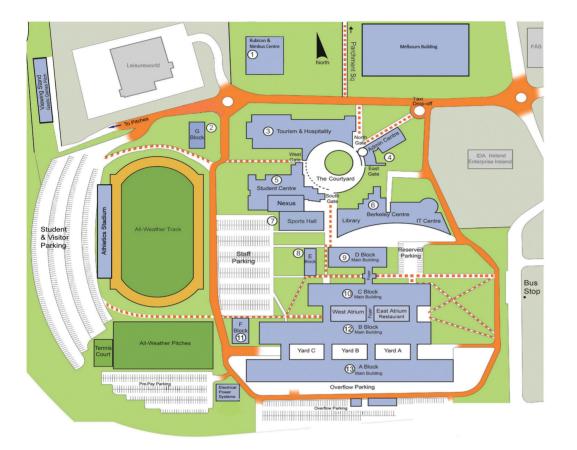
Here in CIT we provide an extensive range of courses with flexible modes of delivery that will allow you to continue the process of lifelong learning. I hope you will join us in 2014/2015.

Dr Brendan J. Murphy

President

June 2014

## **Bishopstown Campus**



#### **Admissions/Registrations**

**T:** 021 433 5044/5043 **E:** admissions@cit.ie

#### **Examinations**

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

#### **Course Fees**

**T:** 021 433 5440 **E:** fees@cit.ie

#### **Opening Hours**

#### Admissions/Examinations

When classes are running: Monday – Thursday 9.30am – 4.00pm Friday 9.30am – 12.30pm 2.00pm – 4.00pm

When classes are not running: **Monday – Friday** 9.30am – 12.30pm 2.00pm – 4.00pm

#### **Opening Hours**

#### Reception

Monday – Friday 9.00am – 1.00pm

2.00pm – 5.00pm

#### Accounts

**Monday – Friday** 9.30am – 12.00noon 2.00pm – 4.00pm

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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.

## CIT 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 studentinclude 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 13,800 between full-time and part-time courses. Courses are offered in Engineering, Science, Business, Humanities, Art, Ceramics, Multimedia, Music, and Theatre & Drama at Higher 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 by the Quality & Qualifications Ireland (QQI). In November 2012, QQI was established as a new integrated agency (replacing the Further Education & Training Awards Council (FETAC), the Higher Education & Training Awards Council (HETAC) and the National Qualifications Authority of Ireland (NQAI), and incorporating the functions of the Irish Universities Quality Board). FETAC, HETAC, and NQAI are now dissolved.

QQI is responsible for the external quality assurance of further and higher education and training (including English language provision), and validates programmes and makes awards for certain providers in these sectors. QQI is also responsible for the maintenance, development and review of the National Framework of Qualifications (NFQ).

Awards and qualifications formerly made by HETAC and FETAC continue to be recognised, because they are on the NFQ. Current programmes leading to a HETAC or FETAC award are now awarded by QQI. 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. CIT's 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

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## About Cork Institute of Technology

## Information/Registration for Continuing Education Courses

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

Information/Registration for the academic year beginning September 2014 will take place at the Institute from 6.00pm to 8.00pm on the following dates:

#### **Tuesday 2nd September 2014**

#### Faculty of Business & Humanities:

Business Studies & Accounting, Human Resource Management, Media Communications, Marketing, Tourism & Hospitality, and Counselling & Psychotherapy.

#### Wednesday 3rd September 2014

#### **Faculty of Engineering:**

Chemical, Civil, Structural & Environmental, Construction, Mechanical, Biomedical & Manufacturing, Nautical, Transport & Automobile, and Craft Studies.

#### Faculty of Science & Informatics:

Applied Physics & Instrumentation, Biological Sciences, Chemistry, Computing, and Mathematics.

#### **Thursday 4th September 2014** 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 8.00pm.

#### **Student Email System**

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, please email **servicedesk@cit.ie** 

#### **Identification Cards**

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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 is required 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.

**N.B.** 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.

#### **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 postgraduate course. Tax relief is available for one course per individual in a tax year and is at the 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.

Students will be notified of their fees by email to their CIT email account and in all cases, course fees must be paid before attending lectures.

Students can check their account balance and pay their fees online at www.cit.ie/pay

## 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, debit or credit card can be made online at www.cit.ie/ pay or by phoning 021 433 5440.

## 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**

All programmes at CIT will run subject to sufficient student numbers. Where a programme cannot proceed, applicants will be contacted and advised on alternative study options.

The following refund policy applies to all courses detailed in this handbook for the 2014/15 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 2014. No refunds will be given thereafter.
- All applications for refunds must be made on the appropriate Refund Form, which can be requested by emailing fees@cit.ie. Please note refund policy will be strictly adhered to.

**NB:** Before signing the Enrolment Form, students are reminded to ensure that they have clearly understood all the terms of their enrolment with CIT, in particular clauses concerning refunds, deferments, waivers, course transfers, and visa applications (when applicable).

#### **Examinations**

Entering for examinations is the responsibility of the registered student.

#### **Semester examinations**

For semester 1, 2 and 3 examinations, students should ensure they are correctly registered for all required modules by the deadlines indicated – see http://www.cit.ie/aboutcit/ servicesandadministration/admissions/

#### **Repeat examinations**

Modules failed in semester 1 or 2 may be repeated at the autumn session. To register, students should register online as per the email sent in late June to all students needing to repeat – see also www.mycit.ie/examinations

#### **Examination timetables and regulations**

Information re student examination timetables and examination regulations will be emailed to student mycit email accounts normally three weeks before the examination session. Students should familiarise themselves with the important documents which relate to examinations at CIT, available online at www. mycit.ie/examinations/regulations/

#### Fees

Only students who have completed their registration processes (i.e. paid their fees in full) are entitled to sit examinations. To make an online payment please go to www.cit.ie/pay

#### **Employer paying fees**

If the student's employer or any outside agency is paying his/her fees, the onus is on the student to ensure that the correct fees are paid in full. http://www.cit.ie/aboutcit/ servicesandadministration/admissions/

#### Students with disability requesting examination supports

Students with disabilities, specific learning difficulties 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) at least 6 weeks before the start of exams with Laura O'Rourke, Disability Support Officer, Access Service, **T**: 021 433 5107, **E**: disability@cit.ie

## About Cork Institute of Technology

#### **The National Framework of Qualifications**

The National Framework of Qualifications (NFQ) provides a way to compare qualifications, and to ensure that they are quality assured and recognised at home and abroad. The Framework of Qualifications is an official national system for describing and linking all educational qualifications.

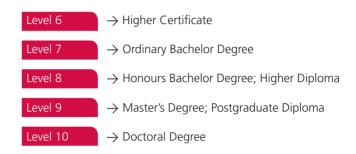
The Framework has been established by the National Qualifications Authority of Ireland (NQAI), a State body established under the Qualifications Act 1999.

All educational awards have been assigned "levels" in the National Framework of Qualifications. For example: 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.qqi.ie as well as

www.cit.ie



The National Framework of Qualifications (NFQ) ADVANCED CERTIFICAT LEVEL 5 CERTIFICATE HIGHER G CERTIFICATE CERTIFICATE **A** 5 6 > ራ ሳ 10-LEVEL •0 FRAMEWORK **AWARDING BODIES** AWARDS IN THE FRAMEWORK FETAC - awarded by Quality and Qualifications Ireland (QQI) There are four types of award in the National Framework of Qualifications: SEC - State Examinations Commission (Department of Education and Skills) Major Awards: named in the outer rings, are the principal class of awards made at a level HETAC - awarded by Quality and Qualifications Ireland (QQI) Minor Awards: are for partial completion of the outcomes for a Major Award IoT - Institutes of Technology Supplemental Awards: are for learning that is additional to a Major Award DIT - Dublin Institute of Technology Special Purpose Awards: are for relatively narrow or purpose-specific achievement Universities

European Qualifications Framework

#### For further Information consult: www.nfq.ie www.QQI.ie

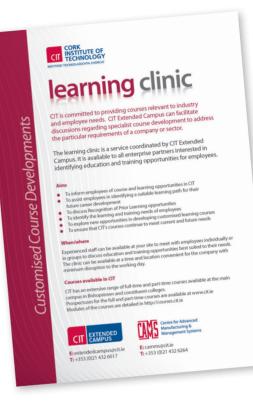
© QQI 2012

#### **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 the National Framework of Qualifications up to Master's 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

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## About Cork Institute of Technology

#### **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, nonformal 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.

#### 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.

#### 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;
- Contact the appropriate Head of Department;
- Contact the Course Coordinator;
- In all instances (except advanced entry cases) you must register for the module(s).

#### **Important Notes**

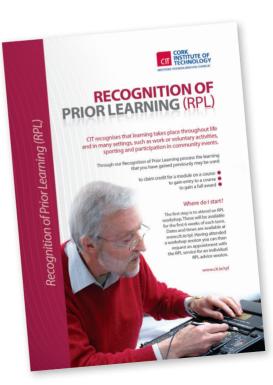
For your RPL claim to be progressed you must attend an information session and avail of the online supports.

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. Prior learning cases based on a combination of prior non formal or informal learning (experiential) are charged full module fee.

#### www.cit.ie/rpl



#### **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 Team**

#### **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, accompanying both students and staff on their life journey. We are open to people of all faiths and cultures and none. The chaplaincy extends a warm welcome to both students and staff and assure you of our presence and support, especially in times of bereavement, illness and during the anxious moments that we all experience from time to time.

We look forward to meeting you throughout your time in CIT.

## About Cork Institute of Technology

#### **Modularisation & Semesterisation**

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

#### What is a Semester?

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

#### What is a Module?

A module is a standalone unit of learning and assessment and is completed within one semester. A full-time student will normally study six modules in each semester; part-time and ACCS 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.

#### 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"

in

"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
- 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: Organisation & Professional Development Management & Enterprise Accounting & Information Systems Marketing & International Business



## Department of Organisation & Professional Development

#### Head of Department Don Crowley

#### **Department Administrator**

Orla O'Shea Location: Room D143 T: 021 433 5902 | E: orla.oshea@cit.ie

#### **Department Secretary**

Eileen O'Mahony Location: Room D143 T: 021 433 5900 | E: opd@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 email address from which you can apply online.

Following your application, please attend on the first night of class unless you hear to the contrary beforehand (e.g. if you do not meet the entry requirements).

# COURSES

- Bachelor of Arts in Human Resource Management Level 7
- Bachelor of Arts (Honours) in Human Resource Management Level 8
- Master of Arts in Human Resource Management (Taught) Level 9
- Master of Business (Taught) Level 9
- Accounting Technicians Ireland
- Institute of Certified Public Accountants in Ireland (CPA)
- Chartered Institute of Management Accountants (CIMA)

- ACCA Diploma in Accounting & Business
- ACCA Programme (full time)
- Introductory Book-Keeping and Accounting
- Road Haulage & Road Passenger Transport (CPC)

Graduates of the BA in HRM are eligible for membership of the Chartered Institute of Personnel and Development (CIPD).

COURSE CODE	CR_BHRMN_7	
APPLICATION	Apply online at http://www.cit.ie/course/CRBHRMN7	rind
COURSE FEE	€165 per 5 credit module (inc. exam fee)	cipd
ENQUIRIES	Olive Murphy O'Dwyer • T: 021 433 5928 • E: olive.murphyodwyer@cit.ie	Approved Centre

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).

#### **Delivery**

**Year 1** - Semester One - Two evenings per week, 6pm -10pm, Semester Two – Three evenings per week, 6pm-10pm

Years 2 & 3 - Tuesday & Thursday 6pm - 10pm.

**Please note** that students are required to attend lectures on some Saturdays during the Semester. Dates will be advised in advance.

#### Aim

The course is designed to meet the needs of those working in human resources/training and development or for someone aspiring to a career in the discipline. The course also attracts line managers, supervisors and team leaders who wish to gain people management skills.

#### **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 via one semester of Bridging Studies.

#### **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**

Monday 15th September 2014

#### Award

Bachelor of Arts in Human Resource Management (Level 7)

#### **Course Content**

Module information available at http://modules.cit.ie

#### 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 1 & 2

#### Year 2 – Modules

- Managing Information Statistics
- 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)

COURSE CODE	CR_BHRMN_8
APPLICATION	Apply online at http://www.cit.ie/course/CRBHRMN8
COURSE FEE	€190 per 5 credit module (inc. exam fee)
ENQUIRIES	Dr Felix Raekson • T: 021 433 5906y • E: felix.raekson@cit.ie

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.

#### Delivery

Two evenings per week, 6pm - 10pm.

**Please note** that students are required to attend lectures on some Saturdays during the Semester. Dates will be advised in advance.

#### Aim

The programme 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**

Tuesday, 16th September 2014

#### Award

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

#### **Course Content**

Module information available at http://modules.cit.ie

#### Semester One

- Consultancy Research Methods
- Organisational Development & Change Management (5 credits)
- Business Finance (5 credits)
- eHRM (5 credits)
- Occupational Psychology (elective) (5 credits)

#### Semester Two

- Managing an International Workforce (5 credits)
- Negotiation Skills (5 credits)
- Emerging Markets & Trends (5 credits)
- Corporate Strategy Implementation (5 credits)
- Concept Acquisition & Cognitive Learning (elective) (5 credits)
- Consultancy Project (completed over the full academic year) (10 credits)

## Master of Arts in Human Resource Management (Taught) (Level 9)

Graduates of the MA in HRM are eligible for membership of the Chartered Institute of Personnel and Development (CIPD).

COURSE CODE	CR_BHRMN_9	
APPLICATION	Apply online at http://www.cit.ie/course/CRBHRMN9	Trad
COURSE FEE	EU applicants: €2,500 per year. Non EU applicants: E: fees@cit.ie	cipd
ENQUIRIES	Dr Felix Raekson • T: 021 433 5906 • E: felix.raekson@cit.ie	Approved Centre

The Master of Arts in Human Resource Management is a two-year Level 9 programme. This Level 9 MA, will allow graduates to apply for advanced level membership of the Chartered Institute of Personnel and Development, (CIPD), and will aid them as their career progresses to strategic roles in organisations. The programme is delivered part-time over two academic years.

#### **Delivery**

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

#### Aim

The programme is designed to expose students to current issues in the Human Resource Management domain at a strategic level. This Masters programme has been designed in consultation with industry to respond to changes that have taken place in the HR area. It is aimed at professionals in the HR discipline who wish to further their career and enhance their skillset.

#### **Entry Requirements**

Bachelor of Arts (Honours) in Human Resource Management (Level 8) at grade H2.2 or higher. Graduates of cognate Honours programmes who have attained HR experience may also be eligible. The programme is offered on a modular basis and requires learners to attain 90 credits.

#### **Commencement Date**

Wednesday 10<sup>th</sup> September 2014

#### Award

Master of Arts in Human Resource Management (Level 9)

#### **Course Content**

Module information available at http://modules.cit.ie

#### Semester One

- Research Methods (5 credits)
- International Corporate Strategy (5 credits)
- HRM in Context (5 credits)
- Coaching & Mentoring (5 credits)

#### Semester Two

- Managing an International Workforce (5 credits)
- Negotiation Skills (5 credits)
- Emerging Markets & Trends (5 credits)
- Corporate Strategy Implementation (5 credits)
- Concept Acquisition & Cognitive Learning (elective) (5 credits)
- E-Learning (elective) (5 credits)
- Consultancy Project (completed over the full academic year) (10 credits)

#### Semester Three

- Applied Corporate Strategy (5 credits)
- Employee Engagement (5 credits)
- Leading Managing & Developing People (5 credits)
- Training, Talent Development & Knowledge Management (5 credits)

#### **Semester Four**

• Research Dissertation (30 credits)

Students have the option of exiting with a Postgraduate Diploma in Human Resource Management on the successful completion of 60 credits. (Level 9)

COURSE CODE	CR_BBUSA_9
APPLICATION	Apply online at http://www.cit.ie/course/CRBBUSA9
COURSE FEE	EU applicants: €2,950 per year. Non EU applicants: €11,250 per year
ENQUIRIES	John Meyler • T: 021 433 5335 • E: john.meyler@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 Organisation and Professional Development offers four streams for the Master's Degree in Business viz:

- 1. Marketing
- 2. Accounting
- 3. Information Systems
- 4. Enterprise

#### **Course Content**

Module information available at http://modules.cit.ie

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. 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 15 week duration (including examinations).
- Semester 1 commences on Wednesday, 10th September 2014 at 6.30pm in T103.
- Presentation of course consists of lectures, tutorials, case studies, visiting lectures, and site visits.

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 31<sup>st</sup> October of the academic year.

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## **Accounting Technicians Ireland**

COURSE CODE	CR_BIATI_6		Accounting Technicians Ireland
APPLICATION	Apply online at http://www.cit.ie/course/CRBIATI6		Ireland
COURSE FEE	Year 1: €900 Year 2: €990 (excl. exam fees payable to Accounting Techn	nicians Irel	and).
ENQUIRIES	Ann Marie Twomey • T: 021 433 5904 • E: annmarie.twomey@cit.ie		

Accounting Technicians are gualified accounting professionals that work at all levels of finance. They can work in all types of organisations and are widely employed throughout the public sector, industry and commerce and in private accountancy practices. They are involved in the day-to-day practical work of accountancy and play a key operational role in producing reliable financial information. Accounting Technicians can perform a wide range of finance roles, from accounts staff to financial controller and beyond.

#### **Course Cancellation**

Before signing the Enrolment Form, students are reminded to ensure that they have clearly understood all the terms of their enrolment with CIT, in particular clauses concerning refunds, deferments, waivers, course transfers and visa applications (when applicable). Please refer to the 'Refund Policy information' at the beginning of this Handbook.

#### Delivery

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

#### Aim

To provide a gualification 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.

#### **Course Content**

#### Year 1

- Financial Accounting
- Law & Ethics
- Business Management
- Taxation

#### Year 2

- Advanced Financial Accounting
- Advanced Taxation
- Integrated Accounting Systems
- Management Accounting

#### Work Experience

- Essential Accounting Skills
- Advanced Accounting Skills
- Personal Development for Accounting Technicians
- Using Information Technology
- Maintaining Accounting Systems
- Maintaining Statutory Compliance

#### Duration

Two years

#### Institute Information

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

#### **Important Dates:**

#### **Exemption Deadline**

Friday 3rd October 2014. Please note that applications for exemptions must be made directly to the Accounting Technicians Ireland.

#### **Exam Registration Closing Date**

30th January 2015 for May 2015 exams.

#### Registration as first time student with ATI

By 31st October 2014. Contact Leda Egri at the Institute: T: 01 649 8180 E: info@acccountingtechnicians.ie

#### **Course Commencement Date**

Year 1 - Thursday 18th September 2014 Year 2 - Tuesday 16th September 2014

#### Awarding Body

Accounting Technicians Ireland



### Institute of Certified Public Accountants Ireland (CPA)

COURSE CODE	CR_BCPAC_9	CPA IRELAND GOLDSTAR APPROVED EDUCATOR
APPLICATION	Apply online at http://www.cit.ie/course/CRBCPAC9	
COURSE FEE	€395 per subject (Includes notes & revision)	
ENQUIRIES	Ann Marie Twomey • T: 021 433 5904 • E: annmarie.tv	womey@cit.ie

#### **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. Before signing the Enrolment Form, students are reminded to ensure that they have clearly understood all the terms of their enrolment with CIT, in particular clauses concerning refunds, deferments, waivers, course transfers, and visa applications (when applicable). Please refer to the 'Refund Policy information' at the beginning of this Handbook.

#### Formation 2 – Monday & Tuesday

- Management Accounting
- Financial Accounting
- 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)
- 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 www.cpaireland.ie

#### **Registration with CPA**

01 December 2014 for April 2015 Exams 01 June 2015 for August 2015 Exams

#### Exam Registration Closing Date(s)

01 March 2015 for April 2015 Exams 01 August 2015 for August 2015 Exams

#### **Awarding Body**

Institute of Certified Public Accountants in Ireland

#### **Commencement Date**

Formation 2 - Monday, 15th September 2014 Professional 1 - Tuesday, 16th September 2014 Professional 2 - Monday, 22nd September 2014

#### **CPA Institute contact details**

Exams: Arron Feery T: 01 425 1021 Registration for new students: Jean Ryan T: 01 425 1056 E: jryan@cpaireland.ie Exemptions: Lisa Feery T: 01 425 1023

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## **CIT in Partnership with CIMA**

CIMA

CIT has built a strong reputation in terms of empowering students with the necessary skills to succeed in business. 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. In partnership with CIMA, CIT offers three programmes:

- CIMA Blended Learning Programme
- CIMA Certificate in Business and Accounting
- CIMA Gateway

## **CIMA Blended Learning Programme**

#### CR\_BBLRN\_9

APPLICATION Apply online at http://www.cit.ie/course/CRBBLRN9

Payable to CIMA: €495 per subject, plus examination and exemption fees

Ruth Vance • T: 021 433 5512 • E: cima@cit.ie

CIMA prepares students for a career in business, teaching skills for strategic advice, managing risk, and making key decisions. This programme integrates classroom and online elements to offer a more stimulating experience for students who can learn at their own pace and at a time that suits them. The syllabus and examinations recognised by their relevance to business and their dedicated focus on developing the financial, non-financial and management skills required to sustain organisational success.

