MTU’S MISSION

To lead change and, through education, empower people for a successful future in a globalised world.

MTU VISION

To lead transformation through education.

MTU VALUES

We are inclusive, engaging, dynamic and bold.
incorporating

MTU Bishopstown Campus, Cork
MTU Cork School of Music
MTU Crawford College of Art & Design
National Maritime College of Ireland
MTU North Campus, Kerry
MTU South Campus, Kerry

CONTINUING EDUCATION COURSES
2022 - 2023
Welcome to the MTU Continuing Education Handbook. At MTU, the learner is at the heart of our university, and we hope this handbook will help you find a course that suits you, wherever you are on your educational or professional journey.

Our mission is to lead change and, through education, empower people for a successful future in a globalised world. We do this by supporting a diversity of learners across the National Framework of Qualifications from level 6 right up to PhDs at level 10.

Whether you’re starting your third level education as a mature student, or upskilling for your career, our courses are designed to suit your needs. Our schedules are designed to help you succeed and balance your studies with your busy daily life.

The value of lifelong learning has never been more relevant as sectors change and adapt to developments in technology and sustainability. MTU’s huge range of part-time and professional courses are designed with extensive input from business and industry experts. Studying with us will enhance your employability and career development prospects.

We are dynamic, bold and brave and a hallmark of MTU is its flexibility and inclusivity. We welcome learners from all backgrounds and identities and look forward to celebrating your achievements.

This handbook outlines our full range of continuing education courses. As you plan the next stage of your educational or professional development, I am confident that MTU can help you fulfil your potential.

If you need more information on our courses visit mtu.ie and please don’t hesitate to contact any of our staff.

I look forward to welcoming you to MTU.

Professor Maggie Cusack, FRSE
President
Munster Technological University
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- Aistear through Physical Education
- One Year Certificate in Counselling Skills
- Higher Certificate in Arts in Counselling Skills
- Certificate in Irish Sign Language

**Level 7**
- Child and Family Law

**Level 8**
- Bachelor of Arts (Honours) in Counselling & Psychotherapy
- Inclusive Education
- Gaeilge don Ghairm

**Level 9**
- Master of Arts in Integrative Psychotherapy
- Master of Arts in Play Therapy

## Culinary Arts, Hospitality

**Level 6**
- Bakery, Breads & Pastry
- Higher Certificate in Arts in Culinary Arts – Professional Chef Programme (Cork Campus)
- Higher Certificate in Arts in Culinary Arts – Professional Chef Programme (Kerry Campus)
- Certificate in Culinary Skills (Cork Campus)
- Certificate in Culinary Skills (Kerry Campus)
- Gourmet Culinary Techniques
- Management Principles for Services
- Pastry, Tarts and Gateaux
- Professional Bar Operations
- Certificate in Retail Food Service Operations
- The Art of Mixology

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- Food Photography
- Bachelor of Arts in Hotel Management – National Trainee Manager Development Programme

**Level 8**
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  2.2 Lean Sigma Yellow Belt for Service and Operational Productivity Improvement
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Level 6
Certificate in Building Information Modelling (BIM) with Revit
Higher Certificate in Engineering in Civil Engineering

Level 7
Bachelor of Engineering in Civil Engineering
Bachelor of Engineering in Environmental Engineering

Level 8
Certificate in Strategic Building Information Modelling Management
Certificate in Applied Building Information Modelling and Management
Bachelor of Science (Honours) in Building Information Modelling and Management

Level 9
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Master of Engineering in Structural Engineering
Master of Engineering in Civil Engineering (Environment and Energy)
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About Munster Technological University

Whatever your plans and talents MTU 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, MTU has a varied part-time and evening programme, one of the largest at third level in the country.

MTU has six principal campuses
www.mtu.ie

MTU Bishopstown Campus, Cork
MTU Crawford College of Art & Design, Cork
MTU Cork School of Music, Cork
National Maritime College of Ireland, Ringaskiddy, Co. Cork
MTU North Campus, Kerry
MTU South Campus, Kerry

The student population comprises approximately 18,000 between full-time and part-time courses. Courses are offered in Engineering, Science, Business, Humanities, Fine Art, Applied Art, Photography, Multimedia, Nursing, Outdoor Activity, Wildlife, Informatics, Music, Musical Theatre, 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.

Quality and Qualifications
Ireland (QQI)

The third-level courses offered by MTU are nationally and internationally recognised by the Quality & Qualifications Ireland (QQI). QQI is the integrated agency that has replaced the Further Education & Training Awards Council (FETAC), the Higher Education & Training Awards Council (HETAC) and the National Qualifications Authority of Ireland (NQAI), and it incorporates the functions of the Irish Universities Quality Board). FETAC, HETAC, and NQAI are now dissolved.

MTU seeks the widest possible recognition for its courses and has established relationships with a wide variety of professional bodies for that purpose. For example, MTU’s engineering courses are accredited by Engineers Ireland and consequently have world-wide recognition. MTU’s business courses gain exemption and recognition from a variety of accounting, marketing, and management professional bodies.

Effective contact with industry is a key objective of the University. 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 University.

MTU offers students an opportunity to pursue courses of proven merit in a progressive and caring environment where students’ needs are treated as paramount.
BUSINESS, MARKETING, MANAGEMENT AND ACCOUNTING

Level 6
ACCA Diploma in Accounting & Business
Accounting Technicians Ireland
Higher Certificate in Business
Introductory Book-Keeping and Accounting
Certificate in Supervisory Management

Level 7
Bachelor of Arts in Human Resource Management
Bachelor of Business in Management

Level 8
Bachelor of Business (Honours) in Accounting
Certificate in Aviation Business
Bachelor of Business (Honours)
Higher Diploma in Business & Sales Management
Certificate in Designing Innovative Services
Certificate in Diversity and Inclusion in the Workplace
Certificate in Digital Marketing
Bachelor of Arts (Honours) in International Business with Aviation Studies
Bachelor of Arts (Honours) in Human Resource Management
Institute of Certified Public Accountants Ireland (CPA)
Certificate in Leadership Development
Certificate in Leadership and Transformational Change
Certificate in Regulated Investment Funds – Special Purpose Award
Certificate in Sales Strategy & Techniques

Level 9
Master of Science in Applied Accounting
Certificate in Applied Analytics for Business
MBA with Aviation Management
Certificate in Corporate Strategy Implementation
Master of Science in Digital Marketing Strategy
Master of Science in Fintech Innovation
Master of Arts in Human Resource Management (Taught)
Master of Business in Investment Fund Administration
Master of Business Administration in Strategy
### ACCA DIPLOMA IN ACCOUNTING & BUSINESS

**Location**
MTU Bishopstown Campus, Cork

**Course Fee**
€1,500 (excludes examination fees)

**Enquiries**
Martin O’Sullivan
T: 021 433 5900
E: martin.osullivan@mtu.ie

Course & Module Information, and to apply online, visit go.mtu.ie/CRBACCB6

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**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 accepting a place on this course, students are reminded to ensure that they have clearly understood all the terms of their enrolment with MTU, 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.

MTU 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.

**Delivery**
Tuesday 6.00pm – 10.00pm & Wednesday 6.30pm – 9.00pm

The Diploma is suitable for those aspiring to work or already working in the following types of roles e.g. basic bookkeeping, trainee accountant in a commercial organisation or accounting practice, accounts clerk in public or private sector.

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

**Subjects**
- Financial Accounting
- Management Accounting
- Business and Technology
- 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.

**Content**
Financial Accounting, Management Accounting, and Business and Technology 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 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. MTU fee to be paid on registration.

**Institute Information**
ACCA Ireland, La Touche House, 1st Floor, IFSC, Dublin 1, T: 01 4475678  E: info@accaglobal.com
www.accaglobal.com
Accounting Technicians are qualified 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.

Delivery
Tuesday & Thursday, 6.30pm – 9.30pm.

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

Admission Requirements
Leaving Certificate Grade O6/H7 (pre. 2017, Grade D3 Ordinary Level) in five subjects. 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.

Awarding Body
Accounting Technicians Ireland

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 accepting a place on this course, students are reminded to ensure that they have clearly understood all the terms of their enrolment with MTU, 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.

Content
Year 1
- Financial Accounting
- Law & Ethics
- Business Management

Year 2
- Advanced Financial Accounting
- Advanced Taxation
- Management Accounting
- Financial Data Management
- Work Practice Module - Level 4
- Work Practice Module - Level 5

For further updates on these Work Practice Modules contact Accounting Technicians Ireland

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

Institute Information
Accounting Technicians Ireland (ATI), 2nd Floor, CA House, 47/49 Pearse Street, Dublin 2.
T: 01 649 8100 www.accountingtechniciansireland.ie

Important Dates
Exemption Deadline: Wednesday, 12th October 2022.
Please note that applications for exemptions must be made directly to the Accounting Technicians Ireland.

Exam registration closing date: 17th April 2023 (June sitting) and 24th July 2023 (August sitting).

Registration closing date for 1st year with ATI: Friday, 14th October 2022.
Registration closing date for 2nd year/continuing students: Friday, 14th October 2022.

New student: Email: enquiry@accountingtechniciansireland.ie
Second year/continuing student: Email: students@accountingtechniciansireland.ie.
Higher Certificate in Business

Course Code CR_BBUSA_6 (Level 6)

Location
MTU Bishopstown Campus, Cork

Course Fee
€185 per 5 credit module (inc. exam fee)

Enquiries
Sheila Butler
T: 021 433 5806
E: sheila.butler@mtu.ie

Course & Module Information, and to apply online, visit go.mtu.ie/CRBBUSA6

Duration & Delivery
Year 1 and 2
Trimester 1:
Four modules over two evenings per week, 6pm – 10pm
Trimester 2:
Six modules over three evenings per week, 6pm – 10pm
Trimester 3:
Two modules over two evenings per week, 6pm – 10pm

Aim
To give participants a firm foundation in business related knowledge and skills, with a view to commencing a career or enabling individuals to 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.

Admission 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

Progression
Successful graduates can progress to the Level 7 Bachelor of Business in Management, and then to the Level 8 Bachelor of Business (Honours) or the Level 8 Bachelor of Business (Honours) in Accounting.

Commencement Date
This course commences in September and further information can be found online. Early application is strongly advised as places are limited.

Content
Year 1 – Modules, all mandatory
Organisational Behaviour
Introduction to Supply Chain
Essential Maths & Stats for Business
Stats & Financial Maths for Business
Introduction to Microeconomics
Fundamentals of Financial Accounting
Cost Accounting
Introduction to Marketing
Communication for Business
Creativity, Innovation & Teamwork
Business IT Skills
Introduction to Management

Year 2 – Modules, all mandatory
Economic Data & Analysis
Cost & Management Accounting
Financial Accounting
Company & Partnership Accounting
Contemporary Management Issues
Financial Accounting Analysis
Marketing Strategy Principles
Professional HR Practice
Introduction to Macroeconomics
Irish Legal System
Irish Civil Law
IT Communication

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
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.
INTRODUCTORY BOOK-KEEPING AND ACCOUNTING

COURSE CODE
CR_BBACC_6
(LEVEL 6)

LOCATION
MTU Bishopstown Campus, Cork

COURSE FEE
€500

ENQUIRIES
Noreen Murphy
T: 021 433 5900
E: noreen.murphy@mtu.ie

Course Information, and to apply online, visit go.mtu.ie/CRBBACC6

Duration
10 weeks. This course will be offered twice during the 2022/2023 academic year, subject to demand.

Tuesday 6.30pm – 9.30pm. Class size is limited to 20 students.

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 course is dedicated to instructing students on manual processing, and 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.

Commencement Dates
Course 1: September 2022
Course 2: February 2023
CERTIFICATE IN SUPERVISORY MANAGEMENT

LOCATION
MTU Bishopstown Campus, Cork

COURSE FEE
€2,500*

ENQUIRIES
Don Crowley
T: 021 433 5900
E: don.crowley@mtu.ie

Course & Module Information, and to apply online, visit go.mtu.ie/CRBSUMA6

*The fee quoted above is inclusive of all programme materials, exam fees and refreshments. Cost may be reduced to €1,995 per person, if eligible for funding from Cork Chamber or Bio Pharma Chem Skillnet.

Duration
6 month programme, flexibly-delivered utilising a block-release mode (1 day per week) for the delivery of four modules over a semester.

Who should apply?
Organisations who wish to provide continuous support and professional development upskilling for existing or potential supervisors/managers or aspiring supervisors. This programme covers all key areas relevant to supervisory management roles and is suitable to an extensive range of industry sectors from manufacturing to services organisations.

Overview
A phased approach, consisting of a series of lectures, facilitated workshops and work-related projects will be used to ensure the programme is relevant, engaging and enjoyable. The teaching methods on the programme will be intensively interactive, with an action learning focus and use of live case studies to build solutions to work place challenges.

Rather than an exclusively lecture-style approach, the emphasis in class will be on lecturer-led group discussion and class debate, which will draw upon the experiences of students to illustrate key learning points and to bring concepts, theories and frameworks to life. This practical, applied approach to teaching methodology, will be underpinned by assessment instruments, and the practical application of best-practice theory to analyse the environment in which the learners work.

Content
Four modules (each at 5 ECTS, Level 6)

People Management incl. Conflict & Mediation
Considers leadership skills in-house for supervisory management, motivating people, conflict management & mediation, coaching & mentoring, project management from project initiation to close-out, technical report writing, presentation & effective meeting skills.

Introduction to Operations Excellence: Lean Practitioner
Delves into operational excellence and lean practice for process efficiency in a supervisory management position. Analyses operational process capability & performance through an operational excellence mind-set.

Introduction to Management: Management Practice
Explores organisation, enterprise, operations management & quality control, leadership & motivation, team & time management.

Performance Management

Award
On successful completion of the four modules, graduates will receive a Special Purpose Award – Certificate in Supervisory Management (Level 6, 20 ECTS).
Duration & Delivery
Year 1
Semester One – Mondays & Wednesdays, 6pm – 10pm
Semester Two – Mondays, Wednesdays & Thursdays, 6pm – 10pm

Year 2
Semester One – Tuesdays & Thursdays 6pm – 10pm
Semester Two – Mondays & Wednesdays 6pm – 10pm

Year 3
Tuesdays & Thursdays 6pm – 10pm

Please note that students in Year 2 & 3 are required to attend lectures and workshops on some Saturdays during the Semester. Dates will be advised in advance. This degree has an embedded award at Level 6 whereby all students who successfully complete Year 1 of the programme will be awarded a Certificate in HR Management and Development.

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 of this degree are eligible for membership of the Chartered Institute of Personnel and Development (CDP).

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.

Admission 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.

Award
Bachelor of Arts in Human Resource Management (Level 7 on the National Framework of Qualifications)

Content
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
Human Resource IT
Organisational Behaviour
Communications for Business

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

Year 3 – Modules
Learning & Training
Employee Rewards (2 x 5 credit modules)
Corporate Strategy Development,
Human Resource Strategy (2 x 5 credit modules)
Training and Testing
Health and Safety (2 x 5 credit modules)
HRM Profession Project
Research Methods for HRM
Project Management Framework

www.mtu.ie
BACHELOR OF BUSINESS IN MANAGEMENT

Duration & Delivery

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).

Commencement Dates

This course commences in September and further information can be found online. Early application is strongly advised as places are limited.

Aim

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. Bachelor of Business (Honours).

Admission Requirements

Year one entry: BMNGT_Y2 (Qualifying Year): A minimum of a two year Higher Certificate (Level 6) is required in a discipline other than business studies.

Note: Students in Qualifying Year 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 Qualifying Year, students can progress to a Bachelor of Business in Management.

Year two entry: BMNGT_Y3 (Award Year): Higher Certificate in Business, with minimum of Pass result or successful completion of the Qualifying Year of the Bachelor of Business in Management (Level 7).

Progression

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

Content

The principle areas of study are:

Year One entry (Qualifying year)
- Economics (10 credits)
- Management (10 credits)
- Information Systems (5 credits)
- Financial Accounting (5 credits)
- Marketing (10 credits)
- Organisational Behaviour (5 credits)
- Contemporary Business (5 credits)
- Business Law (5 credits)
- Business Mathematics & Statistics (5 credits)

Year Two entry (Award Year)
- Economics International Trade (5 credits)
- Human Resource Management (5 credits)
- Organisational Processes & Systems (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)
- Business Strategy Simulation (5 credits)

Award

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

ACCS

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.
**BACHELOR OF BUSINESS (HONOURS) IN ACCOUNTING**

**LOCATION**
MTU Bishopstown Campus, Cork

**COURSE CODE**
CR_BACCE_8

**COURSE FEE**
€215 per 5 credit module (inc. exam fee)

**ENQUIRIES**
Noreen Murphy (Stage 1)
T: 021 433 5920 E: noreen.murphy@mtu.ie
AnnMarie O’Donoghue (Stage 2)
T: 021 432 6170 E: annmarie.odonoghue@mtu.ie

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Course & Module Information, and to apply online, visit [go.mtu.ie/CRBACCE8](http://go.mtu.ie/CRBACCE8)

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**Duration & Delivery**
This is a two year programme.
Stage 1 is delivered 3 nights per week from 6pm – 10pm for two semesters.
Stage 2 is delivered over two semesters and two summers. Each semester in Stage 2 involves 2 nights per week 6pm – 10pm. Each summer session requires one night per week plus two Saturdays over a ten week period.

The programme will be delivered over 4 semesters and 2 summers commencing in September 2022 and finishing in August 2023.

**Aim**
The overall aim of the programme is to prepare graduates for a career in accounting and finance while also earning exemptions for the pursuit of a professional accounting qualification.

**Admission Requirements**

**Award**
Bachelor of Business (Honours) in Accounting (Level 8 on the National Framework of Qualifications).

**Progression**
Graduates with a Bachelor of Business in Accounting (Honours), with a H2.2 award or higher, may apply for MTU’s Taught Master of Business Administration (MBA) in Strategy. Graduates may also use their Exemptions to progress to the Professional Accountancy Bodies.

**Content**
- Advanced Management Accounting
- Financial Management Concepts
- Income Tax
- Single Entity and Group Accounting
- Integrated Accounting Systems
- Auditing – Regulation & Control
- Financial Management for Accountants
- Managing Human Capital
- BIS Management and Applications
- Management Accounting
- Business And IT
- Aspects of Employment Law

The principal areas of study in Stage 2 are:
- Strategic Management
- Advanced Financial Management
- Strategic Management Accounting
- Financial Reporting
- Auditing
- Taxation
- Corporate Governance
- Company Law

**ACCS**
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.
Certificate in Aviation Business

Duration & Delivery
The programme is offered on a part-time basis for one semester. Two modules per week for 15 week blocks (approx. 6 hours of contact in total per week) All classes are delivered fully online and all interactions with MTU are online. The course commences in January 2022 and all material is recorded and available for review after a class has occurred. This course is assessed solely by continuous assessment, with no final examinations.