#### Tuition over three months will consist of:

**COURSE CODE** 

**COURSE FEE** 

**ENOUIRIES** 

- 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.

#### **Course 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. The website www.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.

## **CIMA Certificate in Business Accounting**

COURSE CODE	CR_BBUAC_X
APPLICATION	Apply online at http://www.cit.ie/course/CRBBUACX
COURSE FEE	€1,700 (includes recommended CIMA textbooks), plus €300 examination fees
ENQUIRIES	Ruth Vance • T: 021 433 5512 • E: cima@cit.ie

The Certificate in Business Accounting is CIMA's entry level accounting qualification for students with little or no accounting background. The Certificate level gives the student business experience beyond just financial accounting and you will gain insight into how the different areas of accounting relate to the business world.

It can be seen as a knowledge refresher course or a foundation to a career in business and finance. The Certificate in Business Accounting forms the basis of the CIMA Professional Qualification and is a valuable qualification on its own.

Graduate with the CIMA Certificate in Business Accounting by

- Study one subject per month for five months
- Successfully complete the relevant examination at the end of each month

#### Award

Candidates are eligible for the award of CIMA Certificate in Business Accounting having successfully completed all five examinations.

#### **Course Delivery**

Complete one subject per month:

- Fundamentals of Management Accounting
- Fundamentals of Financial Accounting
- Fundamentals of Business Mathematics
- Fundamentals of Business Economics
- Fundamentals of Ethics, Corporate Governance & Business Law

#### **Subject Delivery**

1 x 2hr introductory session (Thursday 6pm - 8pm)

- 2 x 8hr full day sessions (2 x Saturdays 9am 5pm))
- 1 x 2hr revision and QBR session (Thursday)

To register with CIMA, visit www.cimaglobal.com/irelandregister

To find out more about steps to join CIMA (entry routes, exemptions, study options, etc.) check out www.cimaglobal. com/findoutmore

## **CIMA Masters Gateway**

## The CIMA Gateway is open to graduates who hold an Masters in Business Administration (MBA), Masters in Accounting (MAcc) or Master of Business (Accounting).

The CIMA Masters Gateway entry route is for those CIT Master of Business (Accounting major) graduates wishing to fast track their professional qualification by becoming a CIMA qualified management accountant.

Under this initiative, as a Master of Business in Accounting graduate, you can study for a single fast-track exam awarding with the CIMA Advanced Diploma in Management Accounting and 11 exemptions from the CIMA Professional Qualification. Once you have achieved the CIMA Advanced Diploma, you will be able to progress straight through to the Strategic Level of the CIMA Professional qualification.

The Gateway assessment exam comprises the three management level exams – E2-Enterprise Management, P2-Performance Management and F2-Financial Management. For more information, please contact Colm Murphy at CIMA, T: 01 643 0434 E: colm.murphy@cimaglobal.com

## **ACCA Diploma in Accounting & Business**

## ACCA ACCA F

#### **COURSE CODE**

**APPLICATION** 

**COURSE FEE** 

**ENQUIRIES** 

CR\_BACCB\_6

Apply online at http://www.cit.ie/course/CRBACCB6

€1,500 (excl exam fee)

Martin O'Sullivan • T: 021 433 5904 • E: martin.osullivan@cit.ie

#### **Delivery**

Tuesday 6.30pm – 10.00pm & Wednesday 7.00pm – 9.00pm

CIT has been awarded Gold Status as part ACCA Approved Learning Partners. Gold status is awarded to tuition providers who have demonstrated that they can meet a range of challenging performance targets set by ACCA.

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**

- F3 Financial Accounting (FFA);
- F2 Management Accounting (FMA);
- F2 Accounting in Business (FAB);
- 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 Content**

Subjects FFA, FMA and FAB will be taught from October 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.

Before signing the Enrolment Form, students are reminded to ensure that they have clearly understood all the terms of their enrolment with CIT, in particular clauses concerning refunds, deferments, waivers, course transfers and visa applications (when applicable). Please refer to the 'Refund Policy information' at the beginning of this Handbook.

#### **Institute Information**

ACCA Ireland, 9 Leeson Park, Dublin 6 T: 01 447 5678 E: info@ie.accaglobal.com www.accaglobal.com

COURSE CODE	CR_BACCA_9
APPLICATION	Apply online at http://www.cit.ie/course/CRBACCA9
COURSE FEE	€5,500
ENQUIRIES	Don Crowley • T: 021 433 5900 • E: acca@cit.ie



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.

CIT has been awarded Gold Status as part ACCA Approved Learning Partners. Gold status is awarded to tuition providers who have demonstrated that they can meet a range of challenging performance targets set by ACCA.

#### 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 work experience 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

Applicants should contact ACCA directly to verify their exemptions before registering for the programme. The ACCA Connect customer service centre is open 7 days a week, 365 days a year, and can be contacted T: (01) 447 5678 or E: irelandinfo@accaglobal.com

#### Programme fee includes the following:

- Course/lecture notes for all five professional subjects;
- 2/3 day revision course with accompanying notes;
- Registration Fee;
- Mock exams in each subject;
- Question based revision (QBR).

Please note that candidates are required to pay the following fees directly to ACCA: approx. £700 for exemptions, £75 registration fee, £100 fee per examination, and an annual subscription.

#### **Course Content**

- Subjects offered:
- P1 Governance Risk and Ethics
- P2 Corporate Reporting
- P3 Business Analysis
- P6 Advanced Taxation
- P7 Advanced Audit & Assurance

**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.

Before signing the Enrolment Form, students are reminded to ensure that they have clearly understood all the terms of their enrolment with CIT, in particular clauses concerning refunds, deferments, waivers, course transfers and visa applications (when applicable). Please refer to the 'Course Cancellation information' at the beginning of this Handbook.

Following acceptance by CIT, successful applicants may register with ACCA before 8th September 2014 to avail of an early bird examination fee.

#### **Duration**

One academic year

#### **Commencement Date**

September 2014 with examinations in December 2014 and June 2015. Early registration is recommended as places are limited.

## **Introductory Book-Keeping and Accounting**

#### **COURSE CODE**

#### CR\_BBACC\_6

APPLICATIONApply online at http://www.cit.ie/course/CRBBACC6COURSE FEE€400ENQUIRIESNoreen Murphy • T: 021 433 5902 • E: noreen.murphy@cit.ie

#### Tuesday 6.30pm - 9.30pm

Class size is limited to 20 students.

#### **Course Content**

#### 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 2014/2015 academic year, subject to demand.

#### **Commencement Dates**

**Course 1:** Tuesday 30<sup>th</sup> September 2014 **Course 2:** Tuesday 3<sup>rd</sup> February 2015

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

COURSE CODE	CR_ERTPC_6
APPLICATION	For an application form, please email: cpc@cit.ie
COURSE FEE	€900 (inc. manual)
ENQUIRIES	Eileen O'Mahony • T: 021 433 5903 • E: eileen.omahony@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 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 2014/2015 academic year, subject to demand.

#### **Commencement Dates**

Course 1: Late September 2014 | Exam: Late January 2015 Course 2: February 2015 | Exam: June 2015

## Department of Management & Enterprise

#### Head of Department

Brian McGrath

#### Department Secretary

Louise Byrne Location: Room E1A T: 021 433 5806 | E: louise.byrne@cit.ie

**Please note:** Lecturers are on annual holidays during the summer and you should contact the Department's Administration office, T: 021 433 5806.

Each course has its own unique url address from which you can apply online.

Following your application, please attend on the first night of class unless you hear to the contrary beforehand (e.g. if you do not meet the entry requirements).

- Higher Certificate in Business (ACCS) Level 6
- Bachelor of Business in Management (ACCS) Level 7
- Bachelor of Business (Honours) (ACCS) Level 8
- Higher Certificate in Business for Mature Students (Full time) Level 6

COURSES

(Level 6)

COURSE CODE	CR_BBUSA_6
APPLICATION	Apply online http://www.cit.ie/course/CRBBUSA6
COURSE FEE	€165 per 5 credit module (inc. exam fee)
ENQUIRIES	Sheila Butler • T: 021 433 5806 • E: sheila.butler@cit.ie

#### Delivery

#### 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 - Monday 15th September 2014 at 6.30pm Year 2 - Monday 15th September 2014 at 6.30pm

#### **Course Content**

Module information available at http://modules.cit.ie

#### Year 1 - Modules, all mandatory

- Behavioural Science 1 & 2
- Business Mathematics & Statistics 1 & 2
- Microeconomics
- Macroeconomics
- Financial Accounting 1 & 2
- Communications
- Creativity, Innovation,& Teamwork
- Information Technology
- Public & Business Institutions

#### Year 2 - Modules (12), all mandatory

- Decision Making
- Cost & Management Accounting 1&2
- Financial Accounting 3&4
- Management 1&2
- HRM Introduction
- An Introduction to Marketing
- Marketing Strategy Principles
- Irish Legal System
- Aspects of Civil Law

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.

# Bachelor of Business in Management (Level 7) (ACCS)

#### COURSE CODE CR\_BMNGT\_7

APPLICATION	Apply online at http://www.cit.ie/course/CRBMNGT7
COURSE FEE	€165 per 5 credit module (inc. exam fees)
ENQUIRIES	Y1: Martin O'Sullivan • T: 021 433 5904 • E: martin.osullivan@cit.ie Y2: Bernard Vallely • T: 021 433 5904 • E: bernard.vallely@cit.ie

Year 1: Two/Three evenings per week, 6pm – 10pm Year 2: Two/Three 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**

**BMNGT\_7\_Y2 Bridging:** 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 coordinator.

On successful completion of the Bridging Year, students can progress to a Bachelor of Business in Management.

**BMNGT\_7\_Y3:** Higher Certificate in Business, with minimum of Pass result or successful completion of the Bridging Year of the Bachelor of Business in Management (Level 7).

Graduates with a Bachelor of Business in Management can progress to a Bachelor of Business (Honours) Level 8.

#### **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.

#### **Course Content**

Module information available at http://modules.cit.ie

The principle areas of study are:

#### Year 2 (Bridging Year) – 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 3 (Award Year) – 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)

#### **Commencement Dates**

**Year 1** - Monday 15<sup>th</sup> September 2014 at 6pm **Year 2** - Tuesday 16<sup>th</sup> September 2014 at 6pm (Level 8) (ACCS)

COURSE CODE	CR_BBUSN_8
APPLICATION	Apply online at http://www.cit.ie/course/CRBBUSN8
COURSE FEE	€190 per 5 credit module (inc. exam fees)
ENQUIRIES	John Meyler • T: 021 433 5335 • E: john.meyler@cit.ie

#### **Delivery**

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 Content**

Module information available at http://modules.cit.ie

The principle areas of study are: Mandatory – each module carries 5 credits

- Strategic Management 1
- Strategic Management 2
- Financial Management 1Financial Management 2
- Financial Managen
   Business Ethics
- 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 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.

#### **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.

#### **Commencement Dates**

Year 1 - Monday, 15<sup>th</sup> September 2014 at 6pm Year 2 - Monday, 15<sup>th</sup> September 2014 at 6pm

# Department of Accounting & Information Systems

#### Head of Department Caroline O'Reilly

#### **Department Secretary**

Christine Boyle Location: Room C163 T: 021 433 5920 | E: christine.boyle@cit.ie

**Please note:** Lecturers are on annual holidays during the summer and you should contact the Department's Administration office, T: 021 433 5920.

Each course has its own unique url address from which you can apply online.

Following your application, please attend on the first night of class unless you hear to the contrary beforehand (e.g. if you do not meet the entry requirements).

- Bachelor of Business in Accounting (ACCS) Level 7
- Bachelor of Business (Honours) in Accounting (ACCS) Level 8

# COURSES

(Level 7)

COURSE CODE	CR_BACCE_7
APPLICATION	Apply online http://www.cit.ie/course/CRBACCE7
COURSE FEE	€165 per 5 credit module (inc. exam fee)
ENQUIRIES	Noreen Murphy • T: 021 433 5920 • E: noreen.murphy@cit.ie

#### **Course Delivery**

Three nights per week, 6.00pm - 10.00pm

#### 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 16th September 2014 at 6pm

#### **Course Content**

Module information available at http://modules.cit.ie

#### 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 Marketing
- Microeconomics
- Macroeconomics
- Behavioural Science 1 & 2
- Business Maths and Stats 1

#### COURSE CODE CR B

#### CR\_BACCE\_8

APPLICATION	Apply online at http://www.cit.ie/course/CRBACCE8
COURSE FEE	€190 per 5 credit module (inc. exam fees)
ENQUIRIES	Caroline O'Reilly · T: 021 433 5920 · E: caroline.oreilly@cit.ie

#### Monday & Wednesday, 6pm – 10pm

#### **Course Delivery**

Delivery over four semesters commencing June 2014 and finishing August 2015. Summer terms involve one night per week plus two additional sessions over a ten week period. Academic semester involves two nights per week Monday & Wednesday 6pm - 10pm.

#### Aims

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 this 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, 15th September 2014 at 6pm

#### **Course Content**

#### The principal areas of study are:

- Strategic Management
- Advanced Financial Management
- Strategic Management Accounting
- Financial Reporting
- IT Auditing
- Taxation
- Corporate Governance

# Department of Marketing & International Business

Head of Department Dr Pio Fenton

#### **Department Secretary**

Shirley O'Driscoll Location: Room E11 T: 021 433 5939 E: shirley.odriscoll@cit.ie

**Please note:** Lecturers are on annual holidays during the summer and you should contact the Department's Administration office, T: 021 433 5939.

Each course has its own unique url address from which you can apply online.

Following your application, please attend on the first night of class unless you hear to the contrary beforehand (e.g. if you do not meet the entry requirements).

•	Certificate in	n Digital	Marketing	(Level 8)	(20 Credits)

# COURSE

# **Certificate in Digital Marketing**

(Level 8) (20 Credits)

#### CR\_BDMRK\_8

APPLICATION	Apply online http://www.cit.ie/course/CRBDMRK8
COURSE FEE	€1,500
ENQUIRIES	Dr Pio Fentony • T: 021 433 5922 • E: pio.fenton@cit.ie

2 full Saturdays and 12 Tuesday evenings over a 15 week period.

#### **Course Content**

COURSE CODE

Level 7 or Level 8 degree or relevant experience in an industry role. Candidates will be required to undertake an interview at CIT before admission to the course.

#### **Course Summary**

# This short programme consists of four modules (5 credits each) which will run over one semester.

The Certificate in Digital Marketing is a 15 week part-time programme entailing lab work, seminars and live-case work that is designed to provide the knowledge, skills and confidence required to successfully market business in a digital environment. The programme uses an innovative blend of realworld situations and problems to assist participants in exploring the opportunities of the digital environment.

The industry focus of the programme coupled with the applied nature of teaching provides a practical bedrock of knowledge and experience which can be used to immediate effect in a multitude of business contexts. Participants will explore various social media platforms, website technologies (including mobile), analysis tools and much more in developing a toolbox of skills that is valuable and readily usable in a B2C and B2B environment.

The programme is structured to ensure that participant's time is used wisely and entails a wide variety of speakers drawn from the business world. An innovative blend of lectures, seminars, workshops and labs is used to ensure that the programme is relevant, engaging and enjoyable.

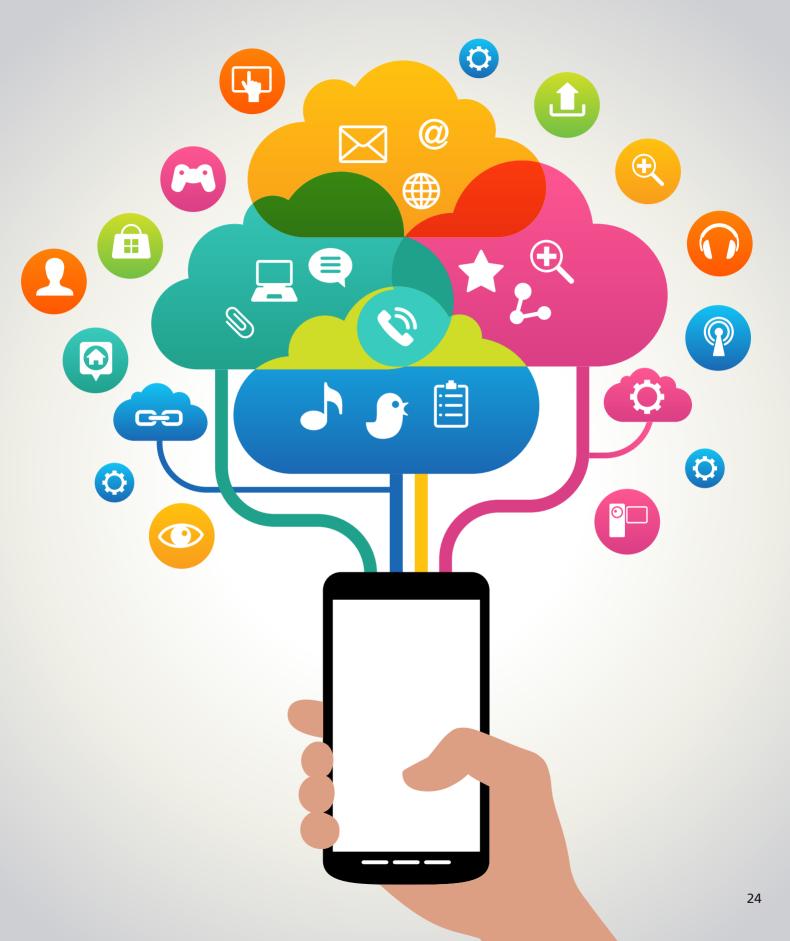
#### **Course Aims**

The programme has been developed to ensure that participants are developing sustainable skills and knowledge that underpin digital marketing. Specifically, the programme aims:

- 1. To develop knowledge of digital marketing tools and technologies in the context of the strategic direction of a business.
- 2. To integrate traditional marketing principles into marketing activity in online and mobile environments.
- To apply practical skills to web design to ensure optimised web/mobile platforms using SEO and content management strategies.

#### **Course Content**

- **Digital Marketing Environment** This module explores the current marketing landscape with emphasis on the challenges posed by the digital context in which many businesses are now operating. This module is delivered using workshops and seminars.
- Digital Advertising and Social Media This practical lab based module will enable students to formulate an integrated digital marketing communications campaign. Students will also learn how to leverage a company's presence on social media platforms to generate more connections and build relationships with customers.
- Website Optimisation and Analytics Many businesses are using inefficient and outdated websites that perform poorly in terms of search engine optimisation. This module will focus on the development of websites using existing technologies such as Wordpress and similar content management systems. Participants will explore how to integrate add-ons such as PayPal and social media content with a view to optimising the website from a usability search engine optimisation perspective.
- Applied Digital Marketing Strategy This module acts as a capstone on the certificate and draws together learning from the above areas with a particular focus on developing a strategic context for content, technology and alternative platforms.



# **School of Humanities**

Head of School Dr Margaret Linehan

The School consists of the following Departments: Applied Social Studies Tourism & Hospitality Sport, Leisure, and Childhood Studies DEIS: Department of Education Development



# **Department of Applied Social Studies**

#### Head of Department Jim Walsh

Department Secretaries Helen Dillon Location: Room G2.13 T: 021 433 5310 | E: helen.dillon@cit.ie

**Please note:** Lecturers are on annual holidays during the summer and you should contact the Department's Administration office, T: 021 433 5310.

#### 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
- 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.

# One Year Certificate in Counselling Skills

#### COURSE CODE

#### CR\_HCOUI\_6

APPLICATIONRequest an application form by E: helen.dillon@cit.ieCOURSE FEE€1,950ENQUIRIESGus Murray • T: 021 434 7800 • E: gus.murray@cit.ieÚna Coakley • M: 087 669 1584

#### 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 i 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 ii Counselling Skills

- The core skills of counselling theory and practice
- Forming a helping relationship
- 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 Personal process competencies which are necessary for their development as Counselling trainees.

#### **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.

#### **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.

#### Duration

Dates are arranged when the course begins. 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 four to five weeks 6.30pm - 9.30pm.
- c) Experiential Group Process Ten Saturdays, 10.00am 5.00pm spread throughout the year.

#### Attendance

Attendance at all sessions is a requirement.

#### 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.

**NB:** It is not a professional qualification in Counselling and does not qualify the holder to practice as a professional counsellor.

#### **Entry Requirements**

Applicants 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).

#### **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 Applied Social Studies, Cork Institute of Technology, Bishopstown, Cork on or before FRIDAY, 8th August 2014. Please mark envelope One Year Certificate application. Interviews will be scheduled as early as possible after the closing date.



#### COURSE CODE

#### CR\_HCOUN\_6

Request an application form by E: helen.dillon@cit.ie

COURSE FEE

**ENQUIRIES** 

APPLICATION

€2,100

Gus Murray • T: 021 434 7800 • E: gus.murray@cit.ie Úna Coakley • M: 087 669 1584

#### 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 the BA in Counselling and Psychotherapy 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.

#### **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.

#### **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.

#### **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.

#### 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.

#### **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
- 3. Counselling Skills or its equivalent;
- 4. Be assessed through interview;
- 5. 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.

#### 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 Applied Social Studies, Cork Institute of Technology, Bishopstown, Cork. Please mark envelope Higher Certificate application. Closing date for completed application forms is FRIDAY, 9th May 2014.



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

#### COURSE CODE

#### CR\_HCOUN\_8

APPLICATION	Request an application form by E: helen.dillon@cit.ie
COURSE FEE	Year 3: €2,900 • Year 4: €2,900
ENQUIRIES	Gus Murray • T: 021 434 7800 • E: gus.murray@cit.ie Úna Coakley • M: 087 669 1584

The Bachelor of Arts (Honours) 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 (Honours) in Counselling & Psychotherapy - Year 3
- Year 4: Bachelor of Arts (Honours) 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**

#### 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.

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

#### 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.

#### **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.

#### **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.

#### 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.

#### **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.

#### 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, graduates 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.

#### **Entry requirements**

#### Applicants 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.

#### Application

A special application form is required for this course. It can be downloaded from the Institute's website www.cit.ie and should be returned to Gus Murray, Department of Applied Social Studies, Cork Institute of Technology, Bishopstown, Cork. Please mark envelope B.A. degree application. Closing date for completed application forms is FRIDAY, 9th May 2014.

## Master of Arts in Integrative Psychotherapy (Level 9)

#### **COURSE CODE**

**CR HINTP 9** 

APPLICATION	Request an application form by E: helen.dillon@cit.ie
COURSE FEE	EU Applicants: Taught year 2013/2014: €3,450 Course Fee for dissertation and Mental Health placement year 2014/2015: €1,150 • Non-EU Applicants: E: fees@cit.ie
ENQUIRIES	Gus Murray • T: 021 434 7800 • E: gus.murray@cit.ie Úna Coakley • M: 087 669 1584

#### 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.

#### **Course Content**

#### 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.

- Developmental Theory & Adult Adaptations
- Clinical Assessment & Case Formulation
- Personal & Relational Process
- Trauma, Dissociation and their treatment
- Clinical Process of Psychotherapy
- Personal and Clinical Integration
- Supervised Psychotherapy Practice
- Practitioner Research Methods
- Mental Health Placement
- Reflective Practitioning Dissertation

#### **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 150 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);
- e) All applicants who enrol to the MA in Integrative Psychotherapy will be required to undergo Garda vetting.

#### \* 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 individual and group 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 Location: Room G2.13 T: 021 433 5820 | E: geraldine.mccarthy@cit.ie

Please note: Lecturers are on annual holidays during the summer and you should contact the Department's Administration office, T: 021 433 5820.

Many of the following courses have their own unique url address from which you can apply online.

Following your application, please attend on the first night of class unless you hear to the contrary beforehand (e.g. if you do not meet the entry requirements).

- 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)\*
- Bakery Techniques
- Pastry: Tarts and Small Gateaux
- Introduction to Management for Hospitality Services• Professional Bar Operations
- The Art of Mixology & Cocktail Making

www.cit.ie/th



## Bachelor of Arts in Culinary Arts (Level 7)

COURSE CODE	CR_OCULP_7_Y3Failte Request an application form by E: geraldine.mccarthy@cit.ie	Development Authority
COURSE FEE	CIT Fee €2,500 (Fáilte Ireland supported premises) €5,000 (where a participant is not in full time employment in a Fáilte Ireland supported premises	
ENQUIRIES	Geraldine McCarthy • T: 021 433 5820 • E: geraldine.mccarthy@cit.ie	

#### **Entry Requirements**

- Selection for this course will also be based on an interview to be held in Cork Institute of Technology;
- A recognised Culinary Arts or Professional Cookery qualification or equivalent;
- Minimum of 1 year's post qualification industry experience in a professional kitchen environment;
- Currently 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;
- Participants with significant industry experience but without previous formal qualifications may be considered through the Recognition of Prior Learning (RPL) process, visit www.cit.ie/rpl

#### Aims

The aim of this course 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.

#### **Course Content**

#### 12 Modules

#### Course Delivery

- Part-time basis one day per week;
- Students should expect to take 2 to 3 years to complete the Bachelor of Arts in Culinary Arts;
- Students are required to have completed Part 1 of any module prior to commencing Part 2.

#### Award

Bachelor of Arts in Culinary Arts (Level 7 on the National Framework of Qualifications)

#### Note:

Modules are offered subject to demand and mode of delivery is in consultation with the student group;

Advanced Pastry 1	Advanced Pastry 2	Advanced Culinary Skills 1
Advanced Culinary Skills 2	Culinary Leadership & Training	Cost Management
<b>Research Methods &amp; Styles</b>	Food Product Development Techniques	Synoptic Study
Service Business Environment	Gastronomy in the Modern World	Food Product Development Concepts

# Advanced Certificate in Professional Cookery Total Immersion Programme (Level 6)

COURSE CODE	CR_FALPR_6_Y1	Values Pailte Ireland National Tourism Development Authority This programme is supported by Fáilte Ireland
APPLICATION	Request an application form by E: geraldine.mccarthy@cit.ie	neianu
COURSE FEE	CIT Fee $\textcircled{C}2,750$ . In addition, approx. $\textcircled{C}600$ for necessary uniforms, knives, and	small equipment.
ENQUIRIES	Ann O'Connor • T: 021 433 5839 • E: ann.oconnor@cit.ie • E: hospitality@cit.ie	2

**Note:** Places are limited to 16 participants per year

#### **Entry Requirements**

Selection for this course is based on an interview to be held in the Cork Institute of Technology.

#### Aims

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:

- 1. Learning the Fundamentals 2. Exploring the Techniques
- 2 Pofining Culinary Sonvice
- 3. Refining Culinary Service

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

The course 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 course, participants work in industry in a professional kitchen and enhance their practical cookery skills.

#### **Course Content**

#### 12 Modules

Culinary Skills and StandardsEuropean, Mediterranean, & Global CuisineMenu Planning & Cost ControlPastryLarderRestaurant Service and CommunicationCommunicationsFood SafetyNutritionGastronomyCulinary ScienceTechnology

#### **Benefits of this course**

• Gain an internationally recognised qualification in 12 months;

Follo I I

- Avail of valuable college education and intensive industry experience in a structured manner;
- 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.

#### **Course Delivery**

The course is 12 months in duration structured as follows: 9 months of 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.

#### Award

Advanced Certificate in Professional Cookery (Level 6 on the National Framework of Qualifications)

# Advanced Certificate in Professional Cookery National Traineeship (Level 6)

COURSE CODE		E Fâilte Ireland National Tourin Development Authority This programme is supported by Fâilte Ireland
COURSE FEE	COURSE FEE CIT Fee €1,500. The course fee is fully supported by Failte Ireland for participants deemed to represent tourism premises.	
ENQUIRIES	Geraldine McCarthy • T: 021 433 5820 • E: geraldine.mccarthy@cit.ie	

#### **Entry Requirements**

- Participants must already be working in professional cookery, in an establishment where their employer is committed to facilitating their further training;
- This course 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 course;
- Selection for this course is based on an interview to be held in the Cork Institute of Technology.

#### **To Apply**

**Participant:** Complete the application form (available from the Department Secretary) and return to the Department of Tourism and Hospitality at CIT.

**Employer:** Establishments wishing to operate this course and nominating an employee must be registered with Fáilte Ireland. Please complete the Registration of Establishment form and return it to the Department of Tourism and Hospitality at the Cork Institute of Technology.

#### Aims

This course 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.

Benefits of this course for the participant:

- Gain an internationally recognised qualification in your chosen field of study;
- Enrich your job immediately as you acquire more skills and secure a better future within the industry.

#### **Course Content & Delivery**

#### 2 Years Day Release.

The Traineeship in Professional Cookery is a day release course with attendance at CIT and on-the-job training in a recognised catering business over a 2-year period.

#### **Employer Commitment is Vital**

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

**Note:** In September of each year, some full-time attendance is required on the course.

#### Award

Advanced Certificate in Professional Cookery (Level 6 on the National Framework of Qualifications)

Culinary Skills & Standards	Food Safety	Nutrition
Classical Cuisine	Pastry	Larder
Gastronomy	Culinary Science	Technology
Menu planning & Cost Control	<b>Restaurant Service &amp; Communications</b>	European, Mediterranean, & Global Cuisine

COURSE CODE	CR_FPASB_6
APPLICATION	Apply on line at http://www.cit.ie/course/CRFPASB6
COURSE FEE	€450 (includes exam fee). In addition, a €60 fee for the necessary work uniform is required.
ENQUIRIES	Catherine O'Mahony • T: 021 433 5842 • E: hospitality@cit.ie

#### **Module Code**

HOSP6043

#### Aims

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. This is a hands-on course where the student will gain practical experience in class.

#### **Course Content**

- Yeast Breads
- Bagels
- Soda Bread Extensions
- Bun Doughs
- Croissants
- Danish Pastries
- Puff Pastry
- Brioche

#### **Course Delivery**

This course commences in September and will operate one evening per week over 12 weeks, consisting of a 4 hour practical class each evening from 6pm to 10pm.

#### Apply

Apply online or by application form (available by email hospitality@cit.ie). Deadline for applications is 31st August. Places are limited on this course.

#### Award

CIT: Single Module Certification (5 ECTS credits at Level 6 on the National Framework of Qualifications)



#### **COURSE CODE**

#### CR\_FPTSG\_6

APPLICATION

Apply on line at http://www.cit.ie/course/CRFPTSG6

 ${\in}450$  (includes exam fee). In addition, a  ${\in}60$  fee for the necessary work uniform is required.

ENQUIRIES

**COURSE FEE** 

Catherine O'Mahony • T: 021 433 5842 • E: hospitality@cit.ie

#### Module Code

HOSP7001

#### Aims

This course provides skills and knowledge in the areas of modern pastries. This is a hands on course where the student will gain practical experience in class.

#### **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.

#### **Course Delivery**

This course commences in February 2015 and will operate one evening per week over 12 weeks, consisting of a 4 hour practical class each evening from 6pm to 10pm.

#### Apply

Apply online or by application form (available by email hospitality@cit.ie). Deadline for applications is 30th November. Places are limited on this course.

#### Award

CIT: Single Module Certification (5 ECTS credits at Level 7 on the National Framework of Qualifications)



# **Introduction to Management for Hospitality Services** (Level 6)

COURSE CODE	CR_OSDPR_6
APPLICATION	Apply on line at http://www.cit.ie/course/CROSDPR6
COURSE FEE	€650
ENQUIRIES	Geraldine McCarthy • T: 021 433 5820 • E: geraldine.mccarthy@cit.ie

#### **Module Code**

HOSP6013

Many organisations are in a position where their supervisors have excellent technical skills, but they often lack management skills which are essential to be an effective supervisor. There is increasing evidence that people management is positively related to superior organisational performance.

#### **Entry Requirements**

This course is suitable to learners who have previously undertaken courses in culinary, tourism or hospitality operations. Applicants with sufficient industry experience may be considered.

#### Aims

This course is designed specifically with the needs of the hospitality and tourism sector in mind. It is ideally suited to 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**

- Management Roles, Skills and Functions
- Business Ethics and Corporate Responsibility
- Law and Technology as drivers of change
- Planning and Decision Making
- Organisation Structure and Design
- Motivation and Leadership Theory and Practice
- Human Resources Management
- Marketing and Customer Care
- Production Planning, Styles and Control

#### **Course Delivery**

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

#### Apply

Apply online or by application form (available by email hospitality@cit.ie). Deadline for applications is 31st August. Places are limited on this course.

#### Award

CIT: Single Module Certification (5 ECTS credits at Level 6 on the National Framework of Qualifications)



€350

#### **COURSE CODE**

APPLICATION

#### CR\_OBARR\_6

Apply on line at http://www.cit.ie/course/CROBARR6

COURSE FEE

ENQUIRIES

Gail Cotter • T: 021 433 5835 • E: gail.cotter@cit.ie

#### Module Code

HOSP6012

#### Aims

This course aims to give participants an introduction to the knowledge, skills and aptitude necessary to become competent bartenders.

This is a hands-on course where the student will gain practical experience in class

#### **Course Content**

- Responsible Service of Alcohol
- Attributes of the Professional Bartender
- Customer Care
- Basic Bar Legislation
- Service of Beverages: both alcoholic and non-alcoholic
- Product Knowledge
- Cellar and Cold Room Equipment
- Cocktails and Wines and Wine Service
- Use of Specialised Equipment e.g. MICROS
- Hygiene and Safety Procedures
- Beer: Types, Service and Sales

#### **Course Delivery**

The course commences in September and is operated on one evening per week over 12 weeks and consists of a 3 hour practical class each evening.

#### Apply

Apply online or by application form (available by email hospitality@cit.ie). Deadline for applications is 31st August. Places are limited on this course.

#### Award

CIT: Single Module Certification (5 ECTS credits at Level 6 on the National Framework of Qualifications)



#### **COURSE CODE**

APPLICATION

#### CR\_FAMCM\_6

Apply on line at http://www.cit.ie/course/CRFAMCM6

COURSE FEE

**ENQUIRIES** 

Gail Cotter • T: 021 433 5835 • E: gail.cotter@cit.ie

#### Module Code

HOSP6044

#### Aims

An introduction to the world of cocktails, establishing a practical base in the methods of cocktail preparation and service. This is a hands-on course where the student will gain practical experience in class.

€400

#### **Course Content**

- Product knowledge
- History of Cocktails
- The structure of the Cocktail
- Methods of Cocktail making
- Use of equipment
- Production of Traditional and Contemporary Cocktails
- Use of garnishes
- Developing Cocktail and mixed drink menus
- Introduction to Molecular Mixology

#### **Course Delivery**

The course commences in September and is operated on one evening per week over 12 weeks and consists of a 3 hour practical class each evening.

#### Apply

Apply online or by application form (available by email hospitality@cit.ie). Deadline for applications is 31st August. Places are limited on this course.

#### Award

CIT: Single Module Certification (5 ECTS credits at Level 7 on the National Framework of Qualifications)



# School of Building, Civil & Environmental Engineering

Head of School Dr Joseph Harrington

**The School consists of the following Departments:** Civil, Structural & Environmental Engineering Construction Architecture



# Department of Civil, Structural & Environmental Engineering

Head of Department Des Walsh

#### **Department Secretary**

Mary Crowley Location: Room A223aL T: 021 433 5950 | E: mary.crowley@cit.ie

**Please note:** Lecturers are on annual holidays during the summer and you should contact the Department's Administration office, T: 021 433 5950.

Each course has its own unique url address from which you can apply online.

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

Following your application, please attend on the first night of class unless you hear to the contrary beforehand (e.g. if you do not meet the entry requirements).

- COURSES
- MEng in Structural Engineering (Level 9)
- MEng in Civil Engineering (Environment and Energy) (Level 9)
- Certificate in Environmental and Energy
- Engineering (Level 8)
- Certificate in Environmental and Energy
- Engineering (Level 7)
- BEng in Civil Engineering (Level 7)
- Higher Certificate in Civil Engineering (Level 6)
- The Institution of Structural Engineers
- Introduction to Eurocodes
- Practical Land Surveying
- Digital Land Surveying and GPS
- Building Regulatory Engineering

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

# MEng in Structural Engineering (Level 9)

COURSE CODE	CR_CSTRU_9
APPLICATION	Apply online at http://www.cit.ie/course/CRCSTRU9
ENQUIRIES	John Justin Murphy • T: 021 432 6741 • E: john.justinmurphy@cit.ie

# **MEng in Civil Engineering (Environment and Energy)** (Level 9)

COURSE CODE	CR_CENEN_9
APPLICATION	Apply online at http://www.cit.ie/course/CRCENEN9
COURSE FEE	Leonard O'Driscoll • T: 021 432 6563 • E: leonard.odriscoll@cit.ie
ENQUIRIES	EU Applicants: 2013/2014 was €5,000. For current course fee information please email fees@cit.ie

#### **Course Fee**

# EU Applicants: 2013/2014 was €5,000. For current course fee information please email fees@cit.ie

**Delivery Mode:** Part-time students must be available to attend classes during normal working hours on one or two days per week. By attending on two days per week in each semester the programme may be completed in two years.

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 this 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 (Level 8)

COURSE CODE	CR_EENEN_8
APPLICATION	Apply online at http://www.cit.ie/course/CREENEN8
COURSE FEE	EU Applicants: 2013/2014 was €2,225. Please email fees@cit.ie
ENQUIRIES	Denise Barnett • T: 021 432 6766 • E: denise.barnett@cit.ie

**Delivery Mode A:** One academic year, requiring attendance on two days per week (Tuesdays and Thursdays in 2013/14) in both semesters.

**Delivery Mode B:** The Department also offers a web based distance learning delivery of this programme available for parttime students; the course can be completed in one academic year. For up to date information in relation to the online delivery mode please refer to http://online.cit.ie/certificate-inenvironmental-a

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 discipline of 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.

## Certificate in Environmental and Energy Engineering (Level 7)

COURSE CODE	CR_EENEN_7
APPLICATION	Apply online at http://www.cit.ie/course/CREENEN7
COURSE FEE	EU Applicants: 2013/2014 was €1,477. Please email fees@cit.ie
ENQUIRIES	Denise Barnett • T: 021 432 6766 • E: denise.barnett@cit.ie

#### **Duration**

One academic year, requiring attendance on two days per week in each semester.

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**

A minimum of a Level 6 qualification in engineering or a Level 7 in construction/architecture/architectural technology related qualification. 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 Environmental & Energy Engineering.

#### Aim

The Certificate in Environmental & Energy Engineering programme aims to provide an opportunity for Level 6 engineering or Level 7 construction/architecture/architectural technology graduates to acquire skills and knowledge in the specific disciplines of environmental and energy engineering. The environmental stream concentrates primarily on the water industry; the energy stream includes modules on Wind Energy, Building Energy Rating and Energy and the Environment.

The programme aims to up-skill and re-skill construction industry personnel including those in the target cohort with Level 6 and Level 7 qualifications in the construction disciplines including architectural technology, architecture and construction. This programme offers two complementary streams; the environmental stream, and the energy stream.

The environmental stream, covers a wide range of relevant topics including water supply and treatment, wastewater treatment, hydrology and hydraulics, waste management, water quality and environmental impact assessment.

The energy stream incorporates building energy, a range of renewable energies including wind energy and environmental & energy policy. A mathematics module is also included as an elective option providing learners with the opportunity to ultimately potentially progress to the Level 7 BEng in Civil Engineering programme or the Level 8 Certificate in Environmental & Energy Engineering. Learner choice is provided in each semester through the range of module elective options available.

#### **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**

A mathematics module is included as an elective option providing learners with the opportunity to ultimately potentially progress to the Level 7 BEng in Civil Engineering programme or the Level 8 Certificate in Environmental & Energy Engineering. Learner choice is provided in each semester through the range of module elective options available.

COURSE CODE	CR_ CCIVE_7
APPLICATION	Apply online at http://www.cit.ie/course/CRCCIVE7
COURSE FEE	€210 per 5 credit module (inc. exam fee)
ENQUIRIES	Des Walsh • T: 021 432 6765 • E: des.walsh@cit.ie

**Please note** that a part-time/evening delivery of this programme occurs on a two year cycle basis and only occurs when sufficient demand exists; this course is NOT likely to be available as a part-time/evening delivery in 2014/15, however, part-time students who are in a position to attend by day may take modules on the programme at any time.

#### **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.

#### **Delivery**

Part-time by day attendance – shared delivery with full-time students, timetabled within the usual 9am - 6pm working day. When a part-time/evening delivery is viable - two evenings per week, 6pm - 10pm and one Saturday per month (average), 9am - 1pm or 2pm - 6pm.

#### **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 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.

#### **Course Content**

#### http://modules.cit.ie

CIT has developed this 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**

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 (Level 7 on the National Framework of Qualifications).

## Higher Certificate in Engineering in Civil Engineering (Level 6)

COURSE CODE	CR_CCIVE_6
APPLICATION	Apply online at http://www.cit.ie/course/CRCCIVE6
COURSE FEE	€250 per module (inc. exam fee)
ENQUIRIES	Des Walsh • T: 021 432 6765 • E: des.walsh@cit.ie

**Please note** that a part-time/evening delivery of this programme occurs on a two year cycle basis and only occurs when sufficient demand exists; this course is NOT likely to be available as a part-time/evening delivery in 2014/15, however, part-time students who are in a position to attend by day may take modules on the programme at any time.

#### **Delivery**

Part-time by day attendance – shared delivery with full-time students, timetabled within the usual 9am - 6pm working day. When a part-time/evening delivery is viable - two evenings per week, 6pm - 10pm and one Saturday per month (average), 9am - 1pm or 2pm - 6pm.

#### **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.

#### **Module Information**

#### http://modules.cit.ie

#### Stage 1

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

#### Stage 2

Module topic areas include Mathematics, Civil Engineering Materials, Structural Design, Structural Engineering, Land Surveying, Water Engineering, Civil & Structural Engineering Construction, Health & Safety 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 Control, Structural Design, Civil & Structural Engineering Construction, Health & Safety, and Professional Studies (Stage 2).

#### CCIVE\_6 Year 3

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

#### Award

Higher Certificate in Engineering in Civil Engineering (Level 6 on the National Framework of Qualifications).