Admission Requirements
Ideally candidates will have a Level 7 award in any discipline. Where students do not have such an award, they may avail of Recognition of Prior Learning (RPL) with experience in the aviation sector being considered positively.

Applicants will be expected to have an IELTS of 6.0 for English language proficiency (or equivalent) where deemed necessary by the Head of Department.

Aim
This programme provides a short immersion into aviation business and puts some emphasis on operations and projects in that arena. The modules provide suitable bridges to business knowledge for those from a non-cognate background. It is aimed at supporting training and education for professionals in the aviation sector and for those aspiring to work in the sector. This may include pilots, cabin crew, aircraft maintenance personnel, engineers, airport workers, and others.

Module Information
MTU 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.

- **MGMT8067 Aviation Business Environment (10 Credits)**
  This module explores the aviation business and its environment from the perspective of those that may have some exposure to that industry. The module looks at the strategic, tactical and operational aspects of the business while exploring trends and challenges. Key aspects of the aviation ecosystem are discussed including human resource management, risk management and aviation finance.

- **MGMT8068 Operation & Project Management (10 Credits)**
  Business Operations Management focused on Operations Strategy Development, and Business Process Improvement through Projects. This module will equip learners with the skills for analysing operations management from a strategic perspective and explore the core principles of the project management process to manage successful projects in light of international business requirements.

Award
Certificate in Aviation Business (20 ECTS, Level 8, on the National Framework of Qualifications).
BACHELOR OF BUSINESS
(HONOURS)

LOCATION
MTU Bishopstown
Campus, Cork

COURSE CODE
CR_BBUSN_8

COURSE FEE
€215 per 5 credit module
(inc. exam fee)

ENQUIRIES
John Meyler
T: 021 433 5335 / 5806
E: john.meyler@mtu.ie

Course & Module Information, and to apply online, visit go.mtu.ie/CRBBUSN8

Duration & Delivery
One academic year and one semester
Year 1: Monday night (mandatory) & one other evening per week, 6pm – 10pm
Year 2: (One semester only): Monday night (mandatory) & one other evening per week, 6pm – 10pm

Commencement Date
This course commences in September and further information can be found online. Early application is strongly advised as places are limited.

Aim
This programme has been designed to provide a balanced education through a critical study of the current dynamic and challenging business environment. It provides students with a broad-based business education helping students to develop personal and professional skills which will give graduates the confidence to pursue a successful business career, in Ireland or overseas. You will have the opportunity to study a variety of business subjects as indicated below. Case studies and practical business projects are used to develop students’ analysis, communication and professional business skills. This programme prepares students for employment in a wide range of business areas and management functions of industrial, commercial and public enterprises, or as a self-employed individual.

Admission Requirements
(a) Ordinary Bachelor Degree in Business; 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.

Content
The principle areas of study are:
Mandatory – each module carries 5 credits
Strategic Analysis
Strategic Selection
Financial Management
Corporate Finance
Business Ethics
Enterprise & Innovation

Electives (choose 6) – each module carries 5 credits
Business to Business Marketing
Sales Strategy Management
Workforce Diversity
International HRM
Business Metrics
IS Strategy and Planning

ACCS
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.

Award
Bachelor of Business (Honours) (Level 8 on the National Framework of Qualifications)

Progression
Graduates with an Honours Bachelor of Business with a H2.2 award or higher can apply for MTU’s Master of Business Administration (MBA) in Strategy.
HIGHER DIPLOMA IN BUSINESS IN SALES MANAGEMENT

LOCATION
MTU Bishopstown Campus, Cork

COURSE CODE
CR_BSMGT_8

COURSE FEE
€3,950

ENQUIRIES
Michael Falahee
E: michael.falahee@mtu.ie

Overview
The Higher Diploma in Business in Sales Management is a part-time one year 60 ECTS Major Award at Level 8 aimed at those working in or aspiring to sales management roles that have a foundation of experience in a sales environment.

Using innovative delivery teaching approaches the programme is a flexible undertaking for those with busy lifestyles. Incorporating online delivery that is supported by traditional classroom delivery, participants will have the opportunity to mix with their peers while also developing their knowledge in their own time. An innovative industry based Applied Project is undertaken which adds real value to the practitioner and their work environment while a flexible Seminar Series provides substantial networking exposure.

The programme has a constant practical real-world focus and lecturers will have extensive experience in a sales environment.

Aim
This programme serves two purposes; to enhance the critical thinking abilities, understanding of business and personal development avenues for the candidate, and also contributing value to the organisation of the participant through an injection of new ideas and more strategic thinking. The programme is focused on facilitating the development of the individual and the organisation.

Content

Mandatory
Effective Sales Techniques (10 Credits)
Organisational Sales Strategy (10 Credits)
Sales Seminar Series (5 Credits)
Sales & Marketing Finance (5 Credits)
Applied Sales Project (20 Credits)

Electives
Sales Force Management (5 Credits)
The Digital Environment (5 Credits)
Sales Ethics and Law (5 Credits)
International Selling (5 Credits)

Duration & Delivery

Semester 1
15 Wednesday evenings and 5 Saturdays

Semester 2
Two nights per week for 15 weeks.

Summer
In-work activity with supervision focused on the Applied Project

Admission Requirements
1. Candidates ideally should hold a Level 8 qualification in any discipline. Participants with such a qualification require 2 years’ experience in a role cognate to sales.
2. Candidates without a Level 8 qualification must be able to demonstrate sufficient relevant experience. Are you eligible for Recognition of Prior Learning (RPL)? For details, see the information section at the beginning of this Handbook.
3. Candidates will be required to undertake an interview at MTU before admission to the course.

Award
Higher Diploma in Business in Sales Management (Level 8 on the National Framework of Qualifications).
CERTIFICATE IN DESIGNING INNOVATIVE SERVICES

Duration & Delivery
4 Full Saturdays online
13 Tuesday evenings online
Next intake in February 2022 assuming minimum student numbers reached.

Admission Requirements
A H2.2 (or equivalent) in an Ordinary Degree in any discipline. Candidates without a Level 7 qualification must be able to demonstrate sufficient relevant experience to be considered for entry. A Personal Statement must be provided by the candidate demonstrating interest or competence in design thinking and or service design. Where required, candidates may be shortlisted and required to attend for interview.

Overview
The Certificate in Designing Innovative Services is a one semester (three months) part-time programme that is designed to provide the knowledge, skills and confidence required to work in the area of service design. The course will introduce the student to design thinking skills and to the key tools and methodologies for development of services.

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 designing services in any type of organisation. Participants will develop their analysis and design skills. On completion of this programme they will be attractive as potential designers of services across a range of industries. In particular these skills would be useful for those working within the local government arena where there is established demand.

The programme is structured to support those in full time employment. The first module Seminar Series in Design Thinking will be delivered online weekly. The second module Design Thinking for Services will have lectures with the theory content delivered online and the workshops will be delivered over 4 Saturdays. The workshops will be the more practical element of the course requiring students to use the tools and methodologies. The students will be able to use real world cases from their workplace for the applications of the tools and methodologies.

The programme will balance real world experience from experienced practitioners in the field who will present on the seminar series with supported learning on practical skills during the workshop sessions.

The seminar series module will use reflective journals for assessment. The other module will require students complete a project in service design incorporating information gathering, analysis and prototype development. This project can be from the student’s own workplace.

Content
Design Thinking for Services
This module aims to provide students with the necessary theoretical knowledge and practical skills to support the execution of a design thinking approach for the design of services. The modules addresses the role of team members, approaches for understanding users, research methods, prototyping, and presentation of findings.

Design Thinking Seminar Series
This module uses an innovative approach to explore the state of the art relating to design thinking from a variety of perspectives. Speakers from diverse organisations will present a series of guest lectures on overarching challenges and students will be tasked with reflecting on integrated problems across societal, environmental and business areas. The module provides students with critical insight into implementing service innovation strategies across a range of service and organisational contexts.

Award
On successful completion of both modules, graduates will receive a Certificate in Designing Innovative Services (Level 8, 10 ECTS, on the National Framework of Qualifications).
COURSE CODE
CR_BDIWP_8
(LEVEL 8)

CERTIFICATE IN DIVERSITY AND INCLUSION IN THE WORKPLACE

COURSE FEE
€1,500

ENQUIRIES
Mary Oldham
T: 021 4335900
E: mary.oldham@mtu.ie

Course & Module Information, and to apply online, visit go.cit.ie/course/CRBDIWP8

LOCATION
MTU Bishopstown Campus, Cork

PROGRAMME STRUCTURE
The programme is structured around three key modules, two at 5 ECTS (European Credit Transfer System), and one at 10 ECTS, which comprise the three central pillars of the programme.

Module 1
Diversity and Inclusion in Practice
This module explores the complexities of diversity and inclusion in the workplace, including, for example, the role of context, intent, and accountability. The module also explores the practicalities associated with diversity and inclusion. Examining the practicalities concerns the need to develop new, and review existing, policies, but also ensuring to take practical steps to ensure people feel comfortable in the work environment.

Module 2
Diversity and Inclusion in Practice
This module will provide learners with a sound understanding of the legal framework governing workplace equality and diversity. Particular emphasis will be placed on Employment Equality legislation which provides the foundation for equality throughout the employment life cycle. The module will begin by considering the sources of equality law. It will then focus on key legal principles of equality law and their application to a range of substantive legal issues pertaining to the workplace.

Module 3
Diversity Research Project
This module equips learners with the skills to identify Equality, Diversity and Inclusion (EDI) related problems and opportunities, and develop a research plan to explore the issues. Learners will engage in secondary and primary research to explore a research question, with a view to identifying ways to address EDI issues in the workplace.

Award
On successful completion of the three modules, graduates will receive a Special Purpose Award – Certificate in Diversity and Inclusion in the Workplace (Level 8, 20 ECTS)

Duration
Total tuition 64 hours in Semester 1, plus Supervision in Semester 2

This programme will be blended delivery in the coming academic year. While much of the lectures will take place online, students may be required to attend campus on a couple of occasions each semester and will have to attend on-campus for their final examinations at the end of each semester.

Who Should Apply?
Individuals who are seeking to improve their understanding of Diversity and Inclusion, and learn how to be practically inclusive in the organisation, while having the confidence to design appropriate training events and develop sound policies should apply for this programme.

Overview
The Level 8 Certificate in Diversity and Inclusion in the Workplace is a two semester (30 weeks) part-time programme that develops and equips students with the knowledge, skills and confidence required to successfully engage with diverse individuals, be inclusive in practical ways, and develop policies and training, all rooted in the context of best practice in inclusion and the legal framework. This will assist in leading teams, managing employees, mitigating risk and supporting organisational performance.

The programme uses a blend of discussion and exploration of real-world situations to assist participants in exploring diversity and inclusion in a safe and supportive environment.

The applied focus of the programme, coupled with relevant content delivery, provides a practical bedrock of knowledge.
CERTIFICATE IN DIGITAL MARKETING

Location
MTU Bishopstown Campus, Cork

Course Fee
€1,500

Enquiries
Online programme: Colm Smyth
E: colm.smyth@mtu.ie
On-campus programme:
Zahid Aslam
E: zahid.aslam@mtu.ie

Course & Module Information, and to apply online, visit online course:
go.mtu.ie/CRBDGMR8 or on campus course: go.mtu.ie/CRBDMRK8

Duration & Delivery
This course is available via two delivery methods – online and on campus. Both commence in September for a 15 week period (with a second intake likely in January). The online version is delivered over 3 weekday evenings per week, while the on campus version takes place at the Bishopstown campus on Tuesday evenings and an additional 3½ Saturdays.

Admission Requirements
Level 7 or Level 8 degree or relevant experience in an industry role. Candidates may be required to undertake an interview at MTU before admission to the course.

Overview
This is an intensive 15 week (1 semester) 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 real-world 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 variety of speakers drawn from the business world. A key tenet of this course is Authentic Assessment, and over 80% of marks for assignments are based around tasks that Digital Marketing Managers might be expected to perform.

Aim
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 environments.
3. To apply practical skills to ensure web and mobile platforms are optimised using SEO and content management strategies.

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. This module will focus on managing websites using technologies such as Wordpress, and practicing the principles of Search Engine Optimisation.

• 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.

Progression Opportunities
The Certificate in Digital Marketing is part of the Master of Science in Digital Marketing Strategy. Completion of this programme may, dependent upon prior experience and education, allow entry to Semester 2 of that Masters programme.
Duration
Two years. All classes are delivered fully online and all interactions with MTU are online. Classes are delivered at different times during the day and evening. Given the nature of a pilot’s work, there is no set time that suits all. All material is recorded and available for review immediately after a class has occurred.

Admission Requirements
- Successful completion of a frozen ATPL and associated Training.
- Submission of an appropriate Entry Learning Portfolio*.
- Applicants will be expected to have an IELTS of 6.0 for English language proficiency (or equivalent) where deemed necessary by the Head of Department.

*The Entry Learning Portfolio will capture the formal and informal learning of the applicant in a short portfolio that will be focused on assessing each student’s ability to cope with the type of learning associated with a level 8 programme. The Entry Learning Portfolio will therefore include:

- Documentary evidence of qualifications
- Extended CV
- Reflective log on learning to date

Overview
The two-year programme recognises the learning involved in becoming a pilot and builds upon it with two years of study of business topics that may be valuable in career progression and mobility. The programme content is focused on broad business principles and issues with a slant on international business. The modules on the programme are very structured and are delivered by experienced lecturers who are conscious that a pilot’s working life is challenging.

Delivery
Two modules per week for 15 week blocks (approx. 6 hours of lectures/content/contact in total per week)
- Semester 1 & 4: September – January (break for Christmas)
- Semester 2 & 5: January – May (break for Easter)
- Semester 3 & 6: June – August

Career Opportunities
Beyond the roles within the aviation industry graduates of this programme would find employment in other industries given the skillset developed in this programme. Given the significant level of advanced business learning that the students will have undertaken the programme prepares students for a variety of roles. Coupled with their life skills and competences, graduates of this programme will be attractive in the jobs market.

The following roles within various sectors would be well within grasp:

- Supply Chain and Logistics Operational Staff
- Purchasers/Buyers
- Business Development Representatives
- Project Managers
- New Product Development
- Marketing
- Operations Team Supervision and Management
- Service Managers
- Business Planning
- International Selling
- Recruitment
- Business Analyst

Award
Bachelor of Arts (Honours) in International Business with Aviation Studies (Level 8 on the National Framework of Qualifications).
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
Semester 1 & 2 – Tuesdays & Thursdays 6pm – 10pm. Please note that students are required to attend lectures and workshops 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.

Admission 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.

Award
Bachelor of Arts (Honours) in Human Resource Management (Level 8 on the National Framework of Qualifications).

Course & Module Information, and to apply online, visit go.mtu.ie/CRBHRMN8

Content
All modules are worth 5 credits (ECTS) unless otherwise noted.

Semester 1
Consultancy and Research
Organisational Development
Business Finance
eHRM
Occupational Psychology

Semester 2
Managing an International Workforce
Negotiation
Emerging Markets & Trends
Corporate Strategy Implementation
Concept Acquisition

Consultancy Project, completed over the full academic year. 10 credits (ECTS)
INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS IRELAND (CPA)

LOCATION
MTU Bishopstown Campus, Cork

COURSE FEE
€395 per subject (Includes notes & revision)

ENQUIRIES
Ann Marie Twomey
T: 021 433 5900
E: annmarie.twomey@mtu.ie

INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS IRELAND (CPA)

CR_BCPAC_8
(LEVEL 8)

Course & Module Information, and to apply online, visit go.mtu.ie/CRBCPAC8

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 accepting a place on this course, students are reminded to ensure that they have clearly understood all the terms of their enrolment with MTU, 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.

Content
Professional
Financial Reporting
Managerial Finance
Advanced Taxation
Corporate Law
Audit & Assurance
Performance Management

Strategic
Advanced Financial Reporting (Mandatory)
Strategy & Leadership (Mandatory)
Data Analytics for Finance (Elective)*
Advanced Tax Strategy (Elective)**
Advanced Audit & Assurance (Elective)**
Strategic Corporate Finance (Elective)

*Data Analytics for Finance will be delivered online by CPA Ireland.

**MTU will deliver two elective modules at Strategic level
1. Advanced Audit & Assurance and

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
1st December 2022 for April 2023 Exams
1st June 2023 for August 2023 Exams

Exam Registration Closing Date(s)
1st March 2023 for April 2023 Exams
1st August 2023 for August 2023 Exams

Awarding Body
Institute of Certified Public Accountants in Ireland

Commencement Date
September 2022
The running of this programme will be dependent on a sufficient number of students enrolling on the course. The programme may be withdrawn if this requirement is not fulfilled.

CPA Institute contact details
Examination queries: Arran Feery
T: 01 4251021 E: afeery@cpaireland.ie

Registration and exemption queries for new students:
Adam O’Reilly
T: 01 4251057 E: aoreilly@cpaireland.ie/hello@cpaireland.ie
Course & Module Information, and to apply online, visit go.mtu.ie/CRBLEAD8

Duration
One semester (six months) part-time programme.

Participants will attend classes for two full days per month (totalling 12 days). Some classes will be delivered in MTU, while others will be delivered on-site.

Admission Requirements
Applicants will be expected to have a Level 8 degree in a technical, non-business discipline.

Overview
This is a one semester (six months) part-time programme that is designed to provide the knowledge, skills and confidence required to successfully manage teams in a manufacturing environment. The programme uses an innovative blend of real-world situations and problems to assist participants in exploring the opportunities of the manufacturing 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 theories and concepts that will develop their skills and competencies, in an applied context, developing a toolbox of skills that is valuable and readily usable and which will lead to improved team performance in a working environment.

The programme is structured to ensure that participant’s time is used wisely and entails a wide variety of leadership development tools. A phased approach, consisting of a series of lectures, facilitated workshops and work-related projects will be used to ensure that the programme is relevant, engaging and enjoyable.

The teaching methods that will be employed on the course will draw upon the experiences of learners to illustrate key learning points and to bring concepts, theories and frameworks to life.

The live case study method will be a consistent feature throughout the programme. This practical, applied approach to teaching methodology will be underpinned by assessment instruments, and the practical application of best-practice theory to analyse the environment in which the learners work.

Content
Three modules (each at 5 ECTS, Level 8)

Effective Leadership – This module explores leadership styles, motivation, change management, communication and impact.

Driving Team Performance – This module considers project management, problem solving and performance management. The module will include the use of live case studies from the employer sponsor.