#### **Further Studies at CIT**

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

# **The Institution of Structural Engineers**

COURSE CODE	CR_CISTE_9
APPLICATION	Apply online at http://www.cit.ie/course/CRCISTE9
COURSE FEE	CIT fee: €800 (Additional fee may be payable to The Institution of Structural Engineers)
ENQUIRIES	John Justin Murphy • T: 021 432 6741 • E: john.justinmurphy@cit.ie

#### 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 (Level 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 ECTS credits at Level 8 on the National Framework of Qualifications)

COURSE CODE	CR_CSURV_7
APPLICATION	Apply online at http://www.cit.ie/course/CRCSURV7
COURSE FEE	€500
ENQUIRIES	Jim O'Byrne • T: 021 432 6761 • E: jim.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 levelling. It is particularly suited to construction personnel who are involved with the organisation of surveying and setting out on construction sites. Please note that a delivery of this programme occurs when sufficient demand exists. Applications are held on file and contact is made with interested applicants when the minimum number of students required to deliver the course has been attained.

The course is typically offered over a number of days, including Saturdays. Exact dates and 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 Course Director is Mr Jim O'Byrne, contact details as above.

The successful completion of the course will lead to CIT single module certification in Practical Land Surveying (5 ECTS credits at Level 7 on the National Framework of Qualifications).

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

- Organise resources, record and process survey data using specialised equipment (e.g. 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 out 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 ECTS credits at Level 7 on the National Framework of Qualifications)

COURSE CODE	CR_CSURV_8
APPLICATION	Apply online at http://www.cit.ie/course/CRCSURV8
COURSE FEE	€500
ENQUIRIES	Jim O'Byrne • T: 021 432 6761 • E: jim.obyrne@cit.ie

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. Please note that a delivery of this programme occurs when sufficient demand exists. Applications are held on file and contact is made with interested applicants when the minimum number of students required to deliver the course has been attained.

The course is typically offered over a number of days, including Saturdays. Exact dates and 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 Course Director is Mr Jim O'Byrne, contact details as above.

The successful completion of the course will lead to CIT single module certification in Digital Land Surveying and GPS (5 ECTS credits at Level 8 on the National Framework of Qualifications).

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 ECTS credits at Level 8 on the National Framework of Qualifications)

#### Department website: www.cit.ie/cse

COURSE CODE	CR_CBREG_8
APPLICATION	Apply online at http://www.cit.ie/course/CRCBREG8
COURSE FEE	€495
ENQUIRIES	Andrew Macilwriath • T: 021 433 5950 • E: andrew.macwriath@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 newly updated course will cover the recently enacted Building Control Amendment Regulations 2014, together with its associated Code of Practice. SI 9 will significantly change the way buildings are inspected and certified, and will bring more work to construction professionals. Part of the inspection procedure will now include CE marking of materials in accordance with the new Construction Products Regulations which will came into effect in July 2013. A third area that has been added to this short course is the new Energy Performance of Buildings Regulations 2012.

This course also addresses all key aspects of the building regulations, provides a brief introduction to the Eurocodes, and should be invaluable to both new users of the building regulation guidance documents, and those that may enjoy a refresher course. All those involved in the construction industry will find this short course useful, particularly those involved in design, detailing, construction overseeing & inspection, and certification of building projects. 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 Course Director is Mr Andrew Macilwraith, contact details as above.

The successful completion of the course will lead to CIT single module certification in Building Regulatory Engineering (5 ECTS credits at Level 8 on the National Framework of Qualifications).

# **Entry Requirements**

Applicants should hold a minimum of an NFQ Level 7 qualification in Civil/Structural Engineering or Architecture or Architectural Technology or in a cognate discipline.

## Award

Single Module Certification (5 ECTS credits at Level 8 on the National Framework of Qualifications)

#### Department website: www.cit.ie/cse

# **Department of Construction**

Head of Department Dr Daniel Cahill

Department Secretary Mary Crowley Location: Room A223aL T: 021 433 5950 | E: mary.crowley@cit.ie

**Please note:** Lecturers are on annual holidays during the summer and you should contact the Department's Administration office, T: 021 433 5950.

Each course has its own unique url address from which you can apply online.

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

Following your application, please attend on the first night of class unless you hear to the contrary beforehand (e.g. if you do not meet the entry requirements).

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

COURSES

COURSE CODE	CR_CCONE_6
APPLICATION	Apply online at http://www.cit.ie/course/CRCCONE6
COURSE FEE	€200 per module (inc. exam fee)
ENQUIRIES	Mary Crowley • T: 021 432 6203 • E: mary.crowley@cit.ie

# Delivery

# 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 (Level 6 on the National Framework of Qualifications).

# **Further Studies at CIT**

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

**Note:** Delivery of this programme is subject to sufficient number of applicants.

COURSE CODE	CR_CCMNE_7
APPLICATION	Apply online at http://www.cit.ie/course/CRCCMNE7
COURSE FEE	€200 per module (inc. exam fee)
ENQUIRIES	Mary Crowley • T: 021 432 6203 • E: mary.crowley@cit.ie

# Delivery

#### 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
  - Construction Resource

#### Award

Bachelor of Science in Construction Management (Level 7 on the National Framework of Qualifications).

**Note:** Delivery of this programme is subject to sufficient number of applicants.

COURSE CODE	CR_CCECE_7
APPLICATION	Apply online at http://www.cit.ie/course/CRCCECE7
COURSE FEE	€200 per module (inc. exam fee)
ENQUIRIES	Mary Crowley • T: 021 432 6203 • E: mary.crowley@cit.ie

# Delivery

#### 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:

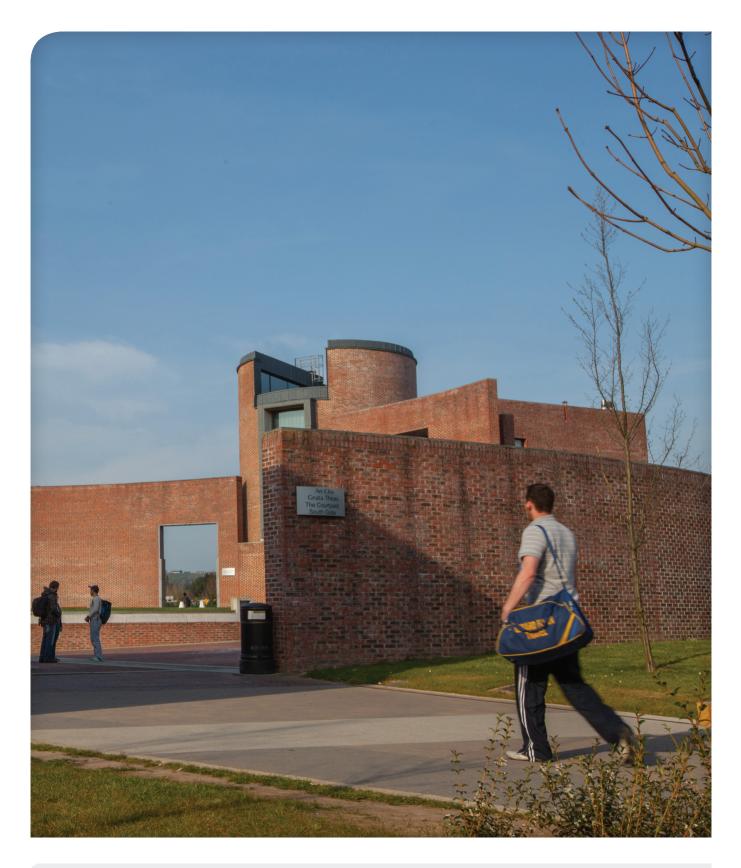
## Stage 3

- Construction Technology
- Measurement
- Cost Planning
- Development Economics
- Construction Procurement
- Construction Contracts
- Construction Finance
- Project

#### Award

Bachelor of Science in Quantity Surveying (Level 7 on the National Framework of Qualifications).

**Note:** Delivery of this programme is subject to sufficient number of applicants.



# School of Mechanical, Electrical & Process Engineering

Head of School Matt Cotterell

Department of Mechanical, Biomedical and Manufacturing Engineering 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

Dr Gerard Kelly

# **Department Secretary**

Deirdre Burke Location: Room A285L T: 021 432 6505 | E: deirdre.burke@cit.ie

**Please note:** Lecturers are on annual holidays during the summer and you should contact the Department's Administration office, T: 021 432 6505.

Each course has its own unique email address from which you can apply online.

Following your application, please attend on the first night of class unless you hear to the contrary beforehand (e.g. if you do not meet the entry requirements).

# • 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 65

# Master of Engineering in Mechanical Engineering (Level 9)

COURSE CODE	CR_EMENG_9
APPLICATION	Apply online at http://www.cit.ie/course/CREMENG9
COURSE FEE	Please email fees@cit.ie
ENQUIRIES	Dr Gerard Kelly • T: 021 433 5438 • E: ger.kelly@cit.ie

The course has been developed to address the need for both new graduates and existing engineers to acquired advanced competencies in computational methods, analytical methods, and design. Furthermore it aims to satisfy the requirement from Engineers Ireland from 2013 that a Master's degree in engineering represents the minimum educational standard for Chartered Engineer status eligibility.

The EGFSN/Forfás Report: Future Skills Requirements of the Manufacturing Sector to 2020 report published in 2013 has identified shortages of Mechanical Engineers at level 9 with specialist skills in design and development, control and automation, and management of innovation in the manufacturing, pharmaceutical and biomedical sectors. This programme will address these shortages.

# Specifically this programme of study is designed to progress your qualifications in the following ways:

- Deepen your technical knowledge, skills and competencies in the core field of Mechanical Engineering through modules in computational methods in solids and fluids, control engineering, and industrial heat and power.
- Deliver specialist knowledge in areas such as integrated design and process modelling and lean sigma.
- Enhance your knowledge and entrepreneurship through strategic business management and managing innovation.
- Enable you to carry out in depth research in an industrially focused sector of Mechanical Engineering through specialist modules in research skills, project realisation and thesis preparation.

## **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.

COURSE CODE	CR_EMECN_7
APPLICATION	Apply online at http://www.cit.ie/course/CREMECN7
COURSE FEE	€540 per 5 credit module (inc. exam fee)
ENQUIRIES	Tony Kelly • T: 021 433 5436 • E: tony.kelly@cit.ie

This is 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.

# **Course Content**

The following four modules are likely to be offered in the 2014/15 academic year:

# Semester 1 Modules (September to December 2014)

Mechanical Design & CAE - MECH7010

On successful completion of this module the learner will be able to

- 1. Manipulate electronic CAD data for use with Computer Aided Engineering software and systems in design.
- 2. Analyse digital prototypes using industry standard software.
- 3. Complete an individual design project demonstrating the application of systematic design principles.
- 4. Design for fatigue a range of mechanical components.
- Integrate major international standards (DIN, ISO, BS, Machinery Directive) and hazard analysis techniques into the mechanical and anthropomorphic design, operation and safety of components and machines.

# • Technological Maths 301 - MATH7020

On successful completion of this module the learner will be able to

- 1. Formulate and identify differential equations.
- 2. Solve first and second order differential equations using classical methods and interpret the solutions.

3. Solve first and second order differential equations using Laplace transforms and interpret the solutions.

# Semester 2

#### Modules (January to May 2015) • Mechatronics 3 MECH7014

On successful completion of this module the learner will be able to

- 1. Analyse, simplify and solve logic circuits.
- 2. Discuss the concepts of open-loop and closed loop systems and the resulting effects on system gain, stability and sensitivity to parameter variation and external disturbances on control systems.
- 3. Explain the modes of action of On/Off, Proportional, Integral and Derivative Control.
- 4. Perform dynamic analysis of resistive and over running load hydraulic circuits using graphical and analytical techniques to interpret flow, pressure and power demand.
- Design electrohydraulic systems to performance specifications using standard software for the design and analysis of electrohydraulic systems.
- 6. Select suitable feedback and final control elements to achieve stated performance requirements of hydraulic position control systems.

# • Technological Maths 302 STAT7003

On successful completion of this module the learner will be able to

- 1. Graphically display and numerically summarise data using methods of descriptive statistics.
- 2. Apply the rules of probability and use probability models for data analysis.
- 3. Compute and interpret point and interval estimates of population parameters.
- 4. Describe the structure of a statistical test of hypothesis.

COURSE CODE	CR_EMESC_6
APPLICATION	Apply online at http://www.cit.ie/course/CREMESC6
COURSE FEE	€1,200 for the academic year (incl. exam fee)
ENQUIRIES	Dan O'Brien • T: 021 433 5425 • E: dan.obrien@cit.ie

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).

## **Course Content**

#### Semester 1

 Mechanical Science (Statics, Stress and Strain) – MECH 6035

On successful completion of this module the learner will be able to

- 1. Determine resultants and apply conditions of static equilibrium to plane force systems.
- Identify and quantify all forces associated with a static framework using either the graphical method/method of joints/method of sections.
- 3. Construct shear force and bending moment diagrams for beams under various loading conditions.
- 4. Determine the stresses and strains in prismatic structures due to direct/shear and thermal loads.
- 5. Manipulate the Simple Bending and Simple Torsion equations to solve basic problems in beams and shafts having symmetrical cross sections.

#### • Technological Mathematics101 - MATH6012

On successful completion of this module the learner will be able to

- 1. Formulate and solve various equations including those involving the laws of indices and logs.
- 2. Reduce equations to linear form and interpret constants from graphs.
- 3. Use trigonometry to solve triangles, graph periodic functions and solve trigonometric equations.
- 4. Apply differentiation to various functions, rates of change, and optimisation.
- 5. Evaluate definite integrals, apply integration techniques to problems in Science & Engineering, and formulate differential equations

#### Semester 2

#### Mechanical Science (Dynamics and Fluids) - MECH 6036

On successful completion of this module the learner will be able to

- 1. Manipulate equations of linear and angular motion.
- 2. Apply momentum, work and energy to linear and angular systems.
- 3. Apply the laws of friction to objects on the flat and inclined planes.
- 4. Determine the forces associated with circular motion.
- 5. Use Bernoullis equation and the continuity equation to solve problems in fluid dynamic systems.

#### • Technological Mathematics201 - MATH6040 On successful completion of this module the learner will be able to

- 1. Differentiate parametrically, implicitly, partially and solve related rates of change problems.
- 2. Apply vector algebra methods to problems involving forces and moments of forces.
- Integrate by parts and by inverse trigonometric substitution; and apply integration methods to various applied problems.
- 4. Solve and analyse simultaneous equations using matrix algebra methods.

#### **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.

#### **Awarding Body**

Cork Institute of Technology

# Certificate in 3D CAD and Solid Modelling (Level 6)

COURSE CODE	CR_E3DDA_6
APPLICATION	Apply online at http://www.cit.ie/course/CRE3DDA6
COURSE FEE	€840 for the academic year (incl. exam fee)
ENQUIRIES	Denis Healy • T: 021 433 5436 • E: denis.healy@cit.ie

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.

#### **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**

This programme consists of two modules:

#### Semester 1

#### • Three Dimensional Design using AutoCAD - MECH6041

On successful completion of this module the learner will be able to

- 1. Use the World and User systems and define 3D co-ordinates in the construction of 3D drawings.
- 2. Use multiple viewports and views to construct 3D drawings
- 3. Create and edit polygon meshes for surface modeling.
- 4. Construct and render 3D models in the solid model state and generate 2D views from same
- 5. Plot multiple views from finished drawings

#### Semester 2

#### Introductory 3D Parametric Modelling - MECH6040

On successful completion of this module the learner will be able to

- 1. Use industry specific 3-D parametric modelling software
- 2. Develop 3-D models/assemblies
- 3. Produce 2-D working drawings from 3-D models
- 3. Illustrate the benefits of parametric modelling for design intent

# **Awarding Body**

Cork Institute of Technology

# Centre for Advanced Manufacturing and Management Centre

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

CAMMS Head	Daithí Fallon
CAMMS Manager	Mike McGrath
CAMMS Administrator	Michèle Kiely



Many CAMMS programmes are validated awards by CIT under delegated authority of Quality Qualifications Ireland (QQI) leading to European Credit Transfer and Accumulation System (ECTS) credits on the National Framework of Qualifications (NFQ). The Centre offers preparatory courses for students taking the American Society for Quality (ASQ) and Society of Manufacturing Engineers (SME) professional exams and is also serves as an offical Exam Site for these bodies.

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

Course themes include:

- Quality, Lean Sigma
- Project Management
- Automation & Control
- Manufacturing Engineering
- Sustainable Energy
- Biomedical Engineering

The Centre is a recognised training provider for Continuing Professional Development (CPD) to Engineers Ireland. Tailored courses can be delivered at your place of work or at CIT across a wide range of disciplines (e.g. Lean Sigma, BioMedical Engineering etc.) through consultation with the Centre's multi-disciplined staff.

"A client specific Materials Science course was delivered over six, two hour sessions on site for a major biomedical multinational company. Theoretical fundamentals were developed, explored and applied to practical, real world engineering examples.

Several hours of project mentoring between the CIT consultant and company engineers took place. Discussion and review of the application of the lecture series content to the specific inhouse project was the main aim of this mentoring period."

Dr Andrew Cashman, Department of Mechanical, Biomedical and Manufacturing Engineering



Centre for Advanced Manufacturing & Management Systems

- 1.0 American Society for Quality Certification Programmes (ASQ)
  - Certified Quality Technician (CQT)
  - Certified Quality Engineer (CQE)

# • 2.0 Lean & Six Sigma Programmes

- 2.1 Introduction to Lean & Six Sigma
- 2.2 Lean Sigma Practitioner, Yellow Belt
- 2.3 Lean Sigma Green Belt
- 2.4 Lean Sigma Black Belt

2.5 Continuous Improvement for Production Teams

# • 3.0 Project Management Programmes

- 3.1 Diploma in Project Management
- 3.2 Project Management Techniques
- 4.0 Automation and Control Systems Programmes
- 4.1 Certificate in Automation & Control Systems
  - 4.1.1 Mechatronics
  - 4.1.2 SCADA and Automation Systems
  - 4.1.3 Robotics
- 5.0 Society of Manufacturing Engineers Certification Programmes (SME)
  - 5.1 Certified Manufacturing Technologist (CMfgT)
  - 5.2 Certified Manufacturing Engineer (CMfgE)

- 6.0 Sustainable Energy Programmes
  - 6.1 Certificate in Introduction to Sustainable Energy
    - 6.1.1 Introduction to Sustainable Energy Systems
    - 6.1.2 Wind Energy
  - 6.2 Certificate in Sustainable Energy
    - 6.2.1 Energy and the Environment
    - 6.2.2 Solar and Geothermal Energy
    - 6.2.3 Ocean and Hydro Energy
- 7.0 Advanced Wind Energy
- 8.0 Biomedical Engineering Programmes
  - 8.1 Certificate in Biomedical Device Manufacture
  - 8.2 Anatomy of Biomechanics
- 9.0 Bachelor of Science Degrees
  - 9.1 Bachelor of Science (Honours) in Process Plant Technology
  - 9.2 Bachelor of Science (Honours) in Advanced Manufacturing Technology

# **1.0 American Society for Quality Certification Programmes**

COURSE CODE	CR_ECQTE_6 / CR_ECQEN_6
APPLICATION	Please email camms@cit.ie for further information.
COURSE FEE	Price will vary on specific company needs.
ENQUIRIES	T: 021 432 6264 • E: camms@cit.ie • W: www.camms.ie

#### The Certification programmes on offer are:

Certified Quality Technician (CQT) Certified Quality Engineer (CQE)

# Please note that these courses are ONLY available to groups of 10 or more.

They are preparatory courses for professional exams set externally by the ASQ (American Society for Quality) which has more than 100,000 members worldwide. The society is dedicated to the advancement of learning, quality improvement and knowledge exchange.

#### **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/

#### **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.

## **Awarding Body**

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

# 2.0 Lean & Six Sigma Programmes 2.1 Introduction to Lean & Six Sigma

COURSE CODE	CR_EILSS_X
APPLICATION	Apply online at http://www.cit.ie/course/CREILSSX
COURSE FEE	€295
ENQUIRIES	T: 021 432 6264 • E: camms@cit.ie • W: www.camms.ie

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 Sigma Practitioner, Yellow Belt Programme or the Lean Sigma Green Belt Certification Programme.

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

# **Course Content**

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

#### **Entry Requirements**

This programme requires no prior knowledge or experience of Lean or Lean 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.

# **Duration**

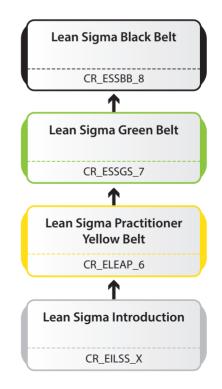
Two full-time days

# Certification

CAMMS, CIT. 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.

**Note:** Delivery of this programme is subject to sufficient number of applicants



# 2.2 Lean Sigma Practitioner, Yellow Belt

COURSE CODE	CR_ELEAP_6
APPLICATION	Apply online at http://www.cit.ie/course/CRELEAP6
COURSE FEE	€1,500* (includes course notes and exam fees)
ENQUIRIES	T: 021 432 6264 • E: camms@cit.ie • W: www.camms.ie

Candidates pursuing the Lean Sigma Practitioner, Yellow Belt 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.

#### **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

#### **Entry Requirements**

Candidates must have a total of 4 years of combined industrial experience, Lean experience and academic study.

#### **Course Commencement**

6th October 2014 26th January 2015

**Duration** Five days over three months.

#### **Awarding Body**

CIT: 5 ECTS credits at Level 6 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.

# 2.3 Lean Sigma Green Belt

Special Purpose Award –15 ECTs Credits at Level 7

COURSE CODE	CR_ESSGS_7
APPLICATION	Apply online at http://www.cit.ie/course/CRESSGS7
COURSE FEE	€2,055* (includes course notes and CIT exam fees)
ENQUIRIES	T: 021 432 6264 • E: camms@cit.ie • W: www.camms.ie

Lean 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 eliminate business process waste, 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-occur.

# **Course Content**

- Introduction to Lean and Lean Sigma, DMAIC Methodology
- Coordinating Project Teams
- Defining the Project and setting goals
- 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, Measuring Success Factors

# **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

Nine full days over three months. CIT Awarded Lean Sigma Green Belt (includes course notes and CIT exam fees). Optional two additional days for ASQ Exam preparation.

## **Awarding Body**

CIT: 15 ECTS credits at Level 7 on the National Framework of Qualifications.

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

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

# 2.4 Lean Sigma Black Belt

Special Purpose Award - 30 ECTS Credits at Level 8

COURSE CODE	CR_ESSBB_8
APPLICATION	Apply online at http://www.cit.ie/course/CRESSBB8
COURSE FEE	€8,500* (includes course notes and CIT exam fees)
ENQUIRIES	T: 021 432 6264 • E: camms@cit.ie • W: www.camms.ie

A certified Lean Sigma Black Belt is a professional who is an expert in Lean 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 Lean Sigma principles.

They have a thorough 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 on both the basic problem solving tools and advanced statistical principles including DOE (Design of Experiments) and SPC (Statistical Process Control).

# **Course Content**

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

# Mentoring

Throughout their training, and until the completion of their projects, Lean Sigma Black Belt students will receive support and mentoring from their tutor.

# **Entry Requirements**

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

## **Duration**

21 full days over six months.

## **Awarding Body**

CIT: 30 ECTS credits at Level 8 on the National Framework of Qualifications.

Candidates who complete the Lean Sigma Black Belt Programme are encouraged to sit the American Society for Quality (ASQ) Lean Sigma Black Belt exam(Examination fees payable directly to the ASQ). The ASQ Lean 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 Lean Sigma Body of Knowledge.

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

# **2.5 Continuous Improvement for Production Teams**

(Company based training)

COURSE CODE	CR_ECIPT_X
APPLICATION	Please email camms@cit.ie for further information.
COURSE FEE	Price will vary on specific company needs.
ENQUIRIES	T: 021 432 6264 • E: camms@cit.ie • W: www.camms.ie

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 how to 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

Two or four days delivery, four or six weeks mentoring.

#### Certification

CAMMS, CIT. Please contact CAMMS directly for more details.

# **3.0 Project Management Programmes 3.1 Diploma in Project Management**

COURSE CODE	CR_EPMAN_8
APPLICATION	Apply online at http://www.cit.ie/course/CREPMAN8
COURSE FEE	€3,850* Includes (CIT exam fees and PMI exam preparation)
ENQUIRIES	T: 021 432 6264 • E: camms@cit.ie • W: www.camms.ie

With the emergence of Project Management as a standalone profession, international accreditation that is accepted across industries is becoming increasingly important. The Diploma is suitable for individuals who may have practical experience in managing projects but need to supplement this with the necessary education. This course is aimed at those who seek to employ professional project management methodologies in the Initiation, Planning, Execution, Control and Close-Out of their Projects.

The Diploma covers all knowledge areas of the internationally recognised professional standard for the practice of Project Management, the PMBOK© (Project Management Body of Knowledge) which is administered by the PMI (Project Management Institute). CIT's Diploma includes a detailed 2-day preparatory 'boot-camp' course for those candidates who intend to sit for the PMI credentials, the PMP® or CAPM®.

The Diploma combines advanced Project Management techniques and methodologies with the real-life experiences of an expert panel of leading project management lecturers from a wide range of industrial sectors. The course consists of a combination of lectures, seminars, case studies, guest speakers, simulations and practical projects. Course delegates complete various assignments in the class, as project teams and individual assignments.

The course is designed for 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. A Special Purpose Award in Project Management at Level 8, will be issued to all successful candidates.

# Duration

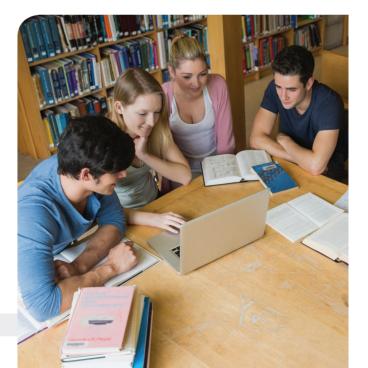
15 full time days over six months, including a two day PMI exam preparatory `boot-camp' course.

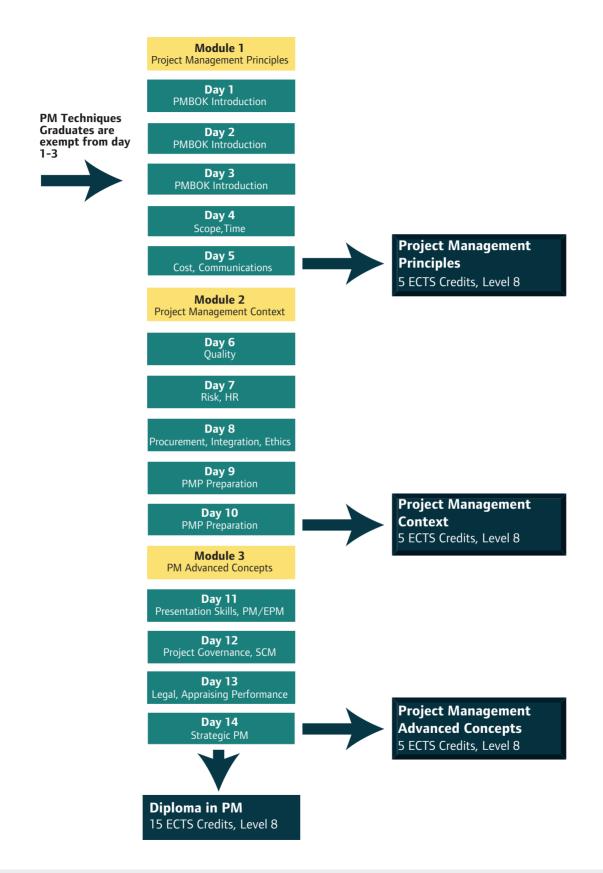
# Certification

CIT: 15 ECTS credits at Level 8 on the National Framework of Qualifications. Students who complete all three modules, will be entitled to a Diploma in Project Management (Special Purpose Award– 15 ECTS Credits at Level 8 NFQ) )

Project Management Institute (PMI): Project Management Professional (on successful completion of 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.





# 3.2 Project Management Techniques

COURSE CODE	CR_EMBXX_7
APPLICATION	Apply online at http://www.cit.ie/course/CREMBXX7
COURSE FEE	€850*
ENQUIRIES	T: 021 432 6264 • E: camms@cit.ie • W: www.camms.ie

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 which will be used to instruct participants in the key areas of project planning and control. Candidates should have basic computer skills.

The course focuses on two 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

#### **Duration**

One evening per week for 12 weeks, every Thursday, 6.30pm - 9.30pm.

## **Awarding Body**

CIT: 5 ECTS 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.

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

# 4.0 Automation and Control Systems Programme 4.1 Certificate in Automation & Control Systems

Special Purpose Award – 15 ECTS Credits at Level 7

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).

# COURSE CODE CR\_EACSY\_7

APPLICATION Apply online at http://www.cit.ie/course/CREACSY7 COURSE FEE Overall Fee: €2,800 (Only applicable when ALL three modules are taken in one academic year) ENQUIRIES T: 021 432 6264 • E: camms@cit.ie • W: www.camms.ie

These modules can also be taken and certified individually. Please see course code, fee, and online application for each module.

# 4.1.1 Mechatronics

COURSE CODE	CR_EACSY_7
APPLICATION	Apply online at http://www.cit.ie/course/CREACSY7
COURSE FEE	€1,800* (includes exam fee)
ENQUIRIES	T: 021 432 6264 • E: camms@cit.ie • W: www.camms.ie

# **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, 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 CIT. 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. The course also covers PLC programming to a high standard of achievement allowing students to programme training rigs and develop knowledge of industrial Mechatronic installations.

# **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.

# **Duration**

One evening per week for one academic year OR Nine day intensive course (over nine weeks)

# **Awarding Body**

CIT: 5 ECTS credits at Level 7 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.

# 4.1.2 SCADA & Automation Systems

COURSE CODE	CR_EACSY_7
APPLICATION	Apply online at http://www.cit.ie/course/CREACSY7
COURSE FEE	€850* (includes exam fee)
ENQUIRIES	T: 021 432 6264 • E: camms@cit.ie • W: www.camms.ie

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.

#### **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)

## **Entry Requirements**

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

#### Duration

One evening per week for 12 weeks in Semester 1.

## Awarding Body

CIT: 5 ECTS credits at Level 7 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.



# 4.1.3 Robotics

COURSE CODE	CR_EACSY_7
APPLICATION	Apply online at http://www.cit.ie/course/CREACSY7
COURSE FEE	€850* (includes exam fee)
ENQUIRIES	T: 021 432 6264 • E: camms@cit.ie • W: www.camms.ie

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 indepth knowledge of Robotic Sensors.

# **Course Content**

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

# **Duration**

One evening per week for 12 weeks in Semester 2

# **Awarding Body**

CIT: 5 ECTS credits at Level 7 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.



# **5.0 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)

# 5.1 Certified Manufacturing Technologist (CMfgT)

COURSE CODE	CR_ECMTE_6
APPLICATION	Please email camms@cit.ie for further information.
COURSE FEE	€1,000 includes course textbook. (Course Fee does not include exam fee, payable to the SME).
ENQUIRIES	T: 021 432 6264 • E: camms@cit.ie • W: www.camms.ie

# **Course Content**

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

# **Entry Requirements**

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

# **Awarding Body**

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

**Note:** CIT is not the examining body for this programme but acts as an offical exam site.

**Note:** Delivery of this programme is subject to sufficient numbers of applicants

# 5.2 Certified Manufacturing Engineer (CMfgE)

COURSE CODE	CR_ECMEN_6
APPLICATION	Apply online at http://www.cit.ie/course/CRECMEN6
COURSE FEE	€840 includes course textbook. (Course Fee does not include exam fee, payable to the SME).
ENQUIRIES	T: 021 432 6264 • E: camms@cit.ie • W: www.camms.ie

The course is based on a body of knowledge specified for certification by the Society of Manufacturing Engineers (SME) which is based in the USA. Its prime aim is to provide recognition for candidates who have several years manufacturing experience but no qualification to show for their work-based expertise.

## **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

# **Entry Requirements**

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

# Duration

One evening per week for the academic year

# **Awarding Body**

Society of Manufacturing Engineers (SME)

**Note:** CIT is not the examining body for this programme but acts as an offical exam site.

# 6.0 Sustainable Energy (Introduction)6.1 Certificate in Introduction to Sustainable Energy

Special Purpose Award – 10 ECTS Credits at Level 6

Students, who successfully complete the modules Introduction to Sustainable Energy Systems; and Wind Energy, will be entitled to a Certificate in Introduction to Sustainable Energy (Special Purpose Award). Complete programme:

# COURSE CODE CR\_ESUSE\_6

APPLICATION Apply online at http://www.cit.ie/course/CR\_ESUSE\_6

COURSE FEE €1,500. (Only applicable when BOTH modules are taken in one academic year)

ENQUIRIES T: 021 432 6264 • E: camms@cit.ie • W: www.camms.ie

# 6.1.1 Introduction to Sustainable Energy Systems

# COURSE CODE CR\_ESUSE\_6

APPLICATION Apply online at http://www.cit.ie/course/CRESUSE6

COURSE FEE €850\* (includes course notes and exam fee)

# ENOUIRIES T: 021 432 6264 • E: camms@cit.ie • W: www.camms.ie

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 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 content of the course will cover installation, economics, planning, and operational issues associated with various energy sources. Students will evaluate the range of energy options for a domestic building and then undertake an energy design."

# **Module 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.

#### **Entry Requirements**

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

#### **Duration**

One evening per week for 12 weeks.

# **Awarding Body**

CIT: 5 ECTS credits at Level 6 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.

# 6.1.2 Wind Energy

COURSE CODE	CR_ESUSE_6
APPLICATION	Apply online at http://www.cit.ie/course/CRESUSE6
COURSE FEE	€850* (includes course notes)
ENQUIRIES	T: 021 432 6264 • E: camms@cit.ie • W: www.camms.ie

It is envisaged that renewable energy technologies will make a major contribution to electricity production, transport and the industrial 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, 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 CIT for both theoretical and laboratory based lessons.

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

# **Module 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

#### **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.

#### Duration

One evening per week for 12 weeks

#### **Awarding Body**

CIT: 5 ECTS credits at Level 6 on the National Framework of Qualifications.

# **6.2 Certificate in Sustainable Energy** Special Purpose Award – 15 ECTS Credits at Level 7

Students who successfully complete the modules: 1. Energy and the Environment; 2. Solar and Geothermal Energy; and 3. Ocean and Hydro Energy, will be entitled to a Certificate in Sustainable Energy (Special Purpose Award - 15 ECTS credits Level 7). Complete programme:

# COURSE CODE CR\_ESUSE\_7

APPLICATION Apply online at http://www.cit.ie/course/CRESUSE7 COURSE FEE Overall Fee: €2,100. (Only applicable when ALL three modules are taken in one academic year) ENQUIRIES T: 021 432 6264 • E: camms@cit.ie • W: www.camms.ie

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

# 6.2.1 Energy and the Environment

COURSE CODE	CR_ESUSE_7
APPLICATION	Apply online at http://www.cit.ie/course/CRESUSE7
COURSE FEE	€850* (includes course notes)
ENQUIRIES	T: 021 432 6264 • E: camms@cit.ie • W: www.camms.ie

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 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 Introduction to Sustainable Energy (Special Purpose Award – Level 6).

# Duration

One evening per week for 12 weeks.

# **Awarding Body**

CIT: 5 ECTS credits at Level 7 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.

# 6.2.2 Solar and Geothermal Energy

COURSE CODE	CR_ESUSE_7
APPLICATION	Apply online at http://www.cit.ie/course/CRESUSE7
COURSE FEE	€850* (includes course notes)
ENQUIRIES	T: 021 432 6264 • E: camms@cit.ie • W: www.camms.ie

This module includes a study of the energy processes involved in the 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 Operation 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 Introduction to Sustainable Energy (Special Purpose Award – Level 6).

#### Duration

One evening per week for 12 weeks

#### **Awarding Body**

CIT: 5 ECTS credits at Level 7 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.

# 6.2.3 Ocean and Hydro Energy

COURSE CODE	CR_ESUSE_7
APPLICATION	Apply online at http://www.cit.ie/course/CRESUSE7
COURSE FEE	€850* (includes course notes)
ENQUIRIES	T: 021 432 6264 • E: camms@cit.ie • W: www.camms.ie

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, and 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 Introduction to Sustainable Energy (Special Purpose Award – Level 6).

#### Duration

One evening per week for 12 weeks.

#### Awarding Body

CIT: 5 ECTS credits at Level 7 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.

# 7.0 Advanced Wind Energy

COURSE CODE	CR_EAWND_7
APPLICATION	Please email camms@cit.ie for an application form.
COURSE FEE	€1,100* (includes course notes)
ENQUIRIES	T: 021 432 6264 • E: camms@cit.ie • W: www.camms.ie

Advanced Wind Energy follows on from the previous module "Introduction to Wind Energy". The course builds on the principles previously outlined and also introduces the student to wind energy analysis software packages.

As part of the course, the student will examine the methods used for wind turbine site selection. The fundamentals of wind farm design, including wind turbine layout and electrical design, energy production, turbine noise levels, turbine wake losses, and turbine suitability will be examined. Wind data collected on a specific site will be used for desktop analysis using industry standard software and this will help determine the suitability of a particular location for a wind farm. The course will be a mixture of laboratory based analysis and classroom theory.

#### **Module Content**

- Wind Atlas Analysis and Application and wind energy software applications
- Wind Data interpretation and wind speed probability
- 3D Terrain maps
- Optimal Site and Turbine selection
- Wind Flow Models using computational fluid dynamics software
- Turbine Wake, Noise, Shadow Flicker

#### **Entry Requirements**

Completion of the "Introduction to "Wind Energy" module and a background in engineering, mathematics, physics or electrical trade is required. As this course is analytically based, a high standard of both mathematics and IT is required.

#### Duration

Three hours per week for 12 weeks OR five full days in Semester 2.

#### **Awarding Body**

CIT: 5 ECTS credits at Level 7 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.

# 8.0 Biomedical Engineering Programmes8.1 Certificate in Biomedical Device Manufacture

Special Purpose Award – 10 ECTS Credits at Level 7

COURSE CODE	CR_EBMDM_7
APPLICATION	Apply online at http://www.cit.ie/course/CREBMDM7
COURSE FEE	€1,300* (includes course notes and exam fees)
ENQUIRIES	T: 021 432 6264 • E: camms@cit.ie • W: www.camms.ie

This programme has been developed for anyone seeking employment in or transferring into the Biomedical Devices Sector as well as anyone 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; catheter 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. Classification 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.

# **Entry Requirements**

This course is open to anyone with a minimum of two years industrial experience

# Duration

Six full days

# **Awarding Body**

CIT: Certificate in Introduction to Biomedical Devices, Special Purpose Award 10 ECTS credits at Level 7 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.

# **8.2 Anatomy of Biomechanics**

COURSE CODE	CR_EBMEC_8
APPLICATION	Apply online at http://www.cit.ie/course/CREBMEC8
COURSE FEE	€1,300* (includes course notes and exam fees)
ENQUIRIES	T: 021 432 6264 • E: camms@cit.ie • W: www.camms.ie

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 will be 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

CAMMS, CIT. 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.

\* Discounts available for groups of three or more.

# 9.0 Bachelor of Science Degrees 9.1 Bachelor of Science (Honours) in Process Plant Technology

COURSE CODE	CR_EPPTN_8
APPLICATION	Apply online at http://www.cit.ie/course/CREPPTN8
COURSE FEE	See module listing
ENQUIRIES	T: 021 432 6264 • E: camms@cit.ie • W: www.camms.ie

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, 7pm - 10pm, and one Saturday per month, 10am - 5pm. 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	€1350
Quality Engineering	€495
Engineering Project Management	€495
Process Automation & Control	€495
Mathematics and Statistics	€495
Process Plant Services	€495
Process Plant Equipment	€495
Maintenance & Reliability	€495
Facilities	€495

#### **Electives (Choose One)**

Automation Systems	€495
Advanced Materials and Processes	€495

# 9.2 Bachelor of Science (Honours) in Advanced Manufacturing Technology

COURSE CODE	CR_EAMTN_8
APPLICATION	Apply online at http://www.cit.ie/course/CREAMTN8
COURSE FEE	See module listing
ENQUIRIES	T: 021 432 6264 • E: camms@cit.ie • W: www.camms.ie

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, 7pm - 10pm, and one Saturday per month, 10am - 5pm. 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.

**Annual Fee per Module** 

#### Modules

Mandatory	
Project	€1350
Quality Engineering	€495
Engineering Project Management	€495
Automation Systems	€495
Mathematics and Statistics	€495
Product Development	€495
Manufacturing Systems	€495
Maintenance & Reliability	€495
Facilities	€495
Electives (Choose One)	

Process Automation & Control	€495
Advanced Materials and Processes	€495

# **Centre of Craft Studies**

Head of Department Michael Hourihan 021 433 5912 | E: michael.hourihan@cit.ie

#### **Department Secretary**

Geraldine Mahon Location: Room B160L T: 021 433 5910 | E: geraldine.mahon@cit.ie

**Please note:** Lecturers are on annual holidays during the summer and you should contact the Department's Administration office, T: 021 433 5910.

#### 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

#### **Automotive Courses:**

- Certificate in Automotive Technology (Level 6)
- Certificate in Automotive Powertrain Technology (Level 7)
- Certificate in Automotive Systems Technology (Level 7)
- Certificate in Automotive Diagnostics (Level 7)

# COURSES

# Welding Course (Basic)

COURSE CODE	CR_BASIC_4_1
APPLICATION	Please email geraldine.mahon@cit.ie for an application form
COURSE FEE	€400
ENQUIRIES	Finbarr O'Keeffe • T: 021 433 5940 • E: finbarr.okeeffe@cit.ie

This course provides a practical introduction to three common welding processes which are used in industry.

#### Delivery

6 x 3.5 hour evenings, practical training classes

#### **Course Content**

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.



COURSE CODE	CR_MAGS_6-1
APPLICATION	Please email geraldine.mahon@cit.ie for an application form
COURSE FEE	€400 (excl. test fee €65 per specimen sent for NDT)
ENQUIRIES	Finbarr O'Keeffe • T: 021 433 5940 • E: finbarr.okeeffe@cit.ie

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.

#### Delivery

7 x 3.5 hour evenings, practical training classes and one night for testing.

#### **Entry Requirements**

A good working knowledge of the appropriate welding process is necessary.

#### **Course Content**

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 listed tests to the required standard.

COURSE CODE	CR_TAGS_6-1
APPLICATION	Please email geraldine.mahon@cit.ie for an application form
COURSE FEE	€400 (excl. test fee €65 per specimen sent for NDT)
ENQUIRIES	Finbarr O'Keeffe • T: 021 433 5940 • E: finbarr.okeeffe@cit.ie

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 EN287/ ASME IX, standard.