Leadership Management – leadership principles, developing high-performance teams, coaching and mentoring, and employee legislation will be considered in the context of this module.

Assessment Strategy
The programme will make extensive use of reflective logs, together with a cross-modular project, report and presentation, in teams. Students will build on their experience and learning gained on the programme, to develop their leadership style and hone techniques and skills that will inform their best-practice application.

Award
On successful completion of the three modules, graduates will receive a Special Purpose Award – Certificate in Leadership Development (Level 8, 15 ECTS).
This programme aims to allow participants to develop their leadership mind-set so that they lead others and in turn help them to develop their leadership mind-set. It is about ‘leading as you preach’ and uses a number of innovative learning practices, including outdoor learning, to stimulate the leadership mind-set in self. Time will be provided to reflect on and to build strategies for both individual and corporate wellness and to lead on same.

Participants learn how to lead by example and with an empathy for those whom they lead. This programme will allow participants to identify a leadership style that promotes leadership qualities and behaviour both in themselves and amongst their peers and colleagues. It will provide experiential learning opportunities that will develop and enhance the participant’s attitude to new opportunities, enabling them to lead their team effectively through change in a transformational manner. This requires the ability to examine methods of organisational analysis and diagnosis, and to develop diverse frameworks for understanding, implementing and leading change in organisations.

Change is necessary to progress any organisation. It can be a transformational experience for all. It can cause doubt in a team to achieve, or to continue to achieve success in their new environment. Participants will learn how to identify these concerns, assisting their management and leadership of a successful solution. The programme will require all participants to evaluate their action plans towards the optimum solution in different situations. All will benefit from real-time simulation of leadership scenarios common to many organisations and learn how to navigate and lead a team through these scenarios. Participants on the programme will practice peer learning and support by learning from and through each other. All participants will have the opportunity to provide sustainable leading opportunities and solutions for themselves, colleagues and their organisations by developing and implementing applied leadership strategies in an organisation of choice. The sustainability of their solutions will be enhanced through the application of their acquired people performance and management skills and techniques from this programme.

**CERTIFICATE IN LEADERSHIP AND TRANSFORMATIONAL CHANGE**

**Location**

Online

**Credits**

15

**Award Type**

Special Purpose Award

This programme will be delivered online part-time from September 2022 to May 2023.

**Entry Requirements**

Applicants must hold a minimum of an NFQ level 7, or equivalent qualification, in a related area. The University’s policy in relation to recognition of prior learning (RPL) also applies.

**Modules**

- Leadership Mindset
- Leading Transformational Change
- People and Performance Management

**Progression Opportunities**

On successful completion of the programme students will have gained 15 credits at NFQ level 8 which may contribute to the achievement of other academic awards.

**Cost**

Fees do not apply to applicants who meet the Springboard+ initiative funding criteria (see https://springboardcourses.ie/eligibility). For employed applicants the HEA will pay 90% of the programme fee, the remaining 10% – €110 will be payable before registration. For applicants who do not meet the Springboard+ eligibility criteria the fee is €1,100.

**Closing date for applications**

22nd July 2022

**For further information contact**

Lifelong Learning Office

E: parttimekerry@mtu.ie

T: 353 (0)66 719 1701
Admission Requirements:
The minimum academic entry requirements for students to be accepted on the Certificate (Level 8) in Regulated Investment Funds are as follows:

a) Applicants must hold at least a Level 7 qualification in business/finance/economics/IT.
b) Students holding a non-business/IT honours degree of the type listed above are eligible to apply. Applicants may be asked to attend an advising interview. These applicants will need to provide evidence that they possess numeracy and IT skills.
c) Students without a Level 7 qualification may qualify under RPL as per academic guidelines on RPL.
d) Those who do not speak English as a first language must meet the MTU requirements for postgraduates in IELTS or equivalent. This programme resides in the School of Business of both institutions (this can be important when determining the appropriate English language competency criteria to apply).

Springboard also imposes its own additional requirements for entry in relation to employment status and other matters.

Duration & Delivery:
The indicative delivery model for the Certificate in Regulated Investment Funds for the 2022/23 is that the course will be delivered online during the evening, over two semesters (one year). The programme comprises 4 modules. Two modules will be delivered in semester one over one evening (6pm to 10pm) with the two remaining modules be delivered semester two over one evening (6pm to 10pm).

All of the examinations will be on-campus, these may be during daytime hours at the Cork Campus of MTU.

Overview:
The Certificate in Regulated Investment Funds, a consortium programme developed between SETU and MTU. The Certificate is primarily targeted for recent graduates and brand new entrants to the Irish funds industry and aims to enable participants to:

• Prepare investment fund financial statements and NAV calculations for a variety of fund types.
• Interpret the principles and provenance of investment fund regulation.
• Discuss the role of governance in the oversight of investment funds.

The programme will be delivered online, one evening per week. The programme will provide candidates with insights into some of the core elements of the operation of regulated investment funds in Ireland.

Module Content:
• Fund Accounting
• The Investment Fund Industry
• Advanced Fund Accounting
• Essentials of Fund Regulation

Award
Upon completion, candidates will be awarded a 20 credit level 8 Certificate in Regulated Investment Funds.

Further information
Please visit https://springboardcourses.ie/details/10460

Cost
Fees do not apply to applicants who meet the Springboard+ initiative funding criteria (see https://springboardcourses.ie/eligibility). For employed applicants the HEA will pay 90% of the programme fee, the remaining 10% – €150 will be payable before registration. For applicants who do not meet the Springboard+ eligibility criteria the fee is €1,500.
CERTIFICATE IN SALES STRATEGY AND TECHNIQUES

LOCATION
MTU Bishopstown Campus, Cork

COURSE FEE
€1,300

ENQUIRIES
Michael Falahee
E: michael.falahee@mtu.ie

COURSE CODE
CR_BSSTE_8
(LEVEL 8)

Course & Module Information, and to apply online, visit go.mtu.ie/CRBSSTE8

Duration
15 weeks, i.e. 12 Wednesday evenings and 5 Saturdays between September and December.

Admission Requirements
All candidates need to be working in a sales related role.

Overview
This programme aims to fortify the Sales Professional's understanding of sales strategy and techniques integrating their experience with best academic knowledge. This short course is ideal for anyone in the sales industry who is looking to gain some insight on how they can improve their own and their organisation's sales strategies. Delivered by experts with exceptional industry experience the programme looks at how to improve sales strategies across various industries. The classroom environment is designed for those in sales roles and endeavours to ensure peer and expert learning.

Content
Organisational Sales Strategy (10 credits)
This module aims to impart to the student the importance of understanding how consumers and organisations purchase in order for sales people to successfully develop strategies to positively influence the purchase decision. Leading from this, students gain an understanding of the wider organisational perspectives on sales strategy and sales management issues. On successful completion of this module, the student will be able to

• demonstrate factors central to decision making in B2C and B2B situations.
• develop an effective marketing and sales strategy in the context of a thorough knowledge of consumer and organisational buying behaviour.
• examine the role of sales in the context of the wider organisation.
• develop a strategic and results driven approach to organisational selling and sales channel management.

Effective Sales Techniques (10 credits)
In this module, students develop an understanding of the role and functions of the salesperson and the key skills needed to be a professional sales person. How to take a strategic and planned approach and how to develop long term consultative relationships with customers.

On successful completion of this module, the student will be able to

• critically assess the functions of a professional sales person.
• evaluate effective sales strategies in a range of organisations
• develop a strategic and goals driven approach to selling sales prospecting and planning.
• assess the management of sales relationships within the framework of medium/long term sales strategy.
• develop a strategy to integrate sales and marketing activities
• conduct a consultative sales presentation.
• explore the preparation required for a move from sales representative to sales management.

Award
On successful completion of both modules, students will be awarded a Certificate in Sales Strategy and Techniques (20 ECTS, Level 8 on the National Framework of Qualifications)
**Master of Science in Applied Accounting**

**Location**
MTU Bishopstown Campus, Cork

**Course Fee**
€5,000 per year. Programme duration is two years.

**Enquiries**
Don Crowley
T: 021 433 5900
E: opd@mtu.ie

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**Course & Module Information, and to apply online, visit go.mtu.ie/CRBAACC9**

**NB:** For students pursuing the CPA qualification and Masters programme, an annual payment of €500 to CPA Ireland will apply. This fee will cover, exemptions, student membership of CPA Ireland and all associated exams.

The MSc in Applied Accounting takes students through a combination of taught modules, self-directed learning and work based learning, achieving a level of advanced understanding and practical application in accounting. It will be offered over a two year period, with students attending MTU on two evenings per week, 6pm – 10pm, during each academic year. Upon successful completion of the programme, graduates will be eligible for the award of MSc in Applied Accounting. The students will have one further year of training with their employer, after which they will be eligible to apply for membership of CPA Ireland.

**Content**

**Year One**

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<thead>
<tr>
<th>Modules - Full Academic Year</th>
<th>Semester One Modules</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Advanced Financial Reporting (SL)</td>
<td>Strategic Corporate Finance</td>
<td>5</td>
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<tr>
<td>Strategy &amp; Leadership (SL)</td>
<td>Communications &amp; Professional Development</td>
<td>5</td>
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<tr>
<th>Semester Two Modules</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Research Methods</td>
<td>5</td>
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</table>

**Year Two**

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</tr>
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<tbody>
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<td>Data Analytics &amp; Strategy</td>
<td>5</td>
</tr>
<tr>
<td>Advanced Tax Strategy (SL)</td>
<td>Semester Two Modules</td>
<td>20</td>
</tr>
</tbody>
</table>

| Accounting Inquiry (Research) | 10 |

**Professional Level – Tuesday & Thursday**

Managerial Finance
Financial Reporting
Corporate Law
Audit & Assurance

**Strategic Level (SL) – Monday & Thursday**

Strategy & Leadership (M)
Advanced Audit & Assurance (E)
Advanced Financial Reporting (M)
Advanced Tax Strategy (E)

**Entry Criteria**
The typical candidate will have a Level 8 Honours Degree in Accounting at grade H2.2 or above, along with exemptions up to and including Professional Level from CPA Ireland. An international student must also have an IELTS of 6.5 or above to be considered for entry to this Masters. Candidates that do not have the appropriate undergraduate degree may still be considered for admission to this Masters under exceptional circumstances if, for example, they have secured the Professional Level CPA Ireland suite of exams and have appropriate work experience.

**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**
1st December 2022 for April 2023 Exams
1st June 2023 for August 2023 Exams

**Exam Registration Closing Date(s)**
1st March 2023 for April 2023 Exams
1st August 2023 for August 2023 Exams

**Awarding Body**
The Institute of Certified Public Accountants in Ireland
Munster Technological University

**Commencement Date**
September 2022
The running of this programme will be dependent on a sufficient number of students enrolling on the course. The programme may be withdrawn if this requirement is not fulfilled.

**CPA Institute contact details**

**Examination queries:** Arran Feery
T: 01 425 1021 E: afeery@cpaireland.ie

**Registration and exemption queries for new students:** Adam O’Reilly T: 01 4251057
E: aoreilly@cpaireland.ie/hello@cpaireland.ie
CERTIFICATE IN APPLIED ANALYTICS FOR BUSINESS

LOCATION
Online and
MTU Bishopstown
Campus, Cork

COURSE FEE
€1500

ENQUIRIES
Mick O’Callaghan
T: 021 433 5900
E: mick.ocallaghan@mtu.ie

Course & Module Information, and to apply online, visit go.mtu.ie/

Total Tuition – 78 hours
This programme will be blended delivery in the coming academic year. While most of the classes will take place online, students may be required to attend campus on a couple of occasions each semester for their final examinations at the end of each semester.

Who should apply?
For employees in all aspects of business, one of the new keys to success, in a data-driven world, is having the skills and knowledge to effectively analyse and interpret the data in your environment. While the demand for data science specialists will continue to grow, data touches most other roles, and almost all employees require some level of data literacy.

The programme is suitable for a wide range of learners including:
1. Team members and operational staff who constantly interact with data and need professional data literacy skills to enable them to handle, interpret, and communicate data to support innovation, strategy development and data-driven decision making.
2. Business leaders who need upskilling in data governance, ethics and technologies so that they can interact with data specialists most effectively.
3. New graduates who require strong professional skills in data analysis, management, communication and visualisation, as well as an understanding of the business context, strategic use of data, and work readiness skills for a commercial environment.
4. Returners to work who want to reskill for careers in data analytics.

Industry Background
The programme is applicable to all industries. Participants may be public or private sector employees or entrepreneurs.

Educational Requirements
We would suggest that applicants ideally have a Level 8 qualification in any discipline; however, applicants with significant work experience will also be considered and are eligible for our recognition of prior learning process.

Module Overview
Course delivery, as well as course assessment, is linked to the stages of the CRISP-DM Data Mining Process.

Module Assessment
Course assessment is also linked to the stages of the CRISP-DM Data Mining Process. All programme assessments involve the practical application of data analysis techniques to real datasets. Programme participants can choose to work on a dataset supplied by the university or, alternatively, select a suitable dataset from their own work environment.

Award
On successful completion of the course, graduates will receive a Special Purpose Award – Certificate in Applied Analytics for Business (Level 9, 10 ECTS)
**MBA WITH AVIATION MANAGEMENT**

<table>
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<tr>
<th>LOCATION</th>
<th>COURSE FEE</th>
<th>ENQUIRIES</th>
</tr>
</thead>
</table>
| Online   | €12,500 in six instalments | Riona Flood  
E: riona.flood@mtu.ie |

**Overview**
The MBA with Aviation Management is a two-year, part-time programme offered to those working within the aviation sector. The programme is designed to allow participants to develop a deeper understanding of certain aviation related topics while also developing their general business understanding. This MBA places an emphasis on the broad aviation sector and examines the challenges relating to aviation business models, regulation, aviation leasing and emerging technologies. It also explores, through general business modules, the opportunities afforded through strategy and leadership in helping a business to grow and develop. The programme has been designed with input from a strong range of industry leaders drawn from the aviation sector.

**Duration & Commitment**
The weekly commitment required each week during term time ranges 8-10 hours of class contact time in Semester 1, 2 and 3. Outside of this students will be expected to do some independent work and reading. Assessments will also need to be completed according to a schedule published at the start of each semester. A part-time MBA is demanding, but it is designed to be completed in the time frame allocated to it. The programme is delivered fully online and there is no requirement to be on campus at any stage. Classes will be scheduled primarily at evening time. All material is recorded and available for review subsequently.

**Admission Requirements**
- Applicants will have a Level 8 Major Award (or equivalent) in any area.
- Applicants must have considerable work experience in the aviation sector or currently be employed in an airline, airport or a strongly related business.
- All candidates must meet minimum levels of English Language proficiency in line with University Policy.
- The University’s Recognition of Prior Learning Policy can be applied for candidates without a Level 8 Qualification. An applicant without such a qualification will be expected to have substantial business exposure as part of their experience.

**Delivery**
3 or 4 modules per week for 13 week blocks (approx. 8 hours of lectures/content/contact in total per week)  
Semester 1 & 3: September – December (break for Christmas)  
Semester 3: January – May (break for Easter)  
Semester 4: Thesis – independent supervised work from January to August

**Career Opportunities**
Beyond the roles within the aviation industry graduates of this programme would find employment in other industries given the skillset developed in this programme. Given the significant level of advanced business learning that the students will have undertaken the programme prepares students for a variety of roles. Coupled with their life skills and competences, graduates of this programme will be attractive in the jobs market. We envisage specific opportunities in the aviation sector in areas relating to logistics, commercialisation, business development, leadership, operations and HR.

**Award**
Masters in Business Administration with Aviation Management (Level 9 on the National Framework of Qualifications).  
Closing date for application August 31st

Course & Module Information, and to apply online, visit [go.cit.ie/CRBAVMA9](http://go.cit.ie/CRBAVMA9)
CERTIFICATE IN CORPORATE STRATEGY IMPLEMENTATION

COURSE CODE
CR_BCSIM_9
(LEVEL 9)

LOCATION
Online and MTU Bishopstown Campus, Cork

COURSE FEE
€900

ENQUIRIES
Dr Anne Crowley
T: 021 4335900
E: anne.crowley@mtu.ie

Course & Module Information, and to apply online, visit go.cit.ie/course/CRBCSIM9

Total Tuition – 39 hours
This programme will be blended delivery in the coming academic year. While much of the lectures will take place online, students may be required to attend campus on a couple of occasions each semester and will have to attend on-campus for their final examinations at the end of each semester.

Who should apply?
Organisations
Who wish to provide professional development and upskilling for existing or potential management staff or those seeking to progress into those roles. However, all staff members in an organisation will benefit from understanding the strategy process and the challenges with implementation.

Individuals
Who wish to expand their experience in strategy development and implementation. The programme can provide further depth to business students strategy knowledge and complementary core business knowledge to non-business graduates.

Industry Background
The programme is applicable to all industries, including social enterprise and the charity sector. Participants may be public or private sector employees or entrepreneurs. All organisations need a strategy and need to know how to implement it.

Educational Requirements
We would suggest that applicants ideally have a Level 8 qualification in any discipline; however, applicants with significant work experience will also be considered and are eligible for our recognition of prior learning process.

Overview Of Programme
The programme consists of one ten credit module – Corporate Strategy Simulation.

Module Overview
The module will develop students knowledge and understanding of strategic analysis models by completing a business situational analysis and developing a proposed implementation plan. Students will then follow their strategic plan across several cycles of a strategy simulation. Students working in groups will experience challenging and dynamic board room discussions, developing their corporate strategy knowledge and soft skills. The reflective assessment elements of the module reinforce student learning ensuring lessons are learnt from all decisions made.

Programme Features
- Interactive
- Reflective Learning
- Action Learning

Enhanced Employability Competences
Programme design is based on research showing the benefit of strategy simulations to participants employability competences. Some of the competences shown to benefit from the use of simulations include

- Decision Making
- Organisational skills
- Analytical Skills
- Communication skills
- Business Acumen
- Teamwork
- Cultural awareness

Award
On successful completion of the course, graduates will receive a Special Purpose Award – Certificate in Corporate Strategy Implementation (Level 9, 10 ECTS)
MASTER OF SCIENCE IN DIGITAL MARKETING STRATEGY

Overview
Over the last few years, more and more companies have shifted their marketing budgets towards Digital Marketing. With this trend set to continue, and an ever-widening set of tools available, MTU offers an innovative MSc in Digital Marketing Strategy. MTU has developed a strong track record in providing short Digital Marketing programmes over the last few years and has found the level of expertise and insight developed through such programmes to be unparalleled.