#### Delivery

6 x 3.5 hour evenings, practical training classes and one night for testing.

#### **Entry Requirements**

A good working knowledge of the TAGS welding process is necessary.

#### **Course Content**

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 listed tests to the required standard.

# Coded Welding Course Arc Welding (Level 6)

COURSE CODE	CR_ARC_6-1
APPLICATION	Please email geraldine.mahon@cit.ie for an application form
COURSE FEE	€400 (excl. test fee €65 per specimen sent for NDT)
ENQUIRIES	Finbarr O'Keeffe • T: 021 433 5940 • E: finbarr.okeeffe@cit.ie

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.

#### Delivery

7 x 3.5 hour evenings, practical training classes and one night for testing.

#### **Entry Requirements**

A good working knowledge of the appropriate welding process is necessary.

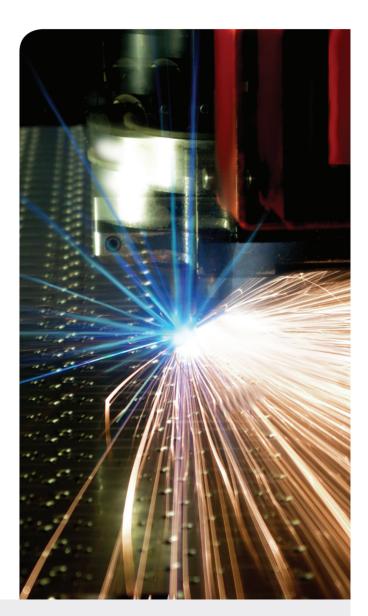
#### **Course Content**

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 listed tests to the required standard.



# Coded Welding Course European Standard EN287 (Level 6)

COURSE CODE	CR_WELD_6-1
APPLICATION	Please email geraldine.mahon@cit.ie for an application form
COURSE FEE	€1,250 (excl. test fees)
ENQUIRIES	Michael Cotter • T: 021 433 5789 • E: michael.cotter@cit.ie

This course provides a coded welding qualification to EN287/ ASMEIX, for tradespersons/welders and other suitable candidates working in general steel fabrication plate/pipe and construction industry.

#### Duration

The course is presented over one full academic year September 2014 to June 2015.

27 Monday evenings, practical training; and 8 Tuesday evenings, theoretical classes.

#### **Entry Requirements**

A good working knowledge of the appropriate welding process is necessary.

#### **Course Content**

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  $\in$ 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 listed tests to the required standard.

# **165 Certificate in Welding & Fabrication Practice** (Level 6)

COURSE CODE	CR_EW165_6
APPLICATION	Please email geraldine.mahon@cit.ie for an application form
COURSE FEE	€1,250 (excl. exam fees)
ENQUIRIES	David Lynch • T: 021 433 5789 • E: david.lynch@cit.ie

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.

#### Delivery

Two evenings per week (to be arranged). The scheme is presented in unit form at Levels 1, 2 and 3.

#### **Course Content**

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.

## Certificate in Automotive Technology (Level 6)

COURSE CODE	CR_EAUTE_6
APPLICATION	Please email geraldine.mahon@cit.ie for an application form
COURSE FEE	€580 (incl. exam fees)
ENQUIRIES	Michael O'Riordan • T: 021 432 6711 • E: michael.oriordan@cit.ie

#### Delivery

One night per week for one academic year.

#### **Entry Requirements**

Leaving Certificate or relevant craft qualification.

#### **Course Content**

The course will consist of TWO modules:

- Mechanical Automotive Technology AUTO6028
- Electrical Automotive Technology AUTO6029

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 classroombased course.

#### Mechanical Automotive Technology

On successful completion of this module the learner will be able to

- List primary engine components and associated subsystems.
- Explain the operation of a spark and compression ignition internal combustion engine.
- Define the internal components of a transmission and final drive arrangements and explain their operating principles.
- Describe the layout and operating principles of the steering and suspension systems as fitted to light vehicles.
- Explain the fundamental operating principles of a vehicle's hydraulic braking system.

#### **Electrical Automotive Technology**

On successful completion of this module the learner will be able to

- Explain the fundamental operating principles of electricity.
- Calculate automotive electrical circuit operations using ohms law.
- Discuss the operation of automotive electrical consumers and loads.
- Evaluate the operation of automotive electrical circuits and systems using automotive electrical test equipment.

#### Award

Special Purpose Award (10 ECTS credits at Level 6 on the National Framework of Qualifications).

#### **Awarding Body**

Cork Institute of Technology

## Certificate in Automotive Powertrain Technology (Level 6)

COURSE CODE	CR_EAUPT_7
APPLICATION	Please email geraldine.mahon@cit.ie for an application form
COURSE FEE	€580 (incl. exam fees)
ENQUIRIES	Gary O'Neill • T: 021 432 6711 • E: gary.oneill@cit.ie

#### Delivery

One night per week for one academic year.

#### **Entry Requirements**

Automotive Technology 1 or equivalent.

#### **Course Content**

The course will consist of TWO modules:

- Automotive Powertrain Electronics AUTO7015
- Automotive Mechanical and Electrical Systems AUTO7014

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.

#### **1. Automotive Powertrain Electronics**

On successful completion of this module the learner will be able to

- Interpret technical information linked to automotive electrical schematics and diagrams.
- Describe low voltage automotive electrical circuits and vehicle sub-systems.
- Describe automotive heavy duty rotating electrical components and systems.
- Describe automotive electronic fuel injection systems and after treatment emission control devices.
- Explain how to repair automotive mechanical, hydraulic, electrical and electronic unit assemblies and systems.
- Make repair decisions based on economic factors.

#### 2. Automotive Mechanical and Electrical Systems

On successful completion of this module the learner will be able to

- Explain and apply occupational health and safety in automotive settings.
- Solve problems using electrical quantities of voltage, electrical current, electrical resistance and power.
- Execute practical use of core automotive diagnostic test equipment.
- Diagnose electrical and electronic vehicle sub-system concerns, using vehicular network system live data transmission and diagnostic trouble codes.
- Explain the role of electricity in modern motor vehicles as it relates to engine, chassis, safety and accessory systems.

#### Award

Special Purpose Award (10 ECTS credits at Level 7 on the National Framework of Qualifications).

#### **Awarding Body**

Cork Institute of Technology

## Certificate in Automotive Systems Technology (Level 6)

COURSE CODE	CR_EAUST_7
APPLICATION	Please email geraldine.mahon@cit.ie for an application form
COURSE FEE	€580 (incl. exam fees)
ENQUIRIES	Noel O'Halloran • T: 021 432 6711 • E: noel.ohalloran@cit.ie

#### Delivery

One night per week for one academic year.

#### **Entry Requirements**

Automotive Technology 2 or equivalent.

#### **Course Content**

The course will consist of TWO modules:

- Automotive Chassis and Body Electronics Systems AUTO7017
- Automotive Management Electronics AUTO7016

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.

#### 1. Automotive Chassis and Body Electronic Systems

On successful completion of this module the learner will be able to

- Assess the operation of petrol and diesel engine management systems.
- Analyse the operation of vehicle comfort control systems.
- Appraise the operation of vehicle passive and active safety systems.
- Illustrate the operation of vehicle network control systems.
- Assess the operation of vehicle lighting control systems.

- 2. Automotive Management Electronics
- On successful completion of this module the learner will be able to
- Assess the complete operation of starting systems.
- Illustrate the operation of an intelligent engine start system.

#### Award

Special Purpose Award (10 ECTS credits at Level 7 on the National Framework of Qualifications).

#### Awarding Body

Cork Institute of Technology

# Certificate in Automotive Diagnostics (Level 7)

COURSE CODE	ТВС
APPLICATION	Please email geraldine.mahon@cit.ie for an application form
COURSE FEE	€480 (incl. exam fees)
ENQUIRIES	Noel O'Halloran • T: 021 432 6711 • E: noel.ohalloran@cit.ie

#### Delivery

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

Single 5 ECTS credit Module Certification at Level 7 on the National Framework of Qualifications



# **Department of Process, Energy & Transport Engineering**

#### Head of Department

Dr Michael J. O'Mahony T: 021 433 5943 E: michael.jomahony@cit.ie

#### **Department Secretary**

Elaine Burke Location: Room A283L T: 021 433 5150 | E: elaine.burke@cit.ie

**Please note:** Lecturers are on annual holidays during the summer and you should contact the Department's Administration office T: 021 433 5150. Each course has its own unique url address from which you can apply online.

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

Following your application, please attend on the first night of class unless you hear to the contrary beforehand (e.g. if you do not meet the entry requirements).

#### MEng in Chemical & Biopharmaceutical Engineering

- Higher Certificate in Science in Good Manufacturing Practice & Technology
- Bachelor of Science in Good Manufacturing Practice & Technology
- Certificate in Biopharmaceutical Processing
- Motor Dealer Organisation
- Introduction to Piping Design

# Master of Engineering in Chemical & Biopharmaceutical Engineering (Level 9)

COURSE CODE	CR_ECHBI_9
APPLICATION	Apply online at http://www.cit.ie/course/CRECHBI9
COURSE FEE	Please email fees@cit.ie
ENQUIRIES	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 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 BEng (Honours) in Chemicaland 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 on the National Framework of Qualifications)

#### **Closing Date for application**

8 September 2014

#### **Commencement Date**

# Higher Certificate in Science in Good Manufacturing Practice & Technology (Level 6)

COURSE CODE	CR_SGMPE_6_Y1
APPLICATION	Apply online at http://www.cit.ie/course/CRSGMPE6Y1
COURSE FEE	€450 per module
ENQUIRIES	Elaine Burke • T: 021 433 5150 • E: elaine.burke@cit.ie

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 Content**

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 (www.cit.ie/rpl).

#### **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).

**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 (Level 7)

COURSE CODE	CR_SGMPE_7_Y1
APPLICATION	Apply online at http://www.cit.ie/course/CRSGMPE7Y1
COURSE FEE	€500 per module
ENQUIRIES	Elaine Burke • T: 021 433 5150 • E: elaine.burke@cit.ie

#### Delivery

One module per night from 6.30pm - 9.30pm

#### **Entry Requirements**

Candidates are required to have a Higher Certificate or higher in an Engineering or Science Discipline. It is required that all qualifying candidates have completed modules in basic chemistry and biology and have a knowledge of GMP, to undertake the complete programme.

#### **Course Content**

#### To commence September 2014

One module per night from 6.30pm - 9.30pm

- Validation Science (Mandatory)
- Chemical Applications (Mandatory)
- Biopharmaceutical Upstream (Elective)

#### To commence February 2015

One module per night from 6.30pm - 9.30pm

- Technology Transfer (Mandatory)
- Maintenance, Utilities and Facilities (Mandatory)
- Biopharmaceutical Downstream (Elective)
- Energy 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
- Technology Transfer
- Maintenance, Utilities and Facilities
- Biopharmaceutical Upstream
- People Management
- Process Improvement
- Biopharmaceutical Downstream
- Energy Management
- Project
- Medical Devices
- Formulation
- Food Processing Technology

**Note:** The running of individual modules will be dependent on a sufficient number of students enrolling on the course.

#### Advanced Entry to the BSc in Good Manufacturing **Practice & Technology**

The entry requirements for the BSc in Good Manufacturing Practice & Technology at CIT are the Higher Certificate in Science in Good Manufacturing Practice & Technology or equivalent.

A combination of the following three requirements will be accepted by the Institute as the equivalent of the Higher Certificate in Science in Good Manufacturing Practice & Technology for advanced entry to the BSc in Good Manufacturing Practice & Technology

- 1. Leaving Certificate, 5 Ds at lower level, including English or Irish and Mathematics.
- 2. 5 years or more relevant work experience in the pharmaceutical, biopharmaceutical, medical device or food industry. To prove the relevance of their application the candidate will need to show that they are familiar with the topics covered in the following modules of the Higher Certificate:
  - a. MANU6011 Calibration Science
  - b. STAT6008 Lean Manufacturing
  - c. MANU6013 Manufacturing Technology
  - d. BIOM6004 Contamination Control
  - e. BIOM6003 Cleanroom Management

- Details of these modules can be found on the CIT website: 3 http://courses.cit.je/index.cfm/page/course/courseId/329
- 4. The following modules of the Higher Cert in Science in Good Manufacturing Practice and Technology or their equivalent:
  - MTMT6021GMP1/QA
  - INFO6017 Information Technology
  - CHEI6001 Fundamentals of Chemistry
  - MATH6009 Maths for Manufacturing
  - BIOL6014 Mammalian Cell Biology
  - CHEO6002 Organic & Inorganic Chemistry

These modules will be offered at night this academic year (Sept 2014 to June 2015) in Cork Institute of Technology.

Good manufacturing (GMP)

A ground manufacturing practice (CAMP) is a pr helps to ensure a quality product. Many countries have legand medical device companies must follow GMP pr own GMP guidelines that correspond with their legislithese guidelines remain more or less similar to the ultimate health of the patient as well as producing good quality mediactive pharmaceutical products. In the U.S. a drug may be a passed all of the specifications tests but is found to be many which violates current good manufacturing guideline. The GMP is a mandatory aspect in pharmaceutical manufactur

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COURSE CODE	CR_EBIPR_7_Y1
APPLICATION	Apply online at http://www.cit.ie/course/CREBIPR7
COURSE FEE	€1,700
ENQUIRIES	Elaine Burke • T: 021 433 5150 • E: elaine.burke@cit.ie

#### Delivery

One module per semester delivered between 6.30pm and 9.30pm, one evening per week. The programme is delivered in one year.

#### **Entry Requirements**

Candidates are required to have a Higher Certificate Level 6 in Engineering or Science.

#### **Course Content**

#### To commence September 2014

• Biopharmaceutical Upstream (Elective)

#### To commence February 2015

Biopharmaceutical Downstream Processing (Elective)

A Special Purpose Award designed to meet the education and training needs of scientists and engineers, to equip them with the knowledge and skills to operate effectively in the biopharmaceutical industry. Practicals are delivered both at CIT and at the National Institute for Bioprocessing Research & Training (NIBRT) in Dublin.

### 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.

**Note:** The running of individual modules will be dependent on a sufficient number of students enrolling on the course

#### Closing Date for receipt of applications 8 September 2014

#### **Commencement Date**

COURSE CODE	CR_EMDOR_6
APPLICATION	Apply online at http://www.cit.ie/course/CREMDOR6
COURSE FEE	€520 (inc. exam fee)
ENQUIRIES	Pat O'Shaughnessy • T: 021 433 5944 • E: pat.oshaughnessy@cit.ie

#### Delivery

One night per week for one academic year.

#### **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.

#### 1. Motor Dealer Organisation AUTO7001

On successful completion of this module the learner will be able to

- Discuss the administration and organisation of the various departments in a motor dealership.
- Describe workshop loading, workshop progress and workshop productivity.
- Detail accident procedures in relation to crash repairs and prepare estimates for these according to approved repairer scheme regulations.
- Explain and identify good and poor workshop and stores layout and discuss the.
- Explain the main duties of the aftersales staff in the

automotive business, describe different types of bonus schemes.

• Discuss the purpose of Block Exemption Regulations in the motor industry. Have a good knowledge of health and safety act in relation to the motor trade.

#### 2. Franchise Dealer Operations MECH 7020

On successful completion of this module the learner will be able to

• Discuss the rules associated with data protection and their relevance to departmental activities within the Motor Trade.

- Explain the obligations placed on the operators of vehicle franchised networks by Block Exemption regulations.
- Describe the obligations placed on the franchise dealer management by current legislation and outline the responsibilities for the control and handling of hazardous material, waste management.
- Comprehend how the various departments in the Motor Industry can be operated efficiently.

• Discuss the various types of insurance cover required within the Motor Industry.

#### Award

Special Purpose Award (10 ECTS credits at Level 6 on the National Framework of Qualifications).

#### **Awarding Body**

Cork Institute of Technology

#### **Closing Date for receipt of applications**

8 September 2014

#### **Commencement Date**

COURSE CODE	ТВС
APPLICATION	Please email elaine.burke@cit.ie for an application form
COURSE FEE	€1,250 (inc. exam fee)
ENQUIRIES	Fergus Delaney • T: 021 432 6746 • E: fergus.delaney@cit.ie

#### Delivery

One module per semester delivered between 6.30pm and 9.30pm, one evening per week. The programme is delivered in one year.

#### **Entry Requirements**

Leaving Certificate or relevant craft qualification.

#### **Course Content**

#### To commence September 2014

Piping Design Principles

#### To commence February 2015

3D Piping Design

#### **Course Content**

The course will consist of TWO modules covering the fundamentals of plant layout design and the use of related computer aided-design software. The principal role of piping design is to integrate design information from various sources into a portfolio of drawings and specifications that are construction-ready. Piping design is a key element to developments in general engineering services, pharmaceutical, biotechnology and food industries.

#### Award

Special Purpose Award (10 ECTS credits at Level 6 on the National Framework of Qualifications). **Awarding Body** Cork Institute of Technology

**Closing Date for receipt of applications** 8 September 2014

Commencement Date



# 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 Guillaume Huyet

#### **Department Secretaries**

Mary Phelan Location: Office No: C229A T: 021 433 5870 E: mary.phelan@cit.ie

Each course has its own unique url address from which you can apply online.

Following your application, please attend on the first night of class unless you hear to the contrary beforehand (e.g. if you do not meet the entry requirements).

**Please note:** Lecturers are on annual holidays during the summer and you should contact the Department's Administration office T: 021 433 5870

- COURSES
- Higher Certificate in Science in Industrial Measurement & Control
- Bachelor of Science in Applied Physics & Instrumentation
- Bachelor of Science (Honours) in Instrument Engineering

# 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.

#### Enquiries

James Barrett (james.barrett@cit.ie) or Harvey Makin (harvey.makin@cit.ie) / T: 021 433 5870

www.physics.cit.ie / www.instrumentation.cit.ie

# Higher Certificate in Science in Industrial Measurement & Control (Level 6)

COURSE CODE	CR_SIMCT_6
APPLICATION	Apply online at http://www.cit.ie/course/CRSIMCT6
COURSE FEE	€200 per 5 credit module (inc. exam fee)
ENQUIRIES	Conor O'Farrell • T: 021 433 5870 • E: conor.ofarrell@cit.ie

#### **ACCS Mode**

**Cycle A**: 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;
- 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 (Level 7)

COURSE CODE	CR_SPHYS_7
APPLICATION	Apply online at http://www.cit.ie/course/CRSPHYS7
COURSE FEE	€200 per 5 credit module (inc. exam fee)
ENQUIRIES	Harvey Makin • T: 021 433 5870 • E: harvey.makin@cit.ie

#### 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 2014/2015 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

#### **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

Quality and Qualifications Ireland (QQI)

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 (Level 8)

COURSE CODE	CR_SINEN_8
APPLICATION	Apply online at http://www.cit.ie/course/CRESSBB8
COURSE FEE	€300 per 5 credit module (inc. exam fee)
ENQUIRIES	James Barrett • T: 021 433 5870 • E: james.barrett@cit.ie

#### **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 changed to the Bachelor of Science (Honours) in Instrument Engineering award. New students will receive the latter award on satisfactory completion of the programme. Pre-September 2012 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 2014/2015 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 credits

#### **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 credits)

#### **Awards**

Bachelor of Science (Honours) in Instrument Engineering (Single module certification is possible)

#### **Validating Body**

Quality and Qualifications Ireland (QQI)

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 postgraduate degree at Masters (MSc) or Doctoral (PhD) levels

# **Department of Biological Sciences**

Head of Department Dr Brendan O'Connell

#### **Department Secretary**

Frances Lynch Location: Office No: C147 T: (021) 433 5885 E: frances.lynch@cit.ie

Each course has its own unique url address from which you can apply online.

Following your application, please attend on the first night of class unless you hear to the contrary beforehand (e.g. if you do not meet the entry requirements).

Please note: Lecturers are on annual holidays during the summer and you should contact the Department's Administration office T: 021 433 5885

- Master of Science in Computational Biology
- Master of Science in Biomedical Science

www.cit.ie/biologicalsciences

# Master of Science in Computational Biology (Level 9)

COURSE CODE	CR_SCMPB_9
APPLICATION	Apply online at http://www.cit.ie/course/CRSCMPB9
COURSE FEE	EU Applicants €5,000 Non EU Applicants - E: fees@cit.ie
ENQUIRIES	Dr Roy Sleator • T: 021 433 5405 • E: roy.sleator@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), visit www.cit.ie/rpl.

#### **Course Content**

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.

Students who successfully complete the taught elements of the course (usually concluded 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.

#### Mandatory

- Structural Biology
- Databases and Ontologies
- IT Systems Engineering and Management for Biosciences
- Biostatistics

#### Electives

- Application Development for Biosciences 1 and 2
- Bioinformatics 1 and 2
- Molecular Biology for Computer Scientists 1 and 2
- Systems Biology

#### **Research Project**

#### **Commencement Date**

15th September 2014

#### **Closing Date for Application**

Applications for places must be made online between 1/5/2014 and 12/9/2014, using the "Apply Online" link on the "Apply" tab of the course information page on www.cit.ie.