The programme is aimed at those working in traditional and digital marketing or those aspiring towards a senior position that requires a solid foundation in multiple aspects of Digital Marketing. Progress through the programme is designed to carefully develop essential skills to a point of expertise in the context of an overall strategic perspective.

MTU’s panel of lecturers has substantial commercial experience, and is drawn from a range of local, national and international companies that lead the way in digital marketing.

This innovative Masters programme will deliver students who are at the forefront of knowledge pertaining to digital marketing strategy and digital leadership.

All assessment is by project work, reports and similar mechanisms; there are no final terminal exams.

Admission Requirements
1. Candidates ideally should have attained at least a H2.2 degree in a cognate area (an area related to business, media or visual communications).
2. Degree-holders from non-cognate areas will be considered provided that these candidates can demonstrate significant relevant industrial experience.

Duration
Part-time: 4 semesters at the MTU Bishopstown Campus. Also available as an online programme.

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2. Degree-holders from non-cognate areas will be considered provided that these candidates can demonstrate significant relevant industrial experience.

Overview
Over the last few years, more and more companies have shifted their marketing budgets towards Digital Marketing. With this trend set to continue, and an ever-widening set of tools available, MTU offers an innovative MSc in Digital Marketing Strategy. MTU has developed a strong track record in providing short Digital Marketing programmes over the last few years and has found the level of expertise and insight developed through such programmes to be unparalleled.

The programme is aimed at those working in traditional and digital marketing or those aspiring towards a senior position that requires a solid foundation in multiple aspects of Digital Marketing. Progress through the programme is designed to carefully develop essential skills to a point of expertise in the context of an overall strategic perspective.

MTU’s panel of lecturers has substantial commercial experience, and is drawn from a range of local, national and international companies that lead the way in digital marketing.

This innovative Masters programme will deliver students who are at the forefront of knowledge pertaining to digital marketing strategy and digital leadership.

All assessment is by project work, reports and similar mechanisms; there are no final terminal exams.

Admission Requirements
1. Candidates ideally should have attained at least a H2.2 degree in a cognate area (an area related to business, media or visual communications).
2. Degree-holders from non-cognate areas will be considered provided that these candidates can demonstrate significant relevant industrial experience.

Overview
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This innovative Masters programme will deliver students who are at the forefront of knowledge pertaining to digital marketing strategy and digital leadership.

All assessment is by project work, reports and similar mechanisms; there are no final terminal exams.

Admission Requirements
1. Candidates ideally should have attained at least a H2.2 degree in a cognate area (an area related to business, media or visual communications).
2. Degree-holders from non-cognate areas will be considered provided that these candidates can demonstrate significant relevant industrial experience.
**Overview**
This innovative online MSc in Fintech Innovation will equip graduates with critical insights into Fintech across the key pillars of finance, technology and innovation. It meets the needs and contributes significantly to future proofing the financial operations across all domains including the financial services sector itself. Digital technologies and developments are continuing to influence transformation in business and operational models. Knowing your customer (KYC) is central to these models, embracing key innovative tools such as data analytics, design thinking, sprints, development operations and UX. This has created a growing demand for talent with the ability to transcend knowledge domains in finance, innovation and technology. This flexibility is required to support inter-and multi-disciplinary innovation teams to work with agility. This leads to the development of products and services for B2B, B2C or new hybrid products and services reaching the market. Participants also have the opportunity to engage with and learn from our industry partners through our panel of Emerging Technology Series of Thought Leaders.

**Modules**
- Digital Transformation
- Service Design for Financial Strategy
- Data Analytics in Fintech
- Financial Information Analysis
- Leveraging Cloud Technologies
- Innovating through an Entrepreneurial Mind-Set
- Development Operations for Process Management
- Organisational Culture & Leadership
- Financial Service Regulation
- Research Methods and Consultancy Project

**Electives**
- Cyber Security
- OR Management Law

**Progression Opportunities**
On successful completion of the programme students may progress to PhD studies.

**Cost**
Candidates will be eligible for part-funded fees of €1,995 per annum, provided they are working in a private or commercial semi-state organisation registered in the Republic of Ireland.

**Closing date for applications**
2nd September 2022

**For further information contact**
E: parttimekerry@mtu.ie
T: 353 (0)66 719 1701
Master of Arts in Human Resource Management

Course & Module Information, and to apply online, visit go.mtu.ie/CRBHRMN9

Duration & Delivery
Stage 1/Semester 1 & 2, and Stage 2/Semester 1 – Mondays & Wednesdays, 6pm – 10pm, with occasional Saturdays.
Stage 2/Semester 2 – Dissertation (supervision dates to be advised).

Master of Arts in Human Resource Programme is also delivered full-time over the course of one academic year.

Places are limited. Applications are assessed on a first come, first served basis.

This programme will be blended delivery in the coming academic year. While much of the lectures will take place online, students may be required to attend campus on a couple of occasions each semester and will have to attend on-campus for their final examinations at the end of each semester.

Admission 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 a grade H2.2 and a minimum of 20 credits of HRM modules or HR experience may also be eligible. The programme is offered on a modular basis and requires learners to attain 90 credits.

All applicants whose first language is not English must provide evidence of English language proficiency (IELTS score of at least 6.0). English language tests must be undertaken no more than two years prior to the start of the programme.

Overview
This programme allows graduates to apply for advanced level membership of Chartered Institute of Personnel and Development, CIPD, and will aid them as their career progresses to strategic roles in organisations.

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 Human Resource discipline who wish to further their career and enhance their skillset.

Award
Master of Arts in Human Resource Management (Level 9 on the National Framework of Qualifications).

Content
All modules are worth 5 credits (ECTS) unless otherwise noted.

Stage 1/Semester 1
International Corporate Strategy
Professional Employment Law
HRM in Context
Coaching and Mentoring (4 Saturdays)

Stage 1/Semester 2
Applied Corporate Strategy
Employee Engagement
Leading, Managing & Developing
Training & Knowledge Management

Stage 2/Semester 1
Research Methods
Reward & Incentive Management
Performance Management
Sourcing & Testing

Stage 2/Semester 2
HRM Dissertation (30 credits)
Overview
This Masters programme has been developed in conjunction with the funds industry and is for early to mid-stage career professionals in the industry who are ambitious to develop their careers further.

The investment fund administration sector is characterized by very well qualified individuals who have deep specialist knowledge of their area of expertise. This programme provides participants with the opportunity to broaden their knowledge of the industry and acquire skills that will assist them as they assume management and leadership roles in their careers.

The programme is a unique mix of professional development and sector specific knowledge that will help you to advance your career. The programme offers the flexibility of online learning with the benefit of an on-site experience also. This allows participants to develop their own personal network within the industry and develop their team and organisational skills through group assessments.

The programme comprises a blend of modules including:
- management development
- aspects of the funds industry
- technology
- critical thinking & analysis

These are the types of modules that will enhance your knowledge of the industry and develop key skills to allow your career to thrive in an increasingly more complicated world.

Admission Requirements
Applicants who have a minimum of Level 8 qualification in business/finance/economics/IT/Law or an approved equivalent qualification are eligible to apply for entry to the programme. The programme is offered on a modular basis and requires learners to attain 90 credits. Additionally, candidates would ideally have at least 12 months’ work experience within the investment fund sector.

If you do not have a level 8 honours degree then it is possible that you may be eligible if you can provide evidence of a broader portfolio of training, learning and experience. This process is call RPL (recognition of prior learning) and we at MTU can help you navigate these processes.

All applicants whose first language is not English must provide evidence of English language proficiency (IELTS score of at least 6.0). English language tests must be undertaken no more than two years prior to the start of the programme.

Duration and Delivery
The Master of Business (MBus) in Investment Fund Administration will be delivered on a part-time basis over two and a half years. The programme will be delivered as a blended online and on-site programme, with some weeks to be delivered on-site at the Cork campus of MTU.

Module Content
The Funds Industry modules
- Contemporary issues in the Funds Industry
- Regulation of Investment Funds
- Governance of Investment Funds
- Fund Reporting and Risk Management

Management Development modules
- Strategic Leadership
- Managing People
- Professional Development
- Managing Technological Change

Critical Thinking and Analysis modules
- Data Analytics and Statistics
- Critical Thinking with Statistics
- Asset Management Techniques
- Principles of Financial Regulations

Research Modules
- Finance Research Methods
- Work-Based Project
- Applied Investment Fund Project

Award
Upon completion, candidates will be awarded a level 9 Master of Business in Investment Fund Administration. The programme also has an embedded award structure (for more information on this, please contact us at the Enquiries email address above).
Aim

The aim of the MBA in Strategy is to enable learners to develop their leadership and strategic management skills, thus raising their individual performance and assisting their organisations achieve success. The MBA enables the learner, as a professional, to review their leadership and management style and identify how they can improve upon same to increase their effectiveness at a senior level in the workplace. The programme allows learners to develop an appreciation of the interconnectedness of all aspects of the organisation, and an appreciation of the role each function must play in delivering on organisational goals. For most learners, moving to a strategic role in their organisation requires an understanding of functions outside of their existing professional competence together with an expert command of the strategic management.

Admission Requirements

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

All applicants whose first language is not English must provide evidence of English language proficiency (IELTS score of at least 6.0). English language tests must be undertaken no more than two years prior to the start of the programme.

Places are limited. Applications are assessed on a first come, first served basis.

Content

Stage 1/Semester 1
• Research Methods
• Exploring Corporate Strategy
• Applied Business Finance
• Leadership & Organisational Behaviour

Stage 1/Semester 2
• Economics of Global Markets
• Global Business Strategy
• Contemporary Issues in Marketing
• IT & Analytics for Business

Stage 2/Semester 1
(One Mandatory and One Elective – 10 ECTS)
• International Business Field Trip (Mandatory)
• Operations Strategy (E)
• Innovation & Creativity (E)
• Organisational Change Management (E)
• Strategic Corporate Finance (E)
• Services Marketing Management (E)

Stage 2/Semester 2
• Research Dissertation

Duration & Delivery

• Two part-time academic years (4 semesters)
• Each semester is of 15 week duration (including examinations).
• Presentation of course consists of lectures, tutorials, case studies, visiting lectures, and site visits.

Stage 1/Semester 1 – Wednesday & Friday
Stage 1/Semester 2 – Wednesday & Friday
Stage 2/Semester 1 – Wednesday & Friday
Stage 2/Semester 2 – Research Thesis

Time: Wed 6pm – 10pm; and Fri 3pm – 8pm.

This programme will be blended delivery in the coming academic year. While much of lectures will take place online, students may be required to attend campus on a couple of occasions each semester and will have to attend on-campus for their final examinations at the end of each semester.

Award

Master of Business Administration (MBA) in Strategy (Level 9 on the National Framework of Qualifications).
SOCIAL SCIENCES AND EDUCATION

Level 6
Aistear through Outdoor Learning
Aistear through Physical Education
One Year Certificate in Counselling Skills
Higher Certificate in Arts in Counselling Skills
Certificate in Irish Sign Language

Level 7
Child and Family Law

Level 8
Bachelor of Arts (Honours) in Counselling & Psychotherapy
Inclusive Education
Gaeilge don Ghairm

Level 9
Master of Arts in Integrative Psychotherapy
Master of Arts in Play Therapy
The Aistear through Outdoor Learning module adopts an approach of “living the curriculum” in which participants will engage in the type of learning activities we would wish for our children: exploring the sensory aspects of “being outdoors”, connecting with the natural environment, practising outdoor pedagogy and risk management and enjoying the experience. Assessment includes a portfolio of artefacts developed during the module and an assignment linking outdoor learning to Aistear and Síolta. This module is relevant to all educators who wish to develop competence and confidence in learning outdoors with children.

### Duration
This module will be delivered in a blended format part-time from September 2022 to December 2022.

### Entry Requirements
Applicants should ideally be working, or have a keen interest, in the Early Childhood Education and Care (ECEC) sector.

### Module
- Aistear through Outdoor Learning

### Progression Opportunities
On successful completion of the module students will have gained 5 credits at NFQ level 6 which may contribute to the achievement of other academic awards.

The Aistear through Outdoor Learning module adopts an approach of “living the curriculum” in which participants will engage in the type of learning activities we would wish for our children: exploring the sensory aspects of “being outdoors”, connecting with the natural environment, practising outdoor pedagogy and risk management and enjoying the experience. Assessment includes a portfolio of artefacts developed during the module and an assignment linking outdoor learning to Aistear and Síolta. This module is relevant to all educators who wish to develop competence and confidence in learning outdoors with children.

### Cost
€700

### Closing date for applications
19th August 2022

### For further information contact
Lifelong Learning Office
E: parttimekerry@mtu.ie
T: 353 (0)66 719 1701

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<td>Single Subject Certification</td>
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Apply online: [www.mtu.ie/kerrypt](http://www.mtu.ie/kerrypt)
During this module students apply the principles of Aistear to the teaching of Physical Education. The teaching approach is inclusive and child-centred, which encourages children to work within their own ability levels. Initially, the concepts and theories, which underpin inclusive Physical Education receive attention. Subsequently this academic work is applied during practical sessions and micro-teaching. Physical activities include ball skills, gymnastics, and athletics.

**Duration**
This module will be delivered in a blended format part-time from September 2022 to December 2022.

**Entry Requirements**
Applicants should ideally be working, or have a keen interest, in the Early Childhood Education and Care (ECEC) sector.

**Module**
- Aistear through Physical Education

**Progression Opportunities**
On successful completion of the module students will have gained 5 credits at NFQ level 6 which may contribute to the achievement of other academic awards.

**Cost**
€700

**Closing date for applications**
19th August 2022

**For further information contact**
Lifelong Learning Office
E: parttimekerry@mtu.ie
T: 353 (0)66 719 1701

### AISTEAR THROUGH PHYSICAL EDUCATION

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Apply online: [www.mtu.ie/kerrypt](http://www.mtu.ie/kerrypt)
ONE YEAR CERTIFICATE IN COUNSELLING SKILLS

Students should note that fees quoted relate to the academic year 2022 and are subject to change on an annual basis.

Course is now full. Applications for academic year 2023/2024, please check www.mtu.ie in early February 2023.

Aim
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.

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.

Duration & Delivery
The course is offered over two semesters from September to May. Each semester has 5 modules. Dates are arranged when the course begins. Attendance at all sessions is a requirement. The course is offered on a part-time basis for the duration of the academic year as follows:

• Theory and Application Programme – one evening per week – Mondays 6.30pm – 9.30pm.
• Counselling Skills Workshops – one additional evening every four to five weeks 6.30pm – 9.30pm.
• Experiential Group Process: Either 10 Saturdays (10am to 5pm) or a combination of Saturdays and evenings (6.30pm to 9.30pm), or a Friday afternoon/evening spread throughout the year. Dates for these are arranged when the course begins.

Admission Requirements
Applicants must:
1. Be 26 years of age or older on 1st January of year of application;
2. Be assessed through interview;
3. Submit two written references.

Application
Visit website go.mtu.ie/HCOUI6 to apply online. It is the applicant’s responsibility to ensure that the references have been submitted by the closing date. References should be submitted confidentially by the referees by email to rae.brady@mtu.ie.

Award
The One Year Certificate in Counselling Skills is awarded by Munster Technological University 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.
Students should note that Fees quoted relate to the academic year 2022 and are subject to change on an annual basis.

Course is now full. Applications for academic year 2023/2024, please check www.mtu.ie in early February 2023.

Aim
This course is being offered to students who have successfully completed the One Year Certificate in Counselling Skills. 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 BA 1 and BA 2.

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 30 personal therapy weekly sessions 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 & Delivery
The course is offered on a part-time basis over two semesters from September to May. Each semester has 5 modules.

Alternatively some of the sessions may be held on Saturday 10.00am to 5.00pm. When a Saturday is involved, it will replace two evening sessions. During Year 2, there will be two weekend workshops in addition to the regular weekly sessions. There will also be five evening skills workshops.

Admission Requirements
Applicants must
1. Be 26 years of age or older on 1st January of year of application;
2. Have successfully completed the One Year Certificate in Counselling Skills;
3. Be assessed through interview or progression assessment for internal applicants.

National Vetting Bureau: MTU uses the National Vetting Bureau (NVB) to help assess the suitability of all applicants on this programme.

Award
The Higher Certificate in Counselling Skills 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.

NB: To achieve a professional qualification, it is necessary to complete Bachelor of Arts (Honours) in Counselling and Psychotherapy, BA 1 and BA 2.
Irish Sign Language (ISL) is the language used by the majority of deaf people in Ireland and is recognized as Ireland’s third official language since the passing of the Irish Sign Language Act 2017. The Certificate in Irish Sign Language will give students access to practical ISL skills and insight into the world of the Irish Deaf Community.

Professionals that would benefit from this course include:

• Therapists
• Occupational therapists
• SNAs, SENOs
• Community care/social workers
• Audiologists
• Paramedics
• Doctors, nurses
• Parents of deaf children
• General customer service workers.

**Duration**
This programme will be delivered in a blended format part-time from September 2022 to May 2023.

**Entry Requirements**
Applicants must hold a FET/QQI award at NFQ Level 5 in Irish Sign Language or equivalent. The University’s policy in relation to recognition of prior learning (RPL) also applies. Applicants may also be required to attend for interview.

**Modules**
• Irish Sign Language Practical Skills
• Perspectives on Deaf Culture and History

**Progression Opportunities**
On successful completion of the programme students will have gained 20 credits at NFQ level 6 which may contribute to the achievement of other academic awards.

**Cost**
€1,050

**Closing date for applications**
19th August 2022

**For further information contact**
Lifelong Learning Office
E: parttimekerry@mtu.ie
T: 353 (0)66 719 1701
This module includes an overview of the Irish legal system as background to gaining an appreciation of child and family law in Ireland. The module includes discussion of the development and expansion of child and family law in Ireland as well as incorporating relevant international influences e.g., the United Nations Convention on the Rights of the Child. Current relevant legislation would be explained and discussed as well as the way child and family law operates in the court system. It would be a good background for anyone working with children and families e.g., medical personnel, social workers, HSE employees, anyone in the public service working with children and families, family support personnel, community and youth workers among others.

Duration
This module will be delivered in a blended format part-time from September 2022 to December 2022.

Entry Requirements
Applicants must hold an NFQ level 6 in Early Childhood Education and Care (ECEC), or equivalent, and it is desirable that they are working in the sector.

Module
- Child and Family Law

Progression Opportunities
On successful completion of this module students will have gained 5 credits at NFQ level 7 which may contribute to the achievement of other academic awards.

Cost
€700

Closing date for applications
19th August 2022

For further information contact
Lifelong Learning Office
E: parttimekerry@mtu.ie
T: 353 (0)66 719 1701
Students should note that Fees quoted relate to the academic year 2022 and are subject to change on an annual basis.