## Master of Science in Biomedical Science (Level 9)

COURSE CODE	CR_SBMSC_9
APPLICATION	Apply online http://www.cit.ie/course/CRSBMSC9
COURSE FEE	EU Applicants €5,000 Non EU Applicants - E: fees@cit.ie
ENQUIRIES	Michael Healy • T: 021 433 5407 • E: michael.healy@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), visit www.cit.ie/rpl.
- 4. Delivery of the programme is designed to facilitate participation by students in current employment.

#### **Course Content**

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.

#### Mandatory

- Molecular & Cellular Biology
- Research Methods
- Molecular Basis of Disease
- Laboratory Management

#### Electives

- Diagnostic and public health microbiology
- Bioinformatics
- Advanced Transfusion Science
- Advanced Clinical and Physiological Biochemistry
- Advanced Immunology
- Advanced Cellular Pathology
- Advanced Micro Pathogenesis
- Advanced Haematology
- Endocrinology and Metabolic Disease

#### **Research Project**

# **Department of Chemistry**

#### **Department Secretary**

Mary Phelan Location: Office No: C229A T: (021) 433 5870 E: mary.phelan@cit.ie

Each course has its own unique url address from which you can apply online.

Following your application, please attend on the first night of class unless you hear to the contrary beforehand (e.g. if you do not meet the entry requirements).

Please note: Lecturers are on annual holidays during the summer and you should contact the Department's Administration office T: 021 433 5870

- Certificate in Quality Assurance Special Purpose Award (Level 6)
- Diploma in Quality Management Part I (Level 7)
- Diploma in Quality Management Part 2 (Level 7)

COURSES

Special Purpose Award (Level 6)

COURSE CODE	CR_SQUAS_6
APPLICATION	Apply online at http://www.cit.ie/course/CRSQUAS6
COURSE FEE	€400 per module, i.e. €800 overall (inc. registration exam fee)
ENQUIRIES	Mary Phelan • T: 021 433 5870 • E: mary.phelan@cit.ie or Dr Mary McCarthy • T: 021 433 5878 • E: mary.mmccarthy@cit.ie

#### Monday or Tuesday or Wednesday, 7pm - 10pm (Usually Monday)

#### **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.

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

#### 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 on the National Framework of Qualifications).

#### **Awarding Body**

Cork Institute of Technology.

#### **Commencement Date**

15th September 2014

#### **Closing Date for Application**

Applications for places must be made online between 1/5/2014 and 31/8/2014, using the "Apply Online" link on the "Apply" tab of the course information page on www.cit.ie.

COURSE CODE	CR_SQMAN_7_Y1
APPLICATION	Apply online at http://www.cit.ie/course/CRSQMAN7Y1
COURSE FEE	€700 (payable to CIT) Exam fee: €140 (payable to the external examining body EIQA)
ENQUIRIES	Mary Phelan • T: 021 433 5870 • E: mary.phelan@cit.ie or Dr Mary McCarthy • T: 021 433 5878 • E: mary.mmccarthy@cit.ie

#### Monday or Tuesday or Wednesday, 7pm - 10pm (Usually Tuesday)

#### **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)

#### **Commencement Date**

16th September 2014

#### **Closing Date for Application**

Applications for places must be made online between 1/5/2014 and 31/8/2014, using the "Apply Online" link on the "Apply" tab of the course information page on www.cit.ie

COURSE CODE	CR_SQMAN_7_Y2
APPLICATION	Apply online at http://www.cit.ie/course/CRSQMAN7Y2
COURSE FEE	$\in$ 800 (payable to CIT) Exam fee: $\in$ 140 (payable to the external examining body EIQA)
ENQUIRIES	Mary Phelan • T: 021 433 5870 • E: mary.phelan@cit.ie or Dr Mary McCarthy • T: 021 433 5878 • E: mary.mmccarthy@cit.ie

#### Monday or Tuesday or Wednesday, 7pm - 10pm (Usually Wednesday)

#### **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).

**Commencement Date** 

24th September 2014

#### **Closing Date for Application**

Applications for places must be made online between 1/5/2014 and 31/8/2014, using the "Apply Online" link on the "Apply" tab of the course information page on www.cit.ie.

# **Department of Computing**

Head of Department Jim O'Dwyer

Department Secretary T: 021 433 5160 E: it@cit.ie

**Please note:** Lecturers are on annual holidays during the summer and you should contact the Department's Administration office T: 021 433 5160

Each course has its own unique url address from which you can apply online.

Following your application, please attend on the first night of class unless you hear to the contrary beforehand (e.g. if you do not meet the entry requirements).

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

- MSc in Cloud Computing
- MSc in Software Development\*
- MSc in Networking and Security
- Bachelor of Science (Honours) in IT
   Management
- Bachelor of Science (Honours) in Cloud Computing
- Bachelor of Science in Information Technology Support
- Bachelor of Science in Computing
- Higher Certificate in Science in Computing\*

#### **Cisco Network Academy**

• CISCO Certified Network Associate

#### CompTIA

- CISCO IT/Essentials 1/CompTIA A+
- CompTIA Network+
- CompTIA Security+
- CompTIA Linux+

#### VMware IT Academy

• VMware Vsphere ESXi 5.0 Install, Configure and Manage



COURSE

# Master of Science in Cloud Computing (Level 9)

COURSE CODE	CR_KCLDC_9_Y5
APPLICATION	Apply online at http://www.cit.ie/course/CRKCLDC9
COURSE FEE	€10,800 in total. Three instalments of €3,600 are possible
ENQUIRIES	Dr Donna O'Shea • E: cloud@cit.ie

# 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 the minimum duration

### **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
- Research Project

### Elective (choose 2)

- Scripting for System Administration
- App. Development Frameworks
- Data Analytics
- Software Engineering

### Award

Master of Science in Cloud Computing (Level 9 on the National Framework of Qualifications).

### **Closing Date for Application**

Completed applications must be made online with CIT before 5pm on 22nd August 2014, using the "Apply Online" link on the "Apply" tab of the course information page on www.cit.ie. Classes will commence in September 2014.

# Master of Science in Software Development (Level 9)



COURSE CODE	CR_KSDEV_9
APPLICATION	Apply online at http://www.cit.ie/course/CRKSDEV9
COURSE FEE	€420 per 5 credit module (inc. exam fee) €840 for the Research Project
ENQUIRIES	Dr John Creagh • T: 021 433 5113 • E: it@cit.ie

In part-time mode, a minimum of two modules will be offered each semester, 6pm-10pm two evenings per week, with Saturday mornings available for laboratories if and when required.

### **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.

### **Course Content**

The programme requires the graduate to take four mandatory and four elective taught modules. The Research Project, which may include the design and implementation of a high quality nontrivial software application, is also mandatory. The Project normally commences in February and assessed in September. For details, visit http://modules.cit.ie

### Mandatory Modules

- Software Engineering
- Software Quality
- Advanced Object Technology
- Computing Research & Practice
- Research Project

### **Elective Modules**

- Web-Based Systems
- Computer Simulation and Modelling
- Artificial Intelligence
- Software Security
- Real Time Systems
- Parallel Computing
- Human-Computer Interaction
- Software Development for the Cloud

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.

### Award

Master of Science in Software Development (Level 9 on the National Framework of Qualifications). (Single module certification is possible).

### **Closing Date for Application**

Completed applications must be made online with CIT before 5pm on 5th August 2014, using the "Apply Online" link on the "Apply" tab of the course information page on www.cit.ie. Classes will commence in September 2014.

# Master of Science in Networking and Security (Level 9)



COURSE CODE	CR_KNSEC_9
APPLICATION	Apply online at http://www.cit.ie/course/CRKNSEC9
COURSE FEE	€420 per 5 credit module (inc. exam fee) •€840 for a 10 credit Module (inc. exam fee) • €840 for the 30 credit Research Project
ENQUIRIES	Vincent Ryan • T: 021 433 5160 • E: it@cit.ie

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 this 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. 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)
- Data Centre Networking (5)

### **Duration**

One year full-time (12 calendar months) or two years part-time.

### Award

Master of Science in Networking and Security (Level 9 on the National Framework of Qualifications).

### **Closing Date for Application**

Completed applications must be made online with CIT before 5pm on 19th September 2014, using the "Apply Online" link on the "Apply" tab of the course information page on www.cit.ie. Classes will commence in September 2014.

# Bachelor of Science (Honours) in IT Management (Level 8)

COURSE CODE	CR_KCSME_8
APPLICATION	Apply online at http://www.cit.ie/course/CRKCSME8
COURSE FEE	€365 per 5 credit module (inc. exam fee)
ENQUIRIES	Department Secretary T: 021 433 5160 E: it@cit.ie

### **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 this 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 from the programme may apply for the taught MSc in Networking or the taught MSc in Networking & Security. Graduates may also apply for a research based MSc or PhD.

### Award

Bachelor of Science (Honours) in IT Management (Level 8 on the National Framework of Qualifications). (Single module certification possible).

### **Closing Date for Application**

Completed applications must be made online with CIT before 5pm on 5th September 2014, using the "Apply Online" link on the "Apply" tab of the course information page on www.cit.ie. Classes will commence in September 2014.

COURSE CODE	CR_KCLDC_8_Y4
APPLICATION	Apply online at http://www.cit.ie/course/CRKCLDC8
COURSE FEE	€9,600 in total. Three instalments of €3,200 are possible
ENQUIRIES	Dr Donna O'Shea • E: cloud@cit.ie

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.

### **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
- Cloud Application Development
- Internet & Network Services
- Converged Networks
- Data Centre Virtualisation
- Project Research Phase
- Business Intelligence
- Enterprise Storage Systems
- Network Security
- Cloud Computing with Python
- 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.

### Award

Bachelor of Science (Honours) in Cloud Computing (Level 8 on the National Framework of Qualifications). (Single module certification possible).

### **Closing Date for Application**

Completed applications must be made online with CIT before 5pm on 22nd August 2014, using the "Apply Online" link on the "Apply" tab of the course information page on www.cit.ie. Classes will commence in September 2014.

# Bachelor of Science in Information Technology Support (Level 7)

COURSE CODE	CR_KITSE_7
APPLICATION	Apply online at http://www.cit.ie/course/CRKITSE7
COURSE FEE	€300 per 5 credit module (inc. exam fee)
ENQUIRIES	Department Secretary • T: 021 433 5160 • E: it@cit.ie

### **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. Visit www.cit.ie/rpl

### **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.

### **Further Studies**

Graduates from the programme may apply for the BSc (Honours) in IT Management.

### Award

Bachelor of Science in Information Technology Support (Level 7 on the National Framework of Qualifications). (Single module certification possible).

### **Closing Date for Application**

Completed applications must be made online with CIT before 5pm on 5th September 2014, using the "Apply Online" link on the "Apply" tab of the course information page on www.cit.ie. Classes will commence in September 2014.

COURSE CODE	CR_KCOME_7
APPLICATION	Apply online at http://www.cit.ie/course/CRKCOME7
COURSE FEE	€300 per 5 credit module (includes exam fee)
ENQUIRIES	Department Secretary • T: 021 433 5160 • E: it@cit.ie

### This programme is designed as a follow on programme from the Higher Certificate in Science in Computing.

### **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. For details, visit 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

### **Further Studies**

Graduates from the programme may apply for the BSc (Honours) in IT Management.

### Award

Bachelor of Science in Computing (Level 7 on the National Framework of Qualifications). (Single module certification possible).

### **Closing Date for Application**

Completed applications must be made online with CIT before 5pm on 5th September 2014, using the "Apply Online" link on the "Apply" tab of the course information page on www.cit.ie. Classes will commence in September 2014.

# Higher Certificate in Science in Computing (Level 6)



COURSE CODE	CR_KCOME_6
APPLICATION	Apply online at http://www.cit.ie/course/CRKCOME6
COURSE FEE	€200 per 5 credit module (inc. exam fee)
ENQUIRIES	Department Secretary • T: 021 433 5160 • E: it@cit.ie

### This programme is designed as a follow on programme from the Higher Certificate in Science in Computing.

### **Entry Requirements**

Non-Standard Applicants: Mature Students, FETAC Level 5, 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.

### **Module Information**

### http://modules.cit.ie

CIT has developed this 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.

### **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.

### Award

Higher Certificate in Science in Computing (Level 7 on the National Framework of Qualifications). (Single module certification possible).

### **Closing Date for Application**

Completed applications must be made online with CIT before 5pm on 15th August 2014, using the "Apply Online" link on the "Apply" tab of the course information page on www.cit.ie. Classes will commence in September 2014.

Late applications may be considered should any places become available.

# **CISCO Network Academy Programme**

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 programme for engineers, which they independently verify.

The Cisco Network Academy in CIT trains and prepares students 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 its 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 the CCNA (Cisco Certified Network Associate) examination.

This qualification is part of the Cisco hierarchy of professional qualification (http://www.cisco.com/go/certification).

# CISCO Certified Network Associate (Level 6)

COURSE CODE	CR_KCNAS_6
APPLICATION	Apply online at http://www.cit.ie/course/CRKCNAS6
COURSE FEE	€2,250 (excludes VUE exam fee)
ENQUIRIES	E: cisco@cit.ie • W: http://cisco.cit.ie

Lectures every Wednesday night. Labs 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.

### **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

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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 2014 to mid-June 2015

### **Validating Body**

CISCO

### **Closing Date for Application**

Completed applications must be made online with CIT by early September 2014, using the "Apply Online" link on the "Apply" tab of the course information page on www.cit.ie. Classes will commence in September 2014.

# 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 Programme which enable students to gain the CompTIA A+ and Server + Accreditations. Other accreditations that may be attained from CompTIA are CompTIA Network +, Security +, INet +, and Linux+.

# CISCO IT Essentials 1/CompTIA A+ (Level 6)

COURSE CODE	CR_KHOST_6
APPLICATION	Apply online at http://www.cit.ie/course/CRKHOST6
COURSE FEE	€1,350 (includes exam fees)
ENQUIRIES	E: cisco@cit.ie • W: http://cisco.cit.ie

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+ 220 701, 702.

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.

### Modules

Information Technology Basics 
 Computer Assembly

 Operating System Fundamentals
 Windows 7/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.

None, but is best suited to someone in IT Support or who wants to enter the field of Information Technology.

### **Duration**

September 2014 to December 2014 (approximately 12 weeks).

### **Validating Body**

Computer Technology Industry Association

### **Closing Date for Application**

Completed applications must be made online with CIT before 5pm on 5th September 2014, using the "Apply Online" link on the "Apply" tab of the course information page on www. cit.ie. Classes will commence in September 2014.



# CompTIA Network+ (Level 6)

COURSE CODE	CR_KINET_6
APPLICATION	Apply online at http://www.cit.ie/course/CRKINET6
COURSE FEE	€1,200 (includes exam fees)
ENQUIRIES	Department Secretary • T: 021 433 5160 • E: it@cit.ie • E: pat.mccarthy@cit.ie

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.

### **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, and Certiport recognise CompTIA Network+ Certification as part of their certification programmes.

### **Duration**

February 2015 to May 2015 (approximately 12 weeks).

### **Validating Body**

Computer Technology Industry Association

### **Closing Date for Application**

Completed applications must be made online with CIT by the end of January 2015, using the "Apply Online" link on the "Apply" tab of the course information page on www.cit.ie. Classes will commence in February 2015.

# CompTIA Security+ (Level 6)

### COURSE CODE

### CR\_KSECY\_6

SECY6
it@cit.ie • E: pat.mccarthy@cit.ie

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 foundation level 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.

### **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.

### **Modules**

• 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, DigitalSignatures, 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**

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. Best suited to someone in IT Support, Network or Server Administration or someone working in a network/security role who wishes to attain certification.

### **Closing Date for Application**

Completed applications must be made online with CIT before 5pm on 5th September 2014, using the "Apply Online" link on the "Apply" tab of the course information page on www. cit.ie. Classes will commence in September 2014. Duration is approximately 12 weeks.

COURSE CODE	CR_KLNUX_6
APPLICATION	Apply online at http://www.cit.ie/course/CRKLNUX6
COURSE FEE	€1,200 (includes exam fees)
ENQUIRIES	Department Secretary • T: 021 433 5160 • E: it@cit.ie • E: pat.mccarthy@cit.ie

### 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 Linux administrator.

### Module

# 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.

### **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

### **Programme Details**

Training Options: Instructor-led training 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

September 2014 to December 2014 (approximately 12 weeks).

### Validating Body

Computer Technology Industry Association

### **Closing Date for Application**

Completed applications must be made online with CIT before 5pm on 5th September 2014, using the "Apply Online" link on the "Apply" tab of the course information page on www.cit.ie. Classes will commence in September 2014.

# VMWare Vsphere ESXi 5.0 Install, Configure and Manage (Level 6)

COURSE CODE	CR_KVMWR_6
APPLICATION	Apply online at http://www.cit.ie/course/CRKVMWR6
COURSE FEE	€2,100 (includes exam fees)
ENQUIRIES	Department Secretary • T: 021 433 5160 • E: it@cit.ie • E: pat.mccarthy@cit.ie

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<sup>™</sup> 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.

### 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

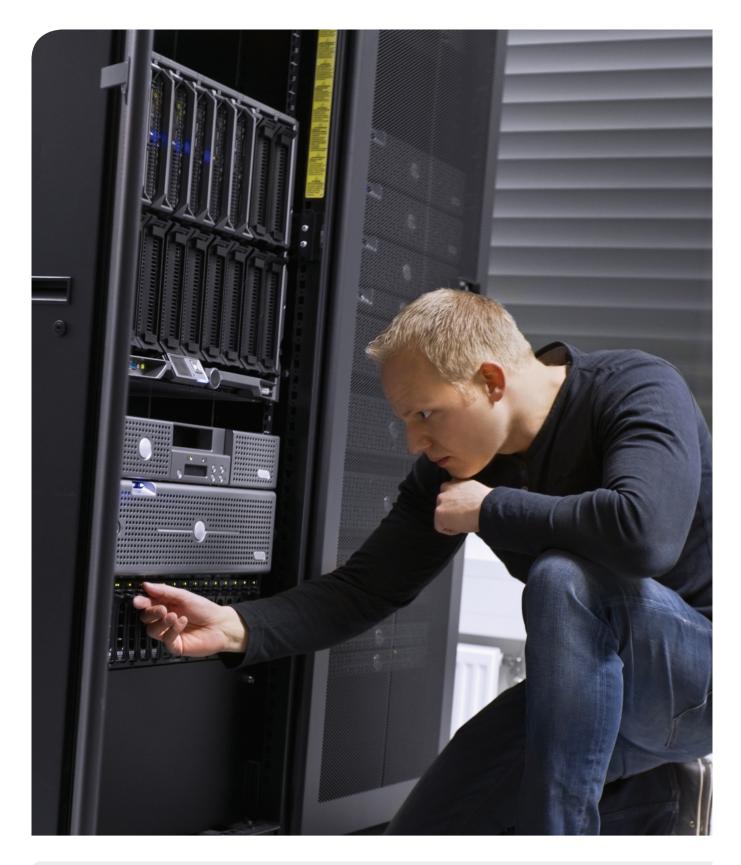
### **Course Objectives**

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

### **Closing Date for Application**

Completed applications must be made online with CIT before 5pm on 5th September 2014, using the "Apply Online" link on the "Apply" tab of the course information page on www.cit.ie. Classes will commence in September 2014.



# National Maritime College of Ireland

Location Ringaskiddy, Co. Cork.

Head of College Conor Mowlds



# **Department of Maritime Studies**

### Head of Department

Vivion Gough T: 021 433 5612 E: viv.gough@nmci.ie

### **College Secretary**

Noreen Kelleher T: 021 433 5607 E: admissions@nmci.ie W: www.nmci.ie

### Enrolment

Evening courses for the 2014/15 academic year will commence in late September. Course advice and registration will take place in Cork Institute of Technology, Bishopstown Campus on Wednesday 3rd September 2014 from 6.00pm to 8.00pm.

### **NMCI** also offers

- Full-time Courses Level 7 and Level 8
- Professional Maritime Short Courses
- GAC Training & Service Solutions (GTSS)
- Offshore courses
  - Bachelor of Business in Supply Chain and Transport Management
  - Yachtmaster (Offshore) Certificate, Shore-Based Course
  - Yachtmaster (Ocean) Certificate, Shore-Based Course

### See www.nmci.ie for details

COURSES

# Bachelor of Business in Supply Chain and Transport Management (Level 7)

COURSE CODE	CR_BSCTM_7
APPLICATION	Apply online at http://www.cit.ie/course/CRBSCTM7
COURSE FEE	€2,800
ENQUIRIES	Jane M. O'Keeffe • T: 021 433 5627 • E: jane.okeeffe@cit.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 MeasurementWarehousing and Inventory Management
- Business and Supply Chain Strategy
- Business and Supply Chain Strategy
- Transport Management in the International Supply Chain
- Management Accounting and Managerial Finance

### Semester 2

- Procurement in Supply Networks
- Organisational Structure and Human Resource Management
- Leadership and Communications in the Supply Chain
- Information Technology & Supply Chain Management
- Global Trade and Customs Law
- Advanced Operations Management

Commencement Date September 2014

### Award

Bachelor of Business in Supply Chain and Transport Management (Level 7 on the National Framework of Qualifications)

# Yachtmaster (Offshore) Certificate

Shore-Based Course

COURSE CODE	CR_MYMOF_6
APPLICATION	Apply online at http://www.cit.ie/course/CRMYMOF6
COURSE FEE	€550
ENQUIRIES	Badiul Alam • T: 021 497 0643 • E: badiul.alam@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 CODECR\_MYMOC\_6APPLICATIONApply online at http://www.cit.ie/course/CRMYMOC6COURSE FEE€450ENQUIRIESBadiul Alam • T: 021 497 0643 • E: badiul.alam@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 entirely 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

# **CIT Cork School of Music**

Location Union Quay, Cork T: 021 480 7310

Director of School Dr Geoffrey Spratt E: geoffrey.spratt@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 School Aiveen Kearney E: aiveen.kearney@cit.ie

# **CIT Cork School of Music**

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 I 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

### **Fleischmann Choir**

# Rehearsals for this large, mixed-voice choir take place on Monday evenings 7.30pm - 10.00pm.

The conductor is Conor Palliser. 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, Or!'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 2014-2015 season will be available from the CIT Cork School of Music's Public Office on or after 1 September 2014. 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.