Course is now full. Applications for academic year 2023/2024, please check www.mtu.ie in early February 2023.

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 – BA 1
Year 4: Bachelor of Arts (Honours) in Counselling & Psychotherapy – BA 2

Aim
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. 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.

Work with Clients
Students will be required to carry out 120 hours of Counselling work with clients during the training. They will be required to obtain supervision for this work from a supervisor nominated by MTU. Payment for supervision will be made directly by students and is not included in the course fee.

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

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

Duration & Delivery
The course is offered over two semesters from September to May each year. Each semester has 5 modules. 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 BA 1, there will be two EGP weekend workshops in addition to the regular weekly sessions.

The course has five key elements which are integrated in the training, using a strong experiential and practical focus. These are
1. Counselling and Psychotherapy Theory and Application
2. Practitioner Development
3. Experiential Group Process/Personal Process Integration
4. Supervised Counselling and Psychotherapy Practice
5. Counselling and Psychotherapy integration
Admission Requirements
Applicants must
1. Be 26 years of age or older on 1st January of year of application;
2. Have successfully completed the Higher Certificate in Arts in Counselling Skills;
3. Be assessed through interview or progression assessment for internal students;

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

Award
On successful completion of the full programme, students will be awarded a Bachelor of Arts (Honours) in Counselling and Psychotherapy. 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.
The module in Inclusive Education critically situates inclusion in a changing social, cultural and political environment which interacts with an evolving ECEC sector. It prepares and equips learners with knowledge, skills and values to plan an inclusive approach to curriculum for the early years in both design and implementation. The learning activities ensure an appreciation of the value, challenges and opportunities of inclusive education. Learners engage in a project to ensure that all children can play, work and learn together.

Duration
This module will be delivered in a blended format part-time from September 2022 to December 2022.

Entry Requirements
Applicants must hold an NFQ level 6 in Early Childhood Education and Care (ECEC), or equivalent, and it is desirable that they are working in the sector.

Module
• Inclusive Education

Progression Opportunities
On successful completion of this module, students will have gained 5 credits at NFQ level 8 which may contribute to the achievement of other academic awards.

Cost
€550

Closing date for applications
19th August 2022

For further information contact
Lifelong Learning Office
E: parttimekerry@mtu.ie
T: 353 (0)66 719 1701
GAEILGE DON GHAIRM

An príomhchuspóir atá ag an modúl seo ná go mbeidh a rchumas foghlaimiúil riarradh go hinniúil ar a gcuid riachtanas gairme i réimse na luath-óige agus luathoideachas trí mheán na teanga. Múinfear conas cumarsáid éifeachtach a dhéanach a dhéanamh ar láthair oibre na luath-óige. Beidh deis ag lucht déanta an mhodúil seo cleachtadh a dhéanamh ar chomhlíonadh feidhmeanna teanga, idir labhairt agus a bhaineann le húsáid na teanga ar an láthair oibre. Bheadh an moduí seo cabhrach agus ábharthach do chleachtóirí réamhscolaíochta atá ag obair i naíonraí agus i gcomhthéacsanna luath-thumoideachais.

The main objective of this module is to enable learners to work competently in the field of early childhood and early education through the medium of the Irish language. Successful completion of the module will enable learners to communicate effectively in early childhood settings. Learners will have the opportunity to practice spoken and written language functions related to the use of Irish ECEC setting. This module would be helpful and relevant for pre-school practitioners working in pre-school and early immersion contexts through the medium of Irish.

Duration
This module will be delivered in a blended format part-time from September 2022 to December 2022.

Entry Requirements
Applicants must have achieved Leaving Certificate Irish or equivalent qualification and it is desirable that they are working in the sector.

Module
• Gaeilge don Ghairm

Progression Opportunities
On successful completion of this module students will be partially prepared for assessment in the TEG Irish exam which fulfills a requirement for entry to a professional master of education (primary teaching).

Cost
€700

Closing date for applications:
19th August 2022

For further information contact:
Lifelong Learning Office
E: parttimekerry@mtu.ie
T: 353 (0)66 719 1701

Apply online: www.mtu.ie/kerrypt
Aim
The programme aims to equip practitioners with advanced knowledge and increased clinical capability.

Client work and supervision: Students will be required to carry out 100 hours of Counselling work with clients during each year of the course. They will be required to obtain supervision for this work from their own Supervisor. Additionally, during Year 1 they will participate in monthly group supervision arranged by the course coordinator. Payment for individual and group supervision will be made directly by students and is not included in the course fee.

Personal Therapy: Students will be required to be in weekly personal therapy throughout the course. The cost of this is separate to the course and is arranged directly between the student and the therapist.

Duration & Delivery
The programme 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 (generally 6.30pm to 9.30pm) and on Saturdays.

Year 2 (30 Credits) will involve a programme of directed/supervised learning where students will research and write the Reflective Practitioning dissertation. During this year they will also carry out their Mental Health Placement.

Admission Requirements
Applicants must
- 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.
- Have competed one year post-qualifying supervised clinical practice with a minimum of 50 hours of clinical practice which is verified by an accredited supervisor.
- Be assessed through interview.
- Submit two written references (for applicants who have not already been on a prior stage of the course).

*Where an applicant has not completed the Bachelor of Arts (Honours) in Counselling or Psychotherapy, equivalence is assessed through the formal Recognition of Prior Learning (RPL) process used in MTU. 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 one year post-qualifying supervised clinical practice.

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

Accreditation
The process of establishing training standards to prepare for the statutory registration of Psychotherapists in Ireland is continuing.

The present overall training programme at MTU combining the Bachelor of Arts (Honours) in Counselling and Psychotherapy, one year post-qualifying supervised clinical practice, and the MA in Integrative Psychotherapy, represents the best interpretation of the requirements as they currently prevail.

Award
Master of Arts in Integrative Psychotherapy (Level 9 on the National Framework of Qualifications).
Students should note that Fees quoted relate to the academic year 2022 and are subject to change on an annual basis.

Applications for academic year 2024/2025, please check www.mtu.ie in early January 2024.

Additional Costing

Year one – €4,500
€2000 Clinical Supervision
€1,000 setting up playroom materials
€1,500 personal therapy (approx.)

Year two – €4,000
€2,500 Clinical Supervision
€1,500 personal therapy (approx.)

Overview
This programme is a postgraduate clinical training in Play Therapy. It aims to equip practitioners with the advanced knowledge and clinical capability that would match international standards of best practice within the Play Therapy profession. The key areas are personal therapy and personal development.

Duration & Delivery
3 years
The course lectures are delivered on a part-time basis on Saturdays. However, 1 day a week is also required for placement (this must be during Social Work Office hours to facilitate child protection reporting). Students also have to consider time involved in Personal Therapy and academic study for course assignments. Students will be required to attend two block weekends – one in November and one in January.

Years 1 and 2 (60 credits) will include a clinical training in Play Therapy. Students will study modules which will be experiential and theoretical. They will undertake placements in both years and will require external supervision from MTU approved supervisors. This supervision is not included in course fees and is outside class times.

On successful completion of the taught elements, students will be awarded a Postgraduate Diploma in Play Therapy, unless they proceed to Year 3.

Year 3 (30 credits) The MA in Play Therapy is awarded to candidates who successfully complete a module in research skills and a research dissertation.

Admission Requirements
Applicants must hold a Level 8 Honours degree (H2.2) or higher, in one of the following areas: Counselling/Psychotherapy, Early Years Education, Occupational Therapy, Primary Education, Psychiatry, Psychology, Psychiatric Nursing, Social Care, Social Work, Special Needs Education or a cognate discipline.

Applicants must be 25 years of age or older on 1st January of year of application; and have at least two years post qualifying experience of working with children. Applicants will be required to submit two references with their online application process. Applicants will be shortlisted to attend for interview based on their online applications.

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

Award
Master of Arts in Play Therapy (Level 9 on the National Framework of Qualifications).
CULINARY ARTS, HOSPITALITY, AND TOURISM

Level 6
Bakery, Breads & Pastry
Higher Certificate in Arts in Culinary Arts – Professional Chef Programme
Higher Certificate in Arts in Culinary Arts – Professional Chef Programme
Certificate in Culinary Skills
Certificate in Culinary Skills
Gourmet Culinary Techniques
Management Principles for Services
Pastry, Tarts and Gateaux
Professional Bar Operations
Certificate in Retail Food Service Operations
The Art of Mixology

Level 7
Bachelor of Arts in Culinary Arts –
    National Chef De Partie Apprenticeship
Food Photography
Bachelor of Arts in Hotel Management –
    National Trainee Manager Development Programme

Level 8
Bachelor of Arts (Honours) in Culinary Arts –
    National Sous Chef Apprenticeship
Revenue Management & Distribution
BAKERY, BREADS & PASTRY

COURSE CODE
CR_FTCXXB_6
(LEVEL 6)

Location
MTU Bishopstown Campus, Cork

Course Fee
€550 (includes exam fee). In addition, a €60 fee for the necessary work uniform is required.

Enquiries
Roisín Clancy
T: 021 433 5820
E: HospitalityCork@mtu.ie

Course & Module Information, and to apply online, visit go.mtu.ie/CRFTCXXB6

Module Code
HOSP6084

Aim
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.

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

Duration & Delivery
This course commences in September and will operate one evening per week per semester, consisting of a 4 hour practical class each evening from 6pm to 10pm.

Apply
Apply online or by application form (available by email HospitalityCork@mtu.ie). Online application for this programme opens annually in February for commencement in September. Closing date for applications is in August. Places are limited on this course and interviews may be held for participation.

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

Note: Modifications to the configuration of the course may take place in accordance with changing requirements.
HIGHER CERTIFICATE IN ARTS IN CULINARY ARTS – PROFESSIONAL CHEF PROGRAMME

LOCATION
Online and MTU Bishopstown Campus, Cork

ENQUIRIES
Sile Hammond
Laura Dorney
E: admissionsCork@mtu.ie

Register with Springboard https://springboardcourses.ie

Application Procedure
You must register with Springboard https://springboardcourses.ie and apply for Higher Certificate in Arts in Culinary Arts – Professional Chef Programme. Once your application on the Springboard website has been accepted, MTU Admissions office in Cork will be in contact with you to complete your registration.

This course is designed for upskilling/advanced skilling purposes and suitable for any candidate currently working at commis chef/chef de partie level.

Admission Requirements
Students will be required to have completed 60 ECTS, Level 6 Certificate in Culinary Arts/Culinary Skills, or equivalent. Eligible applications will be ranked on the basis of academic merit. The University’s policy in relation to recognition of prior learning (RPL) applies.

Aim
The aim of the programme is to provide learners with the knowledge and advanced skills and competencies necessary for a successful and progressive career in the culinary arts sector.

Students will be taught essential practical skills underpinned with the academic knowledge required of a modern day professional chef.

Duration & Delivery
This is a part-time course that will be delivered with a blended learning approach. This course will take place during the day for approximately 16 hours per week (over 2 days) Mondays and Tuesdays, 9am to 6pm (September to December, and February to May). Mandatory induction/training will take place in advance of classes commencing.

Award
Higher Certificate in Arts in Culinary Arts (Level 6, 60 ECTS on the National Framework of Qualifications)
This course is designed for upskilling/advanced skilling purposes and is suitable for anyone currently working at commis chef/chef de partie level with significant prior learning or related work experience. The aim of the programme is to provide learners with the knowledge and advanced skills and competencies necessary for a successful and progressive career in the culinary arts sector. Learners will be taught essential practical skills underpinned with the academic knowledge required of a modern-day professional chef.

**Duration**
This programme will be delivered part-time from September 2022 to May 2023.

**Entry Requirements**
Applicants must already have obtained the Certificate in Culinary Skills (60 credits previously offered through Springboard+ or equivalent). The University’s policy in relation to recognition of prior learning (RPL) applies. Applicants may also be required to attend for interview.

**Modules**
- Food Safety Management
- Buffet Presentation
- Global Cuisine
- Fundamentals of Food Cost and Control
- Innovation in Food Production Service
- Food Science
- Menu Development and Engineering
- Innovative Food Techniques and Technologies
- Pastry and Baking Practice 2

**Progression Opportunities**
Having successfully completed this programme, students can apply for progression to the third year of the Bachelor of Arts in Food Business Innovation on a full-time basis.

**Cost**
Fees do not apply to applicants who meet the eligibility criteria under the Springboard+ (see https://springboardcourses.ie/eligibility). For applicants who do not meet the Springboard+ eligibility criteria the fee is €7,350.

**Closing Date For Applications**
19th August 2022

**For Further Information Contact**
Lifelong Learning Office
E: parttimekerry@mtu.ie
T: 353 (0)66 719 1701
Application Procedure
You must register with Springboard https://springboardcourses.ie and apply for Certificate in Culinary Skills course. Once your application on the Springboard website has been accepted, MTU Admissions office will be in contact with you to complete your registration.

Admission Requirements
The minimum entry requirements for the Certificate in Culinary Skills is five passes in the Leaving Certificate examination or QQI Level 5. Mature Learners will be invited for interview. The University’s policy in relation to recognition of prior learning (RPL) applies.

Aim
The aim of this programme is to provide students with the knowledge, skills and competence necessary for a career in a professional cookery environment. This will be achieved by providing students with the essential practical skills and knowledge required of modern day professionals working in kitchen environments.

Key features:
This one-year part-time programme combines college-based education in culinary operations with work-based learning in industry. The primary focus of the programme is to prepare graduates for a variety of roles in food preparation in food retail outlets including delicatessens, gastro pubs, catering outlets and restaurants.

After completion learners will have the ability to:

Knowledge
• Describe the organisation, marketing, costing and control elements of running a professional kitchen
• Apply scientific principles, technologies and systems to operating a professional kitchen
• Manage the implementation of food control, food cost, portion and quality control in a professional kitchen

Skills
• Demonstrate a wide range of precision technical culinary skills to produce a variety of classical and contemporary dishes
• Apply and adapt nutritional knowledge to creative food production and menu planning
• Analyse appropriate styles of food and beverage service

Competence
• Explain the role of gastronomy in the development of culinary arts
• Operate computer software and systems relevant to the culinary arts
• Evaluate a range of knowledge, skills and competence to design, organise, serve and evaluate a meal experience.
• Apply relevant provisions of legislation and regulation relevant to the hospitality business, including health and safety at work legislation, food safety legislation and the principles of Hazard Analysis and Critical Control Points (HACCP). Identify key academic and independent learning skills

Duration & Delivery
This is a part-time course that will be delivered with a blended learning approach. This course will take place during the day for approximately 16 hours per week (over 2 days). Mandatory induction/training will take place in advance of classes commencing.

Formal classes will commence in September. This programme runs on Wednesday & Thursday, 9am to 6pm (September to December, and February to May)

Students are required to do 400 hours of work experience. Students will be assisted in finding work experience by an academic member of staff.

Award
Certificate in Culinary Skills (Level 6, 60 ECTS on the National Framework of Qualifications)
The aim of this programme is to provide learners with the knowledge, skills and competence necessary for a career in a professional cookery environment. This will be achieved by providing learners with the essential practical skills and knowledge required of modern-day professionals working in kitchen environments. This one-year part-time programme combines college-based education in culinary operations with work-based learning in industry. The primary focus of the programme is to prepare graduates for a variety of roles in food preparation in food retail outlets including delicatessens, gastro pubs, catering outlets and restaurants.

**Duration**
This programme will be delivered part-time from September 2022 to May 2023.

**Entry Requirements**
Applicants must hold an FET/QQI award at NFQ level 5 or equivalent. The University’s policy in relation to recognition of prior learning (RPL) also applies. Applicants may also be required to attend for interview.

**Modules**
- Introduction to Food Preparation and Cooking Techniques
- Fundamental Patisserie Skills
- Introduction to Food Science and Safety
- Food Production Operations
- Patisserie Skills Development
- Food and Nutrition
- Health and Wellbeing
- Information Technology
- Work Placement

**Progression Opportunities**
Having successfully completed this programme, students can apply for progression to the second year of the Bachelor of Arts in Food Business Innovation or to Year 2 in the Higher Certificate in Arts in Culinary Arts.

**Cost**
Fees do not apply to applicants who meet the eligibility criteria under the Springboard+ initiative (see https://springboardcourses.ie/eligibility). For applicants who do not meet the Springboard+ eligibility criteria, the fee is €7,350. Closing date for applications: 19th August 2022

**For Further Information Contact**
Lifelong Learning Office
E: parttimekerry@mtu.ie
T: 353 (0)66 719 1701
GOURMET CULINARY TECHNIQUES

Module Code
HOSP6125

Aim
This hands-on course provides skills and knowledge in the areas of cooking, enabling them to produce safe, nutritious and wholesome foods. The student will learn different techniques and processes associated with culinary hot and cold dishes from both traditional Irish and International Cuisines.

Content
Knife skills
Buying/Storage Techniques
Salads and Dressings
Vegetarian Cooking
Meat and Fish Preparation and Cooking
Ethnic
Canapes
Casseroles
Soups
French cuisine
Traditional Irish
Plating Techniques

Duration & Delivery
This course commences in September and will take place on one evening per week per semester, consisting of a 4 hour practical class each evening from 6pm to 10pm.

Apply
Apply online. Online applications for this programme open annually in February for commencement in September. The closing date for applications is 30th August. Places are limited on this course and interviews may be held for participation.

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

Note: Modifications to the configuration of the course may take place in accordance with changing requirements.

Course & Module Information, and to apply online, visit go.mtu.ie/CRFTCXXF6
Management Principles for Services

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.

Admission 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.

Aim
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.

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

Duration & Delivery
This course commences in September and will operate one evening per week over the semester.

Apply
Apply online or by application form (available by email HospitalityCork@mtu.ie). Places are limited on this course.

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

Note: Modifications to the configuration of the course may take place in accordance with changing requirements.
PASTRY, TARTS AND GATEAUX

LOCATION
MTU Bishopstown Campus, Cork

COURSE FEE
€550 (includes exam fee). In addition, a €60 fee for the necessary work uniform is required.

ENQUIRIES
Roisín Clancy
T: 021 433 5820
E: HospitalityCork@mtu.ie

Module Code
HOSP6085

Aim
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.

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.

Note: Modifications to the configuration of the course may take place in accordance with changing requirements.

Duration & Delivery
The course commences in January and will operate one evening per week each Thursday over the semester, consisting of a 4 hour practical class each evening from 6pm to 10pm.

Apply
Apply online or by application form (available by email HospitalityCork@mtu.ie). Online application opens in September and closes in December. Places are limited on this course and interviews may be held for places.

Award
MTU: Single Module Certification (5 ECTS credits at Level 6 on the National Framework of Qualifications).
PROFESSIONAL BAR OPERATIONS

Module Code
HOSP6012

Aim
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.

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
• Hygiene and Safety Procedures
• Beer: Types, Service and Sales

Duration & Delivery
The course commences in September and is operated on one evening per week over the semester and consists of a 3 hour class each Tuesday evening from 6.30pm to 9.30pm.

Apply
Apply online or by application form (available by email HospitalityCork@mtu.ie). Places are limited on this course.

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

Note: Modifications to the configuration of the course may take place in accordance with changing requirements.

Course & Module Information, and to apply online, visit go.mtu.ie/FTCXXC6

LOCATION
MTU Bishopstown Campus, Cork

COURSE FEE
€400

ENQUIRIES
Roisín Clancy
T: 021 433 5820
E: HospitalityCork@mtu.ie

PROFESSIONAL BAR OPERATIONS

MTU Continuing Education Courses 2022-2023

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CERTIFICATE IN RETAIL FOOD SERVICE OPERATIONS

LOCATION
MTU Bishopstown Campus, Cork

ENQUIRIES
Roisín Clancy
T: 021 433 5820
E: HospitalityCork@mtu.ie

Springboard+ Application Procedure
You must register with Springboard https://springboardcourses.ie/ and apply for the Certificate in Retail Food Operations. Once your application on the Springboard website has been accepted, MTU Admissions office in Cork will be in contact with you to complete your registration.

Duration & Delivery
This programme will be delivered part-time from September to May. Mandatory induction/training will take place in September. Formal classes start in late September.

Provisional schedule:
Semester 1 (September to December) – 1.5 days per week (13 hours in total)
Semester 2 (January to May) – 1 day per week (8 hours in total) (9am to 6pm)

Admission Requirements
Applicants must hold an FET/QQI award at NFQ level 5 or equivalent. The University’s policy in relation to recognition of prior learning (RPL) as applies. Applicants may also be required to attend for interview.

Aim
The Certificate in Retail Food Service Operations is designed to develop highly competent skilled, industry-ready food preparation professionals, equipped with industry relevant techniques and commercial practices, all underpinned by the highest professional standards of food production and health and safety.

The modules to be completed as part of this programme will include:
- Intro to Food Preparation and Cooking Techniques
- Food Safety and Culinary Science
- Fundamental Patisserie Skills
- Fundamentals of Food Cost and Control
- Retail Food Production
- Work Placement (Kitchen)

Award
Certificate in Retail Food Operations (35 ECTS, Level 6, on the National Framework of Qualification)
THE ART OF MIXOLOGY

COURSE CODE
CR_FTCXXD_6 (LEVEL 6)

LOCATION
MTU Bishopstown Campus, Cork

COURSE FEE
€450

ENQUIRIES
Roisín Clancy
T: 021 433 5820
E: HospitalityCork@mtu.ie

Course & Module Information, and to apply online, visit go.mtu.ie/FTCXXD6

Module Code
HOSP6044

Aim
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.

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

Duration & Delivery
The course commences in February and is operated on one evening per week over the semester and consists of a 3 hour class each Tuesday evening from 6.30pm to 9.30pm.

Apply
Apply online or by application form (available by email HospitalityCork@mtu.ie). Places are limited on this course.

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

Note: Modifications to the configuration of the course may take place in accordance with changing requirements.
BACHELOR OF ARTS IN CULINARY ARTS - NATIONAL CHEF DE PARTIE APPRENTICESHIP

Aim
The Chef de Partie Apprenticeship is an ‘earn and learn’ degree programme that combines on-the-job training with academic study. The Chef de Partie is trained to deliver advanced culinary skills in a professional kitchen, to supervise a particular area or station within the kitchen and to work on their own as well as training Commis Chefs. The programme is designed by industry and academic professionals so that students learn the skills, knowledge and behaviours necessary for a successful career that can take them anywhere in the world. The programme combines classroom training with hands-on practical skills development in the workplace, linking college based learning with the everyday work environment.

Content
Year 1 Semester 1
- Fundamental Culinary Skills
- Fundamentals of Patisserie
- Introduction to Food Safety and Culinary Science
- Information Technology
- Learning at Third Level

Year 1 Semester 2
- Refining Culinary Skills
- Developing Patisserie Skills
- Introduction to Food and Beverage Skills
- Workplace Communication
- Nutrition and Diet

Year 2 Semester 1
- Planning a Culinary event
- Classical Cuisine
- Plated Desserts
- Applied Food and Beverage Costing
- Exploring Food

Year 2 Semester 2
- Apprentice led Culinary Event
- Creative Plated Desserts
- Principles of Garde Manger
- Contemporary Cuisine
- Applied Food Safety Management

Year 3 Semester 1
- Classical Culinary Practice
- Applied Culinary Management

Year 3 Semester 2
- Advanced Pastry Arts
- Food Photography and Social Media
- Food Product Design and Innovation

Year 4 Semester 1
- Advanced Pastry Arts and Design
- Food Product Development with Enterprise

Year 4 Semester 2
- Contemporary Garde Manger
- Food Studies and Applied Research for Industry

Duration & Delivery
4 Years – 8 Semesters – Delivery is based on a 13 week semester with 2 days in college in Years 1 & 2 and 1 day in college in Years 3 & 4.

Apply
To become an apprentice you must obtain employment in an approved hotel or restaurant kitchen. The employer must be approved by SOLAS to train apprentices and must register you as an apprentice within two weeks of recruitment. For more information, visit www.apprenticeship.ie or contact the Department Secretary (details above).

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

Progression
Graduates may progress to the Bachelor of Arts (Honours) in Culinary Arts (Sous Chef Apprenticeship) – Level 8 on the National Framework of Qualifications.
### FOOD PHOTOGRAPHY

**Module Code**
HOSP7065

**Aim**
An introduction into the field of food photography and styling to enhance culinary artistic skills.

This course is suitable for those with a knowledge of food, and basic camera skills. Students are required to bring their own digital camera to class and will need access to a camera tripod.

Students will have access to photoshop, and a photographic studio with a studio lighting session during their studies. Students will be expected to develop their projects outside of class-time for analysis and discussion within contact hours. Final assessment is by way of a portfolio of images with accompanying evidence of learning.

**Content**
- Basic Photographic Techniques of the Trade
- Choosing and Treating Ingredients
- Required Tools of the Trade
- Product Presentation
- Advertising, Marketing and the Promotion of Food within a Media Context
- Public Relations and writing styles for PR (subject to change)

**Duration & Delivery**
This course operates one evening per week on Monday evenings over a semester and consists of 3 hour classes.

**Apply**
Apply online or by application form (available by email HospitalityCork@mtu.ie). Places are limited on this course.

Delivery of this course is subject to sufficient number of applicants.

**Award**
MTU: Single Module Certification (5 ECTS credits at Level 7 on the National Framework of Qualifications).

**Note:** Modifications to the configuration of the course may take place in accordance with changing requirements.

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**LOCATION**
MTU Bishopstown Campus, Cork

**COURSE FEE**
€450

**ENQUIRIES**
Roisín Clancy
T: 021 433 5820
E: HospitalityCork@mtu.ie

Course & Module Information, and to apply online, visit [https://go.cit.ie/course/CRFTCXX7Y0D](https://go.cit.ie/course/CRFTCXX7Y0D)
This programme offers those currently employed or seeking employment in the hotel industry the opportunity to pursue a degree in hotel management while simultaneously working with their sponsoring employer. Each year the programme will comprise of the delivery of 60 credits of study through a blended learning approach. This programme will require students to spend two blocks of four weeks per annum at MTU Kerry North Campus’ state-of-the-art facilities in the Hotel, Culinary Arts and Tourism Department. During this period a number of modules will be delivered. The remaining modules will be delivered online and through work-based learning. An exit award, the Higher Certificate in Hotel Supervisory Management, is available after successful completion of year two.

**Duration**
3 years commencing in January 2023.

**Entry Requirements**
Applicants should currently be employed or seeking employment in a sponsoring hotel before course commencement. Applicants under 23 years of age must have achieved an O6/H7 in five subjects in the Leaving Certificate including English OR Irish and Maths. Mature applicants i.e. applicants over 23 years of age on 1st January 2023, are not required to hold a Leaving Certificate.

**Modules**

**Year 1**
- Learning at Third Level
- Introduction to Hotel Management
- Introduction to Hotel Industry
- Food and Beverage Studies 1
- Work-based Learning 1
- Operations 1
- Food & Beverage Costing
- Hotel Marketing
- Communications for Hotel Business
- Work-Based Learning 2
- Operations 2

**Year 2**
- Food and Beverage Management
- Human Resource Management
- Work-based Learning 3
- Social Media Applications for the Hotel Industry
- Room Division Management and CRM
- Finance for Hotels
- Hotel Law
- Selling the Hotel Product
- Food & Beverage Studies 2
- Work-Based Learning 4

**Year 3**
- Digital Marketing
- Management Practice
- Human Resource Planning, Recruitment & Selection
- Financial Management for Hotel Industry
- Work-based Learning Management 1
- Facility Planning, Design & Management
- Revenue Management for the Hotel Industry
- Training & Development
- Entrepreneurship - Business Development
- Work-based Learning Management 2

**Progression Opportunities**
Having successfully completed this programme, students can apply for progression to the BA (Honours) in Hotel Management.

**Cost**
€3,095 per annum (please note fees quoted are for academic year 21/22 and are subject to annual review). Up to 35% funding may be available from South West Gné, South Kerry Skillnet or Rural Food Skillnet for candidates from eligible member organisations within the sector.

**Closing Date For Applications**
9th December 2022

**For Further Information Contact**
Lifelong Learning Office
E: parttimekerry@mtu.ie
T: 353 (0)66 719 1701
BACHELOR OF ARTS (HONOURS) IN CULINARY ARTS – NATIONAL SOUS CHEF APPRENTICESHIP

LOCATION
MTU Bishopstown Campus, Cork

COURSE FEE
Year 1: €750 and Year 2: €750
In addition, a €60 fee for the necessary work uniform is required (a fee will also apply if knives are required).

ENQUIRIES
Roisín Clancy
T: 021 433 5820
E: HospitalityCork@mtu.ie

Course & Module Information, and to apply online, visit go.mtu.ie/CROCUAR8

Overview
This honours degree programme combines on-the-job training with academic study as outlined below.

Year 1
- Sept - Dec 5 days in a block in MTU
- Dec - Jan On the job
- Jan - May 5 days in a block in MTU
- June - Aug On the job (work-based learning captured)

Year 2
- 12 weeks of 1 day in MTU & 4 days at work
- On the job
- 12 weeks of 1 day in MTU & 4 days at work
- On the job (work-based learning captured)

Duration
2 Years over 4 semesters based on a 12 week semester.

Admission requirements
Applicants must be currently employed in, or obtain employment in a SOLAS approved establishment. Applicants must hold a Level 7 ordinary degree in Culinary Arts or equivalent or have relevant industry experience.

Applicants who do not have a Level 7 qualification will be reviewed through Recognition of Prior Learning, on a case by case basis.

Aim
The National Sous Chef Apprenticeship combines academic study with on-the-job training to gain a professional qualification. Designed by industry in consultation with academic professionals, the programme links formal college training with the candidates everyday work environment, allowing them to develop both practically and professionally as a kitchen manager.

Content
Year 1 Semester 1
- Contemporary Culinary Practice
- Strategic Culinary Management

Year 1 Semester 2
- Food Tourism
- Food Blogging & E-Profile

Year 2 Semester 1
- Food Futures

Year 2 Semester 2
- Independent Research Project

Award
Bachelor of Arts (Honours) in Culinary Arts (Level 8 on the National Framework of Qualifications).
Module Code
TOUR8009

The area of Revenue Management in the hospitality industry is of increasing importance in the overall strategic direction of the organisation. This course explores the rationale, theory and practice of Revenue Management and Distribution, which seeks to maximise the revenue and profit generated by the limited capacity associated with hospitality businesses. The module will explore the hotel rooms division, along with other applications to tourist attractions, airlines, golf clubs and restaurants, along with conference and event management.

Admission Requirements
This course is suitable for learners who have previously undertaken courses in tourism or hospitality operations, along with those who have sufficient industry experience in the area.

Aim
This course is designed specifically for those in the hospitality and tourism industries. It is ideally suited to those who are moving into management positions and who need to gain an appreciation for revenue management and its application to the organisation. The course is an ideal form of professional development for new or aspiring managers.

Content
- Introduction to Revenue Management
- Segmentation and Revenue Management
- Revenue Management Implementation
- Pricing
- Distribution and Channel Management
- Forecasting Demand and Overbooking
- Revenue Management Strategies and Tactics
- Revenue Management in Tourism/Service Industries

Duration & Delivery
This course commences in February on one evening per week over the semester, from 6.30pm to 9.30pm.

Apply
Apply online. Online applications for this programme open annually in October for commencement in the following February. The closing date for applications is 31st January. Places are limited on this course and subject to availability.

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

Note: Modifications to the configuration of the course may take place in accordance with changing requirements.
Centre for Advanced Manufacturing and Management Systems (CAMMS)

1.0 Mechanical, Electrical and Plumbing – BIM Applications
2.0 Lean & Six Sigma Programmes
   2.1 Introduction to Lean & Six Sigma
   2.2 Lean Sigma Yellow Belt for Service and Operational Productivity Improvement
   2.3 Lean Sigma Green Belt for Service and Operational Productivity Improvement
   2.4 Lean Sigma Black Belt
   2.5 Lean Sigma Master Black Belt for Service and Operational Productivity Improvement
   2.6 Continuous Improvement for Production Teams
3.0 Project Management Programmes
   3.1 Project Management Techniques
   3.2 Diploma in Project Management
4.0 Automation Programmes
   4.1 Certificate in Automation and Robotics (Level 7)
      4.1.1 Mechatronics
      4.1.2 SCADA and Automation Systems
      4.1.3 Robotics
   4.2 Certificate in Industrial Automation and Networks (Level 8)
   4.3 Certificate in Intelligent Manufacturing Systems (Level 9)
5.0 Automotive Programmes
   5.1 Certificate in Digitised Automotive Operations (Level 7)
   5.2 Bachelor of Science in Transport Management (Level 8, part time)
6.0 Manufacturing Engineering
   6.1 Metrology Training (AUKOM Level 1)
   6.2 Certificate in Computerised Production and Inspection Processes
   6.3 Certificate in Biomedical Device Manufacture
7.0 Bachelor of Engineering Degrees
   7.1 Bachelor of Engineering (Honours) in Process Plant Technology
   7.2 Bachelor of Engineering (Honours) in Advanced Manufacturing Technology
Civil, Structural & Environmental Engineering

Level 6
Certificate in Building Information Modelling (BIM) with Revit
Higher Certificate in Engineering in Civil Engineering

Level 7
Bachelor of Engineering in Civil Engineering
Bachelor of Engineering in Environmental Engineering

Level 8
Certificate in Strategic Building Information Modelling Management
Certificate in Applied Building Information Modelling and Management
Bachelor of Science (Honours) in Building Information Modelling and Management

Level 9
Postgraduate Diploma in Science in Applied BIM and Digital AEC
Master of Engineering in Structural Engineering
Master of Engineering in Civil Engineering (Environment and Energy)

Short CPD Courses
Building Regulatory Engineering
Fire Engineering Design
Fire Safety Certification
Fire Safety Engineering
Practical Land Surveying
Digital Land Surveying and GPS

Construction

Level 6
Higher Certificate in Science in Construction

Level 7
Bachelor of Science in Construction Management
Bachelor of Science in Quantity Surveying

Level 8
Certificate in Mechanical & Electrical Quantity Surveying

Level 9
Master of Science in Construction Project Management
ENGINEERING

Mechanical, Biomedical and Manufacturing Engineering

Level 6
Certificate in Industrial Instrumentation and Automation
Mechanical Engineering Science
Certificate in 3D CAD and Solid Modelling

Level 7
Certificate in Mechatronics
Certificate in Quality Management Tools and Techniques in Practice
Bachelor of Engineering in Mechanical Engineering

Level 8
Certificate in Industry 4.0 and Industrial Internet of Things

Process, Energy & Transport Engineering

Level 6
Science of Biotechnological Manufacturing Operations
Certificate in Cleanroom Manufacturing Practices

Level 7
Certificate in Brewing & Distilling Operations
Certificate in Biopharmaceutical Processing
Certificate in Process Safety
Certificate in Validation Science
Bachelor of Science in Good Manufacturing Practice & Technology
This programme aimed at those who wish to enhance their 3D drawing and design skills in order to operate within a Building Information Management (BIM) regulated environment. It is suitable for those employed or seeking employment with design consultants or engineering/facilities departments within the pharmaceutical, biopharmaceutical, medical device, food manufacturing and water treatment sectors.

The programme has been specifically designed in response to industry needs for upskilling as identified by the South West Regional Skills Forum (SWRSF). The SWRSF (made up of manufacturing, mechanical and MEP consultancy companies) has identified BIM and Revit as two of their top three priority areas for upskilling.

**Content**
Participants will be provided with the skills necessary to contribute effectively through the use of BIM related software applications, specifically Autodesk Revit for Mechanical, Electrical and Plumbing (MEP), in conjunction with a specialised module dedicated to piping design.

Students will develop the ability to use modern computer-based engineering tools to solve well defined building services design problems and communicate effectively with the engineering community. They will learn to create and place equipment, route and coordinate pipework, add electrical components and use P&ID data all within a multidiscipline 3D environment. The programme will also incorporate the use of Piping Standards (BS, DIN, ANSI, etc.) and engineering symbols standards.

**Modules**
- Revit Introduction – introduction to the BIM environment
- Revit-MEP – multidisciplinary services design
- 3D Piping Design – detailed piping design in a virtual environment

Specific content includes
- Intelligent P&ID generation linked to 3D Piping Packages
- 3D Piping and Equipment Modelling
- Estimating pipe sizes and duct sizes using Revit software
- 3D Isometrics and BOM generation
- Utilising Project Browser to generate and manage useful views
- Generating reports and schedules using Revit software

**Admission Requirements**
Applicants should have a minimum of a Level 6 qualification (or equivalent) in an engineering discipline such as mechanical, electrical or building services 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 Built Environment discipline.

**Duration**
September – May, two evenings per week.

**Awarding Body**
Special Purpose Award - 15 ECTS Credits at Level 7 on the National Framework of Qualifications, awarded by Munster Technological University.
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.

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

**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.

**Admission 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, MTU. 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.
Lean Sigma is a very successful methodology for Continuous Improvement in all organisations. Lean Sigma is based on the elimination of waste and the reduction of variability in processing through engagement and respect for all staff.