### Wind Ensemble

The Wind Ensemble rehearses on Wednesday nights from 8.00pm - 10.00pm 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 2014-2015 season will be available from the School's Public Office on or after 1 September 2014. 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 Wednesday lunchtime from 1.15pm - 3.15pm 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 - 10.00pm.

The conductors are Conor Palliser and 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.

# **Individual Tuition**

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 2014-2015 season will be available from the CIT Cork School of Music's Public Office on or after 1 September 2014. 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. Participants are also introduced to the use of Music Notation Software.

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 2013/14 fee was €130/term x 2 terms (2014/15 fee to be confirmed).

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

### Location

Sharman Crawford Street, Cork T: 021 433 5220 | E: ccad.enquiries@cit.ie Head of College Orla Flynn l E: orla.flynn@cit.ie

The College consists of the following Departments: Department of Art Therapy & Continuing Visual Education Department of Art & Design Education Department of Fine Art & Applied Art Department of Media Communications

# **CIT CRAWFORD COLLEGE OF ART & DESIGN**

- MA in Art Therapy (Level 9)
- MA in Art and Design Education (Level 9)
- MA in Teaching Visual Arts for Primary and Early Years Education (Level 9)
- Fine Art Textiles (Level 8)
- Higher Diploma in Arts in Public Relations (Level 8)
- Certificate in Media Production (Level 6)
- Certificate in Radio Broadcast Media (Level 6)
- Certificate in Digital Media Design and Development (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
- 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. The Crawford College of Art & Design also runs occasional short Art courses in the above areas. These courses are advertised on www.cit.ie/ccad.

### SPECIAL CONDITIONS

Course fees are inclusive of cost of practice materials only. Students undertaking individual projects are required to provide their own materials.

Students 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.

### INFORMATION/ENROLMENT

### **Online Application:**

The majority of the part-time courses have an online application process. Please visit your chosen course at www.cit.ie/ccad and click on the 'Apply Tab' to begin the application process. There is also a designated contact name for each course should you have any queries. Early application is advisable as numbers of places on courses are limited. Please note that all courses will run subject to minimum enrolment.

### **Paper Application:**

A small number of part-time courses require a paper application form. Application 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.

Information/Enrolment session will take place at the CIT Crawford College of Art & Design on Thursday, 4th September 2014, from 6.00pm to 8.00pm. Tutors will give presentations on the courses on offer. For non-accredited courses enrolment will take place at this session. For accredited courses applications forms will be available.

Please note that CCAD Department of Media Communications courses take place at the CIT Bishopstown Campus. Information evening for these courses will take place at the CIT Bishopstown Campus on Tuesday, 2nd September 2014, from 6.00pm to 8.00pm.

### All fees must be paid in full on enrolment.

For Information/Enrolment details please contact

CIT Crawford College of Art & Design, Sharman Crawford Street, Cork. T: 021 433 5220 E: ccad.enquiries@cit.ie

www.cit.ie/ccad

# Department of Art Therapy & Continuing Visual Education

### **Head of Department**

Ed Kuczaj T: 021 433 5246 E: ed.kuczaj@cit.ie

**Please note:** Lecturers are on annual holidays during the summer and you should contact the Department's Administration office T: 021 433 5220

Each course has its own unique url address from which you can apply online.

Following your application, please attend on the first night of class unless you hear to the contrary beforehand (e.g. if you do not meet the entry requirements).

Information/Enrolment session will take place at the CIT Crawford College of Art & Design on Thursday, 4th September 2014, from 6.00pm to 8.00pm. Lecturers will give presentations on the courses on offer.

### **Online Application:**

The majority of the part-time courses have an online application process. Please visit your chosen course at www.cit.ie/ccad and click on the 'Apply Tab' to begin the application process. There is also a designated contact name for each course should you have any queries. Early application is advisable as numbers of places on courses are limited. Please note that all courses will run subject to minimum enrolment.

### **Paper Application:**

A small number of part-time courses require a paper application form. Application 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.

# COURSES

### 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
- Crawford Art Summer School

The evening courses generally run on week nights, one night per week over 20 weeks from October to April.

www.cit.ie/ccad

# Master of Arts in Art Therapy

COURSE CODE	CR_ATHPY_9
APPLICATION	Apply online at http://www.cit.ie/course/CRATHPY9
COURSE FEE	EU Applicants: €7,560. Non EU Applicants: please email fees@cit.ie
ENQUIRIES	Ed Kuczaj • T: 021 433 5246 • E: ed.kuczaj@cit.ie

### Closing/starting date: application closing date 30th April/ start date September

For further information on this course please visit: www.artincontext.eu

### **Duration**

2 years Full time/3 years ACCS/Part time

### **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.

### **Career Opportunities**

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.

# Evening Courses – General Information Course Fee €400

An information/enrolment evening will be held on Thursday, 4th September 2014, 6pm - 8pm. An information session will take place at 6.30pm and repeated again at 7pm. Students may enrol on the evening of the 4th September and pay the course fee to secure their place. Alternatively, students may contact the CIT CCAD office (T: 021 4335220 or E: ccad.enquiries@cit.ie) to request an application form. Early enrolment is advisable as places are limited.

A number of the following courses have the facility also to apply online.

# Life Drawing – Intermediate

 COURSE CODE
 ACCXXC7\_Y0

 APPLICATION
 Apply online at http://www.cit.ie/course/ACCXXC7

 ENQUIRIES
 Helle Helsner • helle.helsner@cit.ie

 EVENING
 Monday 7.00pm - 9.30pm

This is an intermediate course in objective drawing from the model in various media including, pencil, ink, charcoal, etc. Students need basic knowledge of gesture drawing and should have already done a beginners course in life drawing.

### Award

CIT: Single Module Certification, 5 ECTS credits at Level 7 on the National Framework of Qualifications.

# Life Drawing – Advanced



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. Semester 1, from October to December, will be bridging studies leading to embarking then on to the module itself in Semester 2.

### Award

CIT: Single Module Certification, 5 ECTS credits at Level 7 on the National Framework of Qualifications.

Drawing/Painting	
COURSE CODE	ТВС
ENQUIRIES	Eileen Healy • E: eileen.healy@cit.ie
EVENING	Tuesday 7.00pm - 9.30pm

It is planned to offer this course as an accredited module please check for further details at the information session on the 4th September.

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.



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.

### Award

CIT: Single Module Certification, 5 ECTS credits at Level 7 on the National Framework of Qualifications.

# Photography - Digital

COURSE CODE	ACCXXD7_Y0
APPLICATION	Apply online at http://www.cit.ie/course/ACCXXD7
ENQUIRIES	Roseanne Lynch/Pádraig Spillane • E: roseanne.lynch@cit.ie
EVENING	Tuesday 6.30pm - 9.30pm

This course is an introduction to fine art digital photography orientating the student's image-making within the context of a fine art college and the discourse of contemporary photography.

The course starts with a basic introduction to operating a digital camera and processing, followed by presentations on contemporary and historical image-makers plus group discussions with students formulating themes for projects. This course values peer exchanges; students are led to recognise and value their own vision alongside gaining technical skills in camera use and digital printing to best express that vision. Students will have access to macs with photoshop, the photographic studio with a studio lighting session, and printers for producing work. Students will be expected to develop their projects outside of the class-time for analysis and discussion within contact hours.

Final assessment is by way of a portfolio of images with accompanying evidence of research and learning.

### Award

CIT: Single Module Certification, 5 ECTS credits at Level 7 on the National Framework of Qualifications.

# Photography - Analogue COURSE CODE ACCXXA6\_Y0 APPLICATION Apply online at http://www.cit.ie/course/ACCXXA6 ENQUIRIES Roseanne Lynch • E: roseanne.lynch@cit.ie

EVENING Wednesday 7.00pm - 9.30pm

This course is grounded is practical instruction to enable the student make informed artistic choices when using an analogue camera, studio lighting, developing film and making prints in the darkroom.

It is a practical hands-on 'learning through doing' course with a project based outcome for assessment and includes a local field trip. The course is suitable for beginners and those with experience of using a camera and darkroom.

To complement the practical we will have a group presentation and discussions on contemporary photography. Group crits and peer learning will be a valuable part of this learning process for students to realise their creative potential. In tandem with this, students will be expected to give time to their projects outside contact hours.

### Award

CIT: Single Module Certification, 5 ECTS credits at Level 6 on the National Framework of Qualifications.

Stained Glass	
COURSE CODE	ТВС
ENQUIRIES	Sue Wainwright • E: sue.wainwright@cit.ie
EVENING	Tuesday 7.00pm - 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, Basic Hand Building

### COURSE CODE ACCXXB7\_Y0

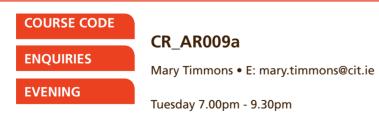
APPLICATION	Apply online at http://www.cit.ie/course/ACCXXB7
ENQUIRIES	Mary Timmons • E: mary.timmons@cit.ie
EVENING	Monday 7.00pm - 9.30pm

The beginner's course is specifically designed for the novice to clay and will incorporate basic coil and slab-building techniques, pinch pots and mould making. A variety of decoration methods and glaze applications will also be considered. Course will consist of 2.5hrs studio practice time and 4.5hrs self-study each week.

### Award

CIT: Single Module Certification, 5 ECTS credits at Level 7 on the National Framework of Qualifications.

# **Pottery - Advanced**



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 2014



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 from Sat 28th June – Wed 2nd July. For further details please see www.artincontext.eu

### **Certificate in Principles of Art Therapy** (Foundation Course) 2014 2015

(Foundation Course) 2014 - 2015



This 10 credit Level 8 course offers a further introduction to Art Therapy, from October to April (Friday 10.30am - 4.00pm and Saturday 10.00am – 3.00pm, 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. For further details please see www.artincontext.eu

Entry to this course is by interview. Closing date for application is the end of April each year.

# **Certificate in Arts in Group Facilitation 2014 - 2015**



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 to June, (Thursday or Friday, and Saturday, 10.30am - 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. For further details please see www.artincontext.eu

Closing date for application is the end of April each year.

# **Certificate in Arts Participation and Development: Creative Approaches to Global Education and Action**

COURSE CODE CR\_AARPD\_8\_Y1

Apply online at http://www.cit.ie/course/CRAARPD8

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 (Friday – Sunday).

# Art Therapy Introductory Weekend Workshops

### **ENQUIRIES**

**APPLICATIONS** 

Louise Foott • E: louise.foott@cit.ie

www.artincontext.eu

### WEBSITE

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. Please visit website for dates.

# **Folder Preparation**

COURSE CODE	CR_AR015
COURSE FEE	€480
ENQUIRIES	Christine Pybus • E: christine.pybus@cit.ie
TIMETABLE	Saturdays 10.00am – 1.00pm

This is a 15-week course suitable for those seeking art college entry. 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, 4th September, 2014, 6.00pm – 8.00pm.

# ENQUIRES Ed Kuczaj • T: 021 433 5246 • E: ed.kuczaj@cit.ie TIMETABLE 21st July – 25th July 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.

Details will be available for the course in May. Please check the CIT website www.cit.ie/ccad or contact:

Eileen Healy E: eileen.healy@cit.ie

Helle Helsner E: helle.helsner@cit.ie

CCAD Office E: ccad.enquiries@cit.ie

# **Department of Art & Design Education**

# **Head of Department**

Albert Walsh T: 021 433 5247 E: albert.walsh@cit.ie

Please note: Lecturers are on annual holidays during the summer and you should contact the Department's Administration office T: 021 433 5200

Each course has its own unique url address from which you can apply online.

Following your application, please attend on the first night of class unless you hear to the contrary beforehand (e.g. if you do not meet the entry requirements).

# POSTGRADUATE COURSES

- MA in Art and Design Education
- MA in Teaching Visual Arts for Primary and Early Years Education

# www.cit.ie/ccad

COURSES

# Master of Arts in Art and Design Education (Level 9)

# **COURSE CODE**

# CR\_AATDE\_9

APPLICATION	Apply online at http://www.cit.ie/course/CRAATDE9
COURSE FEE	EU Applicants €4,140. Non EU Applicants E: fees@cit.ie
ENQUIRIES	Albert Walsh • T: 021 433 5247 • E: albert.walsh@cit.ie

## Please note: Application closing date is 31st August 2014

## **Part-time Course Duration**

No. of semesters: 5 No. of weeks per semester: 12 No. of timetable hours per week: 6 – 8

# **Entry Requirements**

Eligible applicants are those who hold a Level 8 Honours H2.2 Bachelor Degree in Fine Art or Design (or similar) 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 or
- Applicants who hold a teaching qualification in subjects other than art and design may also be considered.
- 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.

# 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.
- 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 elective 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 this 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 (Level 9 on the National Framework of Qualifications)

# Master of Arts in Teaching Visual Arts for Primary and Early Years Education

## COURSE CODE

CR\_ATAPE\_9

APPLICATION	Apply online at http://www.cit.ie/course/CRATAPE9
COURSE FEE	EU Applicants €4,140. Non EU Applicants E: fees@cit.ie
ENQUIRIES	Albert Walsh • T: 021 433 5247 • E: albert.walsh@cit.ie

## Please note: Application closing date is 31st August 2014

#### **Part-time Course Duration**

No. of semesters: 5 No. of weeks per semester: 12 No. of timetable hours per week: 6 – 8

#### **Entry Requirements**

- A BEd (minimum H2.2) for primary school teaching or equivalent recognised qualification or
- A Bachelor of Arts (Honours) in Early Childhood Care and Education (minimum H2.2) 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 this 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 (Level 9 on the National Framework of Qualifications)

# **Department of Fine Art & Applied Art**

# Head of Department

Trish Brennan E: trish.brennan@cit.ie

**Please note:** Lecturers are on annual holidays during the summer and you should contact the Department's Administration office T: 021 433 5200

COURSE

• Fine Art Textiles (Level 8 Special Purpose Award)

www.cit.ie/ccad

COURSE CODE	CR_ATEXT_8
APPLICATION	Apply online at http://www.cit.ie/course/CRATEXT8
COURSE FEE	$\in$ 1,450 for each academic year, basic materials are included)
ENQUIRIES	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 2014.

#### **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 National Framework of 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 parttime 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 College, 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, and 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 Special Purpose Award (Level 8 on the National Framework of Qualifications). 30 Credits will be earned transferable towards a Degree.

# **Department of Media Communications**

Head of Department Rose McGrath E: rose.mcgrath@cit.ie

Department Secretary Maud Coffey T: 021 433 5810 E: maud.coffey@cit.ie

**Please note:** Lecturers are on annual holidays during the summer and you should contact the Department's Administration office T: 021 433 5810.

Each course has its own unique url address from which you can apply online.

Following your application, please attend on the first night of class unless you hear to the contrary beforehand (e.g. if you do not meet the entry requirements).

Information/Registration for the Department of Media Communications part-time courses for the academic year beginning September 2014 will take place at the CIT's Bishopstown Campus on Tuesday 2nd September 6.00pm - 8.00pm.

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.

- Higher Diploma in Arts in Public Relations (Level 8)
- Certificate in Media Production (Level 6)
- Certificate in Radio Broadcast Media (Level 6)
- Certificate in Digital Media Design and Development (Level 8)

# www.cit.ie/ccad

Please Note: all courses run by the Department of Media Communications take place at the CIT's Bishopstown Campus.

# **Higher Diploma in Arts in Public Relations**

(Level 8)

# COURSE CODE CR\_BPURE\_8

APPLICATION	Apply online at http://www.cit.ie/course/CRBPURE8
COURSE FEE	EU Applicants: €1,500. Non EU Applicants: please email fees@cit.ie
ENQUIRIES	Emmett Coffey • T: 021 432 6118 • E: emmett.coffey@cit.ie

Location: Bishopstown Campus, Room: B123L 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 ((Level 8 on the National Frameworks Qualifcation).

# **Certificate in Media Production**

(Level 6)

APPLICATION

**COURSE FEE** 

**ENOUIRIES** 

# COURSE CODE CR\_HMEDP\_6

Apply online at http://www.cit.ie/course/CRHMED	P6
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€400 per module

Brian Doyle • T: 021 432 6115 • E: brian.doyle@cit.ie Rose McGrath • T: 021 433 5812• E: rose.mcgrath@cit.ie

# 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 to a Level 6 Certificate on the National Framework of Qualifications; 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, www.cit.ie/rpl.

# **Modules 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.

- Design for Print Tuesday and Thursday, 7pm – 9pm. Semester 1
- Introduction to Video Monday and Wednesday, 7pm – 9pm. Semester 1
- Digital Imaging Tuesday and Thursday, 7pm - 9pm. Semester 2
- Web Design and Interactive Media Monday and Wednesday, 7pm – 9pm. Semester 2

## **Duration**

1 Year Part-Time

## Award

Certificate in Media Production (Level 6 on the National Framework of Qualifications).

**Please note** this course is delivered on Apple Mac computers and takes place at the CIT's Bishopstown Campus.



# Certificate in Radio Broadcast Media (Level 6)

# COURSE CODE

# CR\_HBRME\_6

APPLICATIONApply online at http://www.cit.ie/course/CRHBRME6COURSE FEE€400 per moduleENQUIRIESBrian Doyle • T: 021 432 6115 • E: brian.doyle@cit.ie<br/>Rose McGrath • T: 021 433 5812• E: rose.mcgrath@cit.ie

# 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, learnercentred 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 audiovisual 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, visit www.cit.ie/rpl for more information.

# **Modules 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.

- Introduction to Audio Visual Broadcasting Technology Tuesday, 6.30pm – 9.30pm. Semester 1 (13 weeks)
- Journalistic Writing and Principles Wednesday, 7.00pm – 9.00pm. Semester 1 (13 weeks)
- Practical Broadcasting Skills Monday, 6.30pm - 9.30pm. Semester 2 (13 weeks)
   Broadcasting Industry Placement
- Thursday 7.00pm 9.00pm. Semester 2 (13 weeks)

(First meeting – arrangements for work placement will then be scheduled)

# **Duration**

1 Year Part-Time

# Award

Certificate in Radio Broadcast Media (Level 6 on the National Framework of Qualifications).

**Please note** this course is delivered on Apple Mac computers and takes place at the CIT's Bishopstown Campus.

# Certificate in Digital Media Design and Development (Level 8)

# COURSE CODE

CR\_HDMTE\_8

APPLICATION	Apply online at http://www.cit.ie/course/CRHDMTE8				
COURSE FEE	€250 per module				
ENQUIRIES	Maria Murray • T: 021 433 5810 • E: maria.murray@cit.ie Rose McGrath • T: 021 433 5812 • E: rose.mcgrath@cit.ie				

# 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.

This programme has been developed as a bridging route for applicants who are interested in undertaking the Department's 60 credit MA in E-learning Design & Development but who do not possess the necessary background in multimedia or digital media. On successful completion of the programme, graduates will be able to research, design, and develop a wide range of digital media technologies and solutions, with such learning serving as a foundation for further specialisation with regard to e-learning and technology-enhanced learning.

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 (Honours) in Multimedia, the BA (Honours) in Visual Communication, the MA in Journalism & New Media, the MA in Public Relations with New Media and the MA in E-learning Design and Development. The programme also draws from expertise in CIT's Online Delivery Department (see http://online.cit.ie) The programme is delivered flexibly with the support of many of the same tools, services and technologies which constitute the course curriculum.

# **Entry Requirements**

Applicants should hold a minimum of an NFQ Level 8 qualification or equivalent. Selection for this course will also be based on a short interview. 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, visit www.cit.ie/rpl.

#### Modules 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.

## **Mandatory Modules**

- Multimedia Production
- E-Learning: Theory and Technology
- Web Design Basics
- Moving Image & Sound
- Creative Strategies

#### **Elective Modules (choose 1)**

- Interpreting Sound & Music
- Introduction to Digital Media
- Digital Culture

# **Duration**

1 Semester full-time (13 weeks).

# Award

Certificate in Digital Media Design and Development (Level 8 on the National Framework of Qualifications).

**Please note** this course is delivered predominantly on Apple Mac computers and takes place at the CIT's Bishopstown Campus during the day.

# **Notes**




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N.B. Fees quoted relate to the academic year 2014/2015 only.

E&OE



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knowledge at work

# **Continuing Education**

COURSES 2014-2015

# Information/Registration Evening 2nd / 3rd / 4th September

See inside for details