A certified **Lean Sigma Yellow Belt** has the knowledge to identify opportunities for continuous improvement in their workplace. A Yellow Belt can apply Lean Sigma principles and problem solving tools to eliminate waste and reduce variation in a process. A Yellow Belt understands how improvements are made through team effort.

**Content**
- Introduction to Lean/Six Sigma
- Lean Sigma Concepts
- Voice of the Customer
- Eliminating Waste
- In-class Project Work
- DMAIC Methodology and Tools
- Continuous Improvement Tools
- Improving Service Processes
- Reduction in Variation

**Project mentoring and support**
A group project is undertaken as part of the course. Students will receive project support and mentoring from their tutors.

**Online support**
Online resources are provided for students to support classroom learning.

**Admission Requirements**
Candidates must have a total of at least four years combined academic and work experience.

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>COURSE FEE</th>
<th>ENQUIRIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTU Bishopstown Campus, Cork</td>
<td><em><em>€995</em> (includes course notes and exam fees)</em>*</td>
<td>T: 021 432 6264 T: 021 432 6264 E: <a href="mailto:CammsCork@mtu.ie">CammsCork@mtu.ie</a> W: <a href="http://www.camms.ie">www.camms.ie</a></td>
</tr>
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**Duration**
5 days over 3 months.

**Awarding Body**
Special Purpose Award - 10 ECTS Credits at Level 6 on the National Framework of Qualifications, awarded by Munster Technological University.

**Discount**
Corporate discounts are available. You may be eligible for funding through EI, IDA, Skillnet or Springboard.

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

Course Information, and to apply online, visit [go.mtu.ie/CRELSYB6](http://go.mtu.ie/CRELSYB6)
Lean Sigma is a very successful methodology for Continuous Improvement in all organisations. Lean Sigma is based on the elimination of waste and the reduction of variability in processing through engagement and respect for all staff.

A certified Lean Sigma Green Belt has the skills and tools to apply a structured approach to problem solving using Lean Sigma and to put a sustaining mechanism in place to ensure problems do not reoccur. A Green Belt understands the application of DMAIC/DMADV models. They are able to identify non-value added activities in a process and to use the appropriate tools to eliminate waste. A Green Belt will demonstrate project team leadership ability.

Content

- Introduction to Lean/Six Sigma
- Lean Sigma Concepts and Tools
- Measurement Techniques
- Introduction to Statistical Tools
- Process Capability using SPC
- DMAIC Methodology and Tools
- Defining the Project/Goals Setting
- Analysis of Process Data
- Cause and Effect
- Co-ordinating Project Teams

Project mentoring and support

A work-based project is undertaken as part of the course. Students will receive project support and mentoring from their tutors.

Online support

Online resources are provided for students to support classroom learning.

Admission Requirements

Level 6 qualification and at least three years work experience preferred.

Duration

9 days over 3 months.

Awarding Body

Special Purpose Award - 15 ECTS Credits at Level 7 on the National Framework of Qualifications, awarded by Munster Technological University.

Discount

Corporate discounts are available. You may be eligible for funding through EI, IDA, Skillnet or Springboard.

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

**LOCATION**
MTU Bishopstown Campus, Cork

**COURSE CODE**
CR_ESSBB_8

**COURSE FEE**
€4,750* (includes course notes and exam fees)

**ENQUIRIES**
T: 021 432 6264  
E: CammsCork@mtu.ie  
W: www.camms.ie

Course Information, and to apply online, visit go.mtu.ie/CRESSBB8

Lean Sigma is a very successful methodology for Continuous Improvement in all organisations. Lean Sigma is based on the elimination of waste and the reduction of variability in processing through engagement and respect for all staff.

A certified **Lean Sigma Black Belt** is an expert in Lean Sigma philosophies and principles, including supporting systems and tools. A Black Belt will demonstrate team leadership, understand team dynamics and assign team member roles and responsibilities. Black Belts have a thorough understanding of all aspects of DMAIC/DMADV models. They have a thorough knowledge of Lean enterprise concept and are able to identify non-value added activities in a process and to use the appropriate tools to eliminate waste.

**Content**
- Introduction to Lean/Six Sigma
- Change Management
- Team Building and Facilitation
- Lean Sigma Supply Chain
- Measurement System Analysis
- Regression
- Process Capability
- Project Control
- DMAIC Methodology and Tools
- Return on Investment
- Critical Success Factors
- Hypothesis Testing
- Control Charts
- Design of Experiments

**Project mentoring and support**
A work-based project is undertaken as part of the course. Students will receive project support and mentoring from their tutors.

**Online support**
Online resources are provided for students to support classroom learning.

**Admission Requirements**
Level 6/7 qualification preferred. Green Belt qualified or several years work experience in a supervision role is required. Experience in Lean or Six Sigma principles is desirable.

**Duration**
19 days over 12 months.

**Awarding Body**
Special Purpose Award – 30 ECTS Credits at Level 8 on the National Framework of Qualifications, awarded by Munster Technological University.

**Discount**
Corporate discounts are available. You may be eligible for funding through EI, IDA, Skillnet or Springboard.

**Note:** Places are limited for this course. Eligible candidates will be considered on a first come first served basis.
Lean Sigma is a very successful methodology for Continuous Improvement in all organisations. Lean Sigma is based on the elimination of waste and the reduction of variability in processing through engagement and respect for all staff.

A certified **Lean Sigma Master Black Belt** is the go to person for deployment of Lean Sigma systems in the organisation. They hold a key role within or in support of the management team for business achievement of goals utilising improvement and problem-solving techniques. They may mentor and educate others in the organisation and determine best practice adaptation within the organisation for Operational and Design success. MBBs provide everyday leadership to the Lean Sigma effort. MBB’s establishing and maintaining the long term Lean Sigma Environment.

**Content**
- Creating and Measuring the Lean Sigma Environment (Site visit)
- Lean Sigma MBB Deployment Research Project
- Lean Sigma Analytics (Site visit)
- Lean Sigma MBB Deployment Application Project

**Project mentoring and support**
A work-based project and a research project are undertaken as part of the course. Students will receive project support and mentoring from their tutors.

**Online support**
Online resources are provided for students to support classroom learning.

**Admission Requirements**
Black Belt or equivalent required.

**Duration & Delivery**
12 days over 12 months.

**Awarding Body**
Special Purpose Award – 30 ECTS Credits at Level 9 on the National Framework of Qualifications, awarded by Munster Technological University.

**Discount**
Corporate discounts are available. You may be eligible for funding through EI, IDA, Skillnet or Springboard.

**Note:** Places are limited for this course. Eligible candidates will be considered on a first come first served basis.
2.6 CONTINUOUS IMPROVEMENT FOR PRODUCTION TEAMS

COMPANY BASED GROUP TRAINING

LOCATION
MTU Bishopstown Campus, Cork

APPLICATION
Please email CammsCork@mtu.ie for further information.

COURSE FEE
Price will vary on specific company needs.

ENQUIRIES
T: 021 432 6264
E: CammsCork@mtu.ie
W: www.camms.ie

Course Information, visit go.mtu.ie/CRECIPTX

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.

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

Certification
CAMMS, MTU. Please contact CAMMS directly for more details.
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.

**Content**

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

- Project Time Management – Activity Definition, Activity Duration Estimating, Activity Sequencing, Schedule Development, Schedule Control
- Project Scheduling Software – MS Project version to 2016
- Project Planning and defining the Work Breakdown Structure (WBS)
- 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 & Delivery**

The evening course is delivered fully online. The course is 10 weeks in duration and consists of one evening session per week, every Tuesday, 6.30pm – 9.30pm.

**Awarding Body**

5 ECTS Credits at Level 7 on the National Framework of Qualifications, awarded by Munster Technological University.

**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.

* A discount structure is available for groups: 5% for 2 people, 10% for 3 or more.
3.2 DIPLOMA IN PROJECT MANAGEMENT

**COURSE CODE**

CR_EPMAN_8

**LOCATION**

Online and
MTU Bishopstown
Campus, Cork

**COURSE FEE**

€3,850 (includes MTU
exam fees and PMI exam
preparation)

**ENQUIRIES**

T: 021 432 6264
E: CammsCork@mtu.ie
W: www.camms.ie

Course Information, and to apply online, visit go.mtu.ie/CREPMAN8

With the emergence of Project Management as a standalone profession, international accreditation that is accepted across industries is becoming increasingly important. The course is suitable for individuals who may have practical experience of either being involved in projects or managing and leading 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.

This MTU accredited Special Purpose Award in Project Management uses a combination of external experts and in-house lecturers to provide a broad scope of industrial and academic expertise. Our panel of lecturers and experts includes those with PMI® (Project Management Institute), ‘Registered Education Provider’ (REP®) Approval. The content and delivery is applicable to all industrial sectors (not just technical projects).

The programme 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). As Agile Project Management is becoming more commonplace, the Diploma also includes detailed insight into the use of Agile methods to deliver projects, showing how Scrum, Lean, Kanban and Agile hybrids can be applied to different industries. The Diploma programme educates students in both traditional predictive / waterfall & Agile Project Management approaches – both essential toolsets for a Project Manager.

The Special Purpose Award 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.

**Duration & Delivery**

The Diploma is approximately 6 months in duration, consisting of just one class each week.

Please see https://www.cit.ie/course/CREPMAN8 for detailed timetables.

**Certification**

Students who complete all three modules, will be entitled to an accredited Diploma in Project Management (Special Purpose Award – 15 ECTS Credits at Level 8 on the National Framework of Qualifications, awarded by Munster Technological University.

As part of the Diploma, we also help students evaluate which PM Certification option may be the best fit (this is an optional element of the course), providing dedicated support for PMI or Agile exam certification application and preparation.

The Diploma incorporates a two-day ScrumMaster Bootcamp, providing Diploma students with an additional option to sit the ‘Professional Scrum Master™’ (PSM) certification exam (their exam fee is not included in the course price) – a certification that is in high demand with over half a million certified professionals.
COURSE CODE
LOCATION ENQUIRIES

www.mtu.ie

■ Project Initiation & Selection
■ Project Charter
■ Project Scope Definition
■ Project Cost Management
■ Project Scheduling
■ ‘Microsoft Project’ – Scheduling Software Tutorial
■ Project Budgeting
■ Managing Project Change
■ Project Risk Management

MODULE 1

PM Techniques evening course graduates are exempt from Day 1 & 2

■ Project Stakeholder Management
■ Project Quality Management
■ Project Communications
■ Procurement for Project Managers
■ Project Resource Management
■ Project Integration
■ PM Ethics
■ Selecting and Applying for the relevant PM Certification
■ Agile Project Management
■ 2-Day Professional Scrum Master™ (PSM) Bootcamp
■ Presentation Skills

MODULE 2

■ Myers Briggs profiling, Teams and Communication Styles
■ Presentation Skills
■ Strategic Project Management
■ Project Governance / Global teams
■ Using PM Techniques to implement Change Management
■ Managing challenging stakeholders
■ Recovering a project in difficulty
■ Business Process Mapping – Driving Organisational Change through Projects

MODULE 3

■ Project Management Principles
5 ECTS Credits, Level 8

■ Project Management Context
5 ECTS Credits, Level 8

■ Project Management Advanced Concepts
5 ECTS Credits, Level 9

Diploma in Project Management
15 ECTS Credits, Level 8
4.0 AUTOMATION PROGRAMMES

4.1 CERTIFICATE IN AUTOMATION & ROBOTICS

SPECIAL PURPOSE AWARD - 20 ECTS CREDITS AT LEVEL 7

COURSE CODE
CR_EACSY_7

LOCATION
MTU Bishopstown Campus, Cork

COURSE FEE
Overall Fee: €3,100 (Only applicable when ALL three modules are taken in one academic year)

ENQUIRIES
T: 021 432 6264
E: CammsCork@mtu.ie
W: www.camms.ie

4.1.1 MECHATRONICS

LOCATION
MTU Bishopstown Campus, Cork

COURSE FEE
€1,950*

ENQUIRIES
T: 021 432 6264
E: CammsCork@mtu.ie
W: www.camms.ie

Course Information, and to apply online, visit go.mtu.ie/CREACSY7

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 (PLCs, controllers)
• Design, build and fault find on mechatronic systems

This course covers the practical and theoretical requirements for certification by MTU. Certification requires that a candidate provides 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.

Admission 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 & Delivery
One evening per week for one academic year, one module per semester.

Awarding Body
10 ECTS Credits at Level 7 on the National Framework of Qualifications, awarded by Munster Technological University.

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.

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) Level 7 on the National Framework of Qualifications, awarded by Munster Technological University.

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

COURSE CODE
CR_EACSY_7
(LEVEL 7)

LOCATION
MTU Bishopstown
Campus, Cork

COURSE FEE
€925*

ENQUIRIES
T: 021 432 6264
E: CammsCork@mtu.ie
W: www.camms.ie

Course Information, and to apply online, visit go.mtu.ie/CREACSY7

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.

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)

Admission 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 & Delivery
One evening per week for 12 weeks in Semester 1. Additional programme may run in Semester 2, subject to demand.

Awarding Body
5 ECTS Credits at Level 7 on the National Framework of Qualifications, awarded by Munster Technological University.

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.
4.1.3 ROBOTICS

LOCATION
MTU Bishopstown Campus, Cork

COURSE CODE
CR_EACSY_7 (LEVEL 7)

COURSE FEE
€925*

ENQUIRIES
T: 021 432 6264
E: CammsCork@mtu.ie
W: www.camms.ie

Course Information, and to apply online, visit go.mtu.ie/CREACSY7

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.

Content
• Robotic cell design
• End effectors
• Robotics programming
• External sensors

Admission 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 & Delivery
One evening per week for 12 weeks in Semester 2. Additional programme may run in Semester 1, subject to demand.

Awarding Body
5 ECTS Credits at Level 7 on the National Framework of Qualifications, awarded by Munster Technological University.

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.
**4.2 CERTIFICATE IN INDUSTRIAL AUTOMATION AND NETWORKS**

**LOCATION**  
MTU Bishopstown  
Campus, Cork

**COURSE FEE**  
€2,200

**ENQUIRIES**  
E: CammsCork@mtu.ie

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**Admission Requirements**
Candidates should have obtained a Level 7 in Automation  
and Control or similar. Candidates may also be considered  
through MTU’s well-established RPL process.

Candidates with sufficient experience which in the judgement  
of MTU may be deemed equivalent to this qualification will  
be considered following the principles/procedures set out the  
Institute’s Recognition of Prior Learning service in MTU.

**Aim**
The Certificate in Industrial Automation and Networks aims  
to provide the learner with advanced knowledge of PLC  
programming using multi-languages and the ability to  
develop PLC communication across the required network  
structures.

Upon successful completion of this programme the  
graduate will be able to demonstrate:
- Detailed knowledge and understanding of the  
  essential facts, major concepts, principles and theories  
  associated with PLC, HMI and Networking in modern  
  automation systems.
- The ability to evaluate the five IEC61131:
  - PLC Programming Languages and the appropriate  
    network communication protocols  
  - Connect the correct Input/Outputs to the PLC, HMI  
    and map the IO bits to the programming charts.  
  - Programme a PLC incorporating a HMI using the  
    appropriate languages communicating across the  
    selected network.

**Award**
15 ECTS Credits on the NFQ will be received by students  
who successfully complete the course.

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Course Information, and to apply online, visit [https://www.cit.ie/course/TDAOP7Y1](https://www.cit.ie/course/TDAOP7Y1)
4.3 CERTIFICATE IN INTELLIGENT MANUFACTURING SYSTEMS

Location
MTU Bishopstown Campus, Cork

Course Fee
€4,200

Enquiries
T: 021 432 6264
E: CammsCork@mtu.ie
W: www.camms.ie

Overview
The Certificate in Intelligent Manufacturing Systems is a Level 9 programme which aspires to bridge the gap between the engineering operations and information technology paradigms in the manufacturing sector. Smart Manufacturing has been described as the synthesis of advanced manufacturing capabilities and digital technologies to produce highly customisable products faster, cheaper, better, and greener. A smart factory will integrate data from system-wide physical, operational, and human assets to drive manufacturing, maintenance, inventory tracking and the digitisation of operations in order to achieve this goal.

Award
5.0 AUTOMOTIVE PROGRAMMES
5.1 CERTIFICATE IN DIGITISED AUTOMOTIVE OPERATIONS

Admission Requirements
Candidates must have at least three years of relevant industrial experience and should have obtained their Leaving Certificate or an appropriate craft/technician qualification. Candidates may also be considered through MTU's well-established RPL process.

Aim
This Programme has been developed for individuals seeking employment in the Service administration area of Automotive Engineering OR those already working in the sector wishing to up-skill and gain the relevant qualifications in an evolving technological Automotive industry.

Dealer Management Software skillset is vital to Industry performance into the future, coupled with Business & Management Skills, course participants will garner essential IT skills and the ability to communicate professionally in the digital world.

Graduates will gain the expertise to manage a modern after-sales department, dealing with costing, scheduling, planning and reporting through the latest digital platforms.

Award
20 ECTS credits on the NFQ will be received by students who successfully complete the course.

Course Information, and to apply online, visit https://www.cit.ie/course/CRTDAOP7
5.2 BACHELOR OF SCIENCE IN TRANSPORT MANAGEMENT

LOCATION
MTU Bishopstown Campus, Cork

COURSE FEE
€1,500 per annum

ENQUIRIES
E: CammsCork@mtu.ie

Admission Requirements
Graduates who have achieved the required grade in the Automotive Technology and Management (BSc Degree) Level 7 degree programme (or similar qualification) are eligible for entry. Candidates may also be considered through MTU’s well-established RPL process.

Aim
Transport and fleet operations play a significant role for economic activity within Ireland and worldwide. Automobile and transport industries have undergone significant changes in recent years with many technical advances making both vehicles and transport operations more efficient. This course is designed to take account of these advances and it prepares graduates for employment within such a dynamic and exciting industry.

The BSc (Honours) in Transport Management course is designed for graduates who wish to progress from the Automotive Technology and Management (BSc Degree), along with other students who have similar qualifications and/or work experience and wish to progress to Honours degree level. The course places significant emphasis on Transport and Fleet operations and has been designed in cooperation with the transport industry.

The course provides students with knowledge of the motor, fleet, transport and logistics operations through a combination of lectures and directed learning along with group and individual project work. Work placement is also included as part of the programme. Employment opportunities include supervisory, management and technical positions within the motor, transport, and fleet industries.

Modules

<table>
<thead>
<tr>
<th>Semester One</th>
<th>Semester Two</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fleet Operations</td>
<td>Transport Planning &amp; Logistics</td>
</tr>
<tr>
<td>Transport Telematics</td>
<td>Sustainable Transport</td>
</tr>
</tbody>
</table>

Award
20 ECTS credits on the NFQ will be received by students who successfully complete the course.

These 20 ECTS credits form part of the overall award of 60 credits for the BSc (Hons) in Transport Management. The Honors degree may be completed over 2/3 years Part Time. Candidates may also achieve credits for the Work-placement and project modules through MTU’s well established RPL process. Full suite of modules may be found here. https://www.cit.ie/course/CRTTMGT8

Course & Module Information, and to apply online, visit https://www.cit.ie/course/CRTTMGT8
AUKOM training is currently offered in 19 countries and MTU is the only approved training centre in Ireland. Three levels of certification are available; this Level 1 programme concentrates on fundamental concepts, such as dimensional tolerancing, basic programming, and common measuring equipment. Full course details are available at https://www.aukom.info/en/aukom-training-courses/content-level-1.html.

Topics covered in AUKOM Level 1 are

- Principles of coordinate metrology
- Basic definitions, tolerancing, and geometric elements
- Measuring preparation, including stylus selection, part cleaning, and temperature control
- Documentation & quality management

Candidates will be prepared to take the AUKOM Level 1 test which will be administered by MTU personnel at the end of the programme; AUKOM certificates will be issued to those who successfully complete the programme and the test.

Summary

- Duration: 5 Days
- Location: MTU Bishopstown Campus, Cork
- Course Fee: €1,950 (covers tuition, AUKOM Level 1 Handbook and exam fees)
- Enquiries: T: 021 432 6264 E: CammsCork@mtu.ie W: www.camms.ie

Note: Course and module information, and to apply online, visit go.mtu.ie/CRSMETR6
6.2 CERTIFICATE IN COMPUTERISED PRODUCTION & INSPECTION PROCESSES

LOCATION
MTU Bishopstown Campus, Cork

COURSE CODE
CR_ECMPI_7 (LEVEL 9)

COURSE FEE
€1,850

ENQUIRIES
T: 021 432 6264
E: CammsCork@mtu.ie
W: www.camms.ie

Course & Module Information, and to apply online, visit go.mtu.ie/CREC mpi7

*Multiple applications from the same company will be eligible for a 10% discount for 2 attendees, 15% for 3 attendees or more.

Admission Requirements
Candidates should have a Level 6 qualification (or equivalent) in Engineering or cognate discipline. Candidates with sufficient experience which in the judgement of MTU may be deemed equivalent to this qualification will be considered following the principles/procedures set out the University’s Recognition of Prior Learning service in MTU.

Structure
Smart Manufacturing comprises systems that are “fully-integrated, collaborative manufacturing systems that respond in real time to meet changing demands and conditions in the factory, in the supply network, and in customer needs.” The merger of the physical and virtual worlds (cyber physical systems) opens up new areas of innovation enabling optimisation of the entire manufacturing supply chain to create higher quality products, improve productivity, increased energy efficiency involving real-time data collection and analysis.

The aim of this programme is to upskill technicians/engineers in the latest machining and inspection technologies and to show how advances in ICT can be exploited and implemented on the factory floor. The programme will utilise industry-standard computer numerical control (CNC) machine tools, co-ordinate measuring machines (CMM) and CAD/CAM software.

In the past three years, MTU has invested circa €1.5 million in bringing its CNC machining and CMM inspection equipment up to a standard comparable to that in manufacturing industry. The University also has access to the most up-to-date CAD/CAM software. Participants on the programme will thus be exposed to the current state-of-the-art technologies and to the emerging developments and trends. The University has also invested in staff training so that the potential offered by the new equipment/software is fully realised.

It is envisaged that the topics in this programme will be developed to a more advanced level in the following academic year leading to an additional 15 credits for those wishing to progress further.

Award
Certificate in Computerised Production & Inspection Processes (15 ECTS credits at Level 7 on the National Framework of Qualifications).
This programme was 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 Practice (GMP) system and the operation of regulatory bodies such as FDA/IMB.

Content

• **Anatomy**
  General anatomy, Neuro Anatomy, Cardiovascular 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, wire drawing; 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**

• **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.

**Admission Requirements**

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

**Duration & Delivery**

One evening per week for 13 weeks.

**Awarding Body**

MTU: Certificate in Biomedical Device Manufacture, 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.

* Discounts available for groups of three or more.
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.

Admission Requirements
Merit or better in a relevant Level 7 major award programme or equivalent. Candidates with sufficient experience which in the judgment of MTU may be deemed equivalent to this qualification will be considered following the principles/procedures set out by the Recognition of Prior Learning service in MTU.

Duration & Delivery
Three evenings per week, 7pm – 10pm, and one Saturday per month, 10am – 5pm. The course can be completed in two academic years.

Award
Bachelor of Engineering (Honours) in Process Plant Technology (Level 8 on the National Framework of Qualifications).

<table>
<thead>
<tr>
<th>Modules</th>
<th>Annual Fee per Module</th>
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<tbody>
<tr>
<td>Mandatory</td>
<td></td>
</tr>
<tr>
<td>Project</td>
<td>€1350</td>
</tr>
<tr>
<td>Quality Engineering</td>
<td>€510</td>
</tr>
<tr>
<td>Engineering Project Management</td>
<td>€510</td>
</tr>
<tr>
<td>Process Automation &amp; Control</td>
<td>€510</td>
</tr>
<tr>
<td>Mathematics and Statistics</td>
<td>€510</td>
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<tr>
<td>Process Plant Services</td>
<td>€510</td>
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<tr>
<td>Process Plant Equipment</td>
<td>€510</td>
</tr>
<tr>
<td>Maintenance &amp; Reliability</td>
<td>€510</td>
</tr>
<tr>
<td>Facilities</td>
<td>€510</td>
</tr>
<tr>
<td>Electives (choose 1)</td>
<td></td>
</tr>
<tr>
<td>Automation Systems</td>
<td>€510</td>
</tr>
<tr>
<td>Advanced Materials and Processes</td>
<td>€510</td>
</tr>
</tbody>
</table>
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.

**Admission Requirements**
Merit or better in a relevant Level 7 major award programme or equivalent. Candidates with sufficient experience which in the judgment of MTU may be deemed equivalent to this qualification will be considered following the principles/procedures set out by the Recognition of Prior Learning service in MTU.

**Duration & Delivery**
Three evenings per week, 7pm – 10pm, and one Saturday per month, 10am – 5pm. The course can be completed in two academic years.

**Award**
Bachelor of Engineering (Honours) in Advanced Manufacturing Technology (Level 8 on the National Framework of Qualifications).
Building Information Modelling (BIM) is fast becoming the global industry standard for designing, procuring, constructing and managing buildings and infrastructure projects. The digitisation of building components and performance data, coupled with the use of collaborative tools and internationally agreed standards, have been associated with reduced costs and improved outcomes on projects worldwide.

This 10-credit special purpose award is designed to act as a foundation for BIM adoption by those employed in the built environment related professions. Participants will be given the skills needed to create and engage with building information models and digital building data. The collaborative nature of the course will support the engagement of those operating in the fields of building design (architecture, civil and structural engineering, mechanical and electrical services, quantity surveying), building construction, related product manufacturing and facilities management.

The course will focus on the use of Autodesk Revit to generate model data and will take advantage of associated software packages and platforms to co-ordinate multiple disciplines in a common data environment (CDE). Practical activities are supplemented by live and recorded lectures, allowing participants to grow their understanding of BIM practice.

The content of the course is offered entirely online, further supporting the participant’s development in the use of collaborative tools. On completion, the successful candidate will be capable of generating BIM content and of participating in critical BIM processes using internationally agreed structures and procedures.

**Entry Requirements**
Applicants must hold an NFQ level 6 qualification in construction studies or related discipline OR a minimum of 2 years’ experience in construction project-related work such as drawing production, measurement or similar activity (CAD experience would be beneficial but is not a prerequisite for this course). The University’s policy in relation to recognition of prior learning (RPL) also applies.

**Modules**
- Building Information Modelling (BIM) with Revit

**Progression Opportunities**
On successful completion of the programme students will have gained 10 credits at NFQ level 6 which may contribute to the achievement of other academic awards.

**Cost**
Fees do not apply to applicants who meet the funding criteria under the Springboard+ initiative (see https://springboardcourses.ie/eligibility). For applicants who do not meet the Springboard+ eligibility criteria the fee is €580.

**Closing Date For Applications**
19th August 2022

**For Further Information Contact**
Lifelong Learning Office
E: parttimekerry@mtu.ie
T: 353 (0)66 719 1701

Apply online: [www.springboardcourses.ie](http://www.springboardcourses.ie)
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.*

**Admission Requirements**

Leaving Certificate Grade O6/H7 (pre. 2017, 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.

**Content**

**Stage 1**
Module topic areas include Mathematics, Applied Mechanics, Engineering Science, Linear Surveying & Levelling, CAD, Construction, Health & Safety.

**Stage 2**

**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 Communication, Land Surveying, and Construction.

**CCIVE_6 Year 2**
Modules from Stage 1 and modules from Stage 2:
Topics typically include Applied Mechanics, Health & Safety (Stage 1), Mathematics, Civil Engineering Materials, Land Surveying Control, Structural Design, Civil & Structural Engineering Construction, Professional Studies (Stage 2).

**CCIVE_6 Year 3**
Modules from Stage 2:
Topics typically include Practical Land Surveying, Structural Engineering, Structural Design, and Hydraulics and Hydrology.

**Award**

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

**Further Studies at MTU**

Higher Certificate graduates are eligible to apply for the BEng in Civil Engineering (Level 7 on the National Framework of Qualifications).

Course & Module Information, and to apply online, visit [go.mtu.ie/CRCCIVE6](http://go.mtu.ie/CRCCIVE6)
BACHELOR OF ENGINEERING IN CIVIL ENGINEERING

LOCATION
MTU Bishopstown Campus, Cork

APPLICATION
Apply online at go.mtu.ie/CRCCIVE7

COURSE FEE
€300 per 5 credit module (inc. exam fee)

ENQUIRIES
Des Walsh
E: des.walsh@mtu.ie

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.

The below websites have information on recommended textbooks, average weekly workload, assessments, and exams.

1) Civil Engineering: go.mtu.ie/CRCCIVE7
2) Environmental Engineering: go.mtu.ie/CRCENVI7

Admission 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.

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.

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
1) Bachelor of Engineering in Civil Engineering (Level 7 on the National Framework of Qualifications) or
2) Bachelor of Engineering in Environmental Engineering (Level 7 on the National Framework of Qualifications).

BACHELOR OF ENGINEERING IN ENVIRONMENTAL ENGINEERING

LOCATION
MTU Bishopstown Campus, Cork

APPLICATION
Apply online at go.mtu.ie/CRCENVI7

COURSE FEE
€300 per 5 credit module (inc. exam fee)

ENQUIRIES
Des Walsh
E: des.walsh@mtu.ie
Certificate in Strategic Building Information Modelling Management

Location
MTU Bishopstown Campus, Cork

Course Fee
€1,650*

Enquiries
Seán Carroll
E: sean.carroll@mtu.ie

*Multiple applications from the same company will be eligible for a 10% discount for 2 attendees, 15% for 3 attendees or more.

Admission Requirements
Applicants should have a minimum of a Level 7 architectural technology or engineering or construction related qualification.

In order to take elective module INTR8030 Virtual Design & Construction, applicants are advised to have completed the MTU Certificate in Building Information Modelling Technologies Special Purpose Award (or have the equivalent prior learning). Alternatively, elective INTR9017 Infrastructure Asset Management is available.

Equivalent recognition may be given through the Recognition of Prior Learning 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 Built Environment discipline.

Structure
This Certificate is a three module, 15 credit, part-time programme. The programme provides an opportunity for architectural, engineering, and construction degree graduates, or qualifying students, to acquire effective skills and knowledge in the strategic application of Building Information Modelling (BIM) methodologies and technologies within a multidisciplinary and collaborative approach to building design and construction.

Participants will gain experience in using industry standard technology such as Autodesk Revit, Navisworks, Recap 360, BIM 360 Glue, and BIM 360 Field or other equivalent software. The programme is delivered by academic staff involved in BIM research combined with industry professionals charged with the delivery of BIM projects in Ireland and abroad.

Overall, this award will enhance employment prospects where there is an ever-increasing skills need both nationally and internationally. The programme will build on participants’ existing experience of the Architecture, Engineering and Construction (AEC) sector and introduce experience in working within a collaborative environment and enabled by the latest technological advances which support industry.

This programme will also offer a natural stepping-stone in the lifelong learning journey of those who have previously completed the well-established MTU Certificate in Building Information Modelling Technologies programme, which now has over 100 graduates.

Content
The programme comprises two mandatory modules and choose one elective:

Mandatory
INTR8028 BIM – Theory and Practice
DESI8018 Design Thinking for BIM

Elective (choose one)
INTR9017 Infrastructure Asset Management
INTR8030 Virtual Design & Construction

Through interaction with the MTU Careers Service, the student will be provided with the tools to engage in effective Career Planning and Management. Careers education will be facilitated through tailored employability workshops, one-to-one support, relevant career resources and, networking opportunities with employers and recruitment agencies, thus leading to increased job readiness.

Award
Special Purpose Award – Certificate in Strategic Building Information Modelling Management (Level 8, 15 ECTS Credits on the National Framework of Qualifications).
CERTIFICATE IN APPLIED BUILDING INFORMATION MODELLING AND MANAGEMENT

LOCATION
MTU Bishopstown Campus, Cork

COURSE FEE
€3,300*

ENQUIRIES
Seán Carroll
E: sean.carroll@mtu.ie

Course & Module Information, and to apply online, visit go.mtu.ie/CRCABIM8

*Multiple applications from the same company will be eligible for a 10% discount for 2 attendees, 15% for 3 attendees or more.

Admission Requirements
Applicants should have a minimum of a Level 7 architectural technology or engineering or construction related qualification.

Equivalent recognition may be given through the Recognition of Prior Learning 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 Built Environment discipline.

Aim
This Certificate is a four module, 30 credit, part-time programme. The programme provides an opportunity for architectural, engineering, and construction degree graduates, or qualifying students, to acquire effective skills and knowledge in the strategic application of Building Information Modelling (BIM) methodologies and technologies within a multidisciplinary and collaborative approach to building design and construction.

Structure
Participants will gain experience in using industry standard technology such as Autodesk Revit, Navisworks, Recap 360, BIM 360 Glue, and BIM 360 Field or other equivalent software. The programme is delivered by academic staff involved in BIM research combined with industry professionals charged with the delivery of BIM projects in Ireland and abroad.

Overall, this award will enhance employment prospects where there is an ever-increasing skills need both nationally and internationally. The programme will build on participants’ existing experience of the Architecture, Engineering and Construction (AEC) sector and introduce experience in working within a collaborative environment and enabled by the latest technological advances which support industry.

This programme will also offer a natural stepping-stone in the lifelong learning journey of those who have previously completed the well-established MTU Certificate in Building Information Modelling Technologies programme, which now has over 100 graduates.

Through interaction with the MTU Careers Service in Cork, the student will be provided with the tools to engage in effective Career Planning and Management. Careers education will be facilitated through tailored employability workshops, one-to-one support, relevant career resources and, networking opportunities with employers and recruitment agencies, thus leading to increased job readiness.

Content
The programme comprises four mandatory modules:

Semester 1
INTR8031 Project BIM+M
INTR8034 Project - Research Phase

Semester 2
CIVL8031 AEC Project & Control Management
INTR8035 Project - Implementation Phase

Award
Special Purpose Award – Certificate in Applied Building Information Modelling and Management (Level 8, 30 ECTS Credits on the National Framework of Qualifications).
Springboard Application Procedure
You must register with Springboard https://springboardcourses.ie/ and apply for Bachelor of Science (Honours) in Building Information Modelling (BIM) and Management. Once your application on the Springboard website has been accepted, MTU Admissions office in Cork will be in contact with you to complete your registration.

Admission Requirements
Applicants should have a minimum of a Level 7 architectural technology or engineering or construction 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 a Built Environment discipline.

Overview
The architecture, engineering and construction (AEC) industry is moving towards a situation where BIM is becoming an essential requirement internationally, thereby, creating a clear need for professionals with appropriate process and technology skills. This programme will enable architects, designers and design/project/construction/facility managers to specialise in the use of BIM and the implementation of integrated design and delivery. Upon completion, graduates will have developed skills and knowledge in a highly advanced specialism and the expertise gained is at the forefront of industry requirements. The technical and reflective skills gained will be of immediate advantage to employers in construction, engineering and design roles across the built environment.

Graduates of the programme will target employment across the Architectural, Engineering and Construction sector where there is an on-going national demand for skilled personnel at different levels and most specifically in the following sectors:

• Leveraging ICT advancements within the sector, in particular, Building Information Modelling (BIM);
• Lean design and construction process improvement techniques.

Content
Semester 1 (Sep – Dec)
Collaborative BIM (10 ECTS)
BIM Theory & Practice (5 ECTS)
Collaborative BIM (10 ECTS)

Semester 2 (Jan – May)
Design Thinking for BIM (5 ECTS)
Digital Design & Construction (10 ECTS)

Semester 3 (June – Sep)
AEC Industry Placement (15 ECTS)

Duration and delivery
This is a part-time course that will be delivered 2 evenings and one afternoon per week. Refer to go.mtu.ie/CRCBIMM8

Award
Bachelor of Science (Honours) in Building Information Modelling and Management (Level 8, 60 ECTS credits on the National Framework of Qualifications).
**POSTGRADUATE DIPLOMA IN SCIENCE IN APPLIED BUILDING INFORMATION MODELLING AND DIGITAL AEC**

**LOCATION**
MTU Bishopstown Campus, Cork

**COURSE FEE**
€7,500

**ENQUIRIES**
Michal Otreba  
E: michal.otreba@mtu.ie  
M: 086 219 5094

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**Springboard Application Procedure**
You must register with Springboard [https://springboardcourses.ie/](https://springboardcourses.ie/) and apply for Postgraduate Diploma in Science in Applied Building Information Modelling and Digital AEC. Once your application on the Springboard website has been accepted, MTU Admissions office in Cork will be in contact with you to complete your registration.

**Admission Requirements**
Applicants should hold a minimum of a Level 8 in civil engineering, construction, architecture, architectural technology, building services engineering, or other cognate disciplines.

Equivalent recognition may be given through the Recognition of Prior Learning 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. Semester 1 electives include Advanced Level modules which provide students with the opportunity, where necessary, to enhance and develop skills in the BIM disciplines at Level 8.

**Mature and non-standard Entrants**
The Institute and Department facilitate non-standard entrants and the transfer of non-standard students on an individual, case by case, basis. A rigorous assessment of prior learning is carried out to establish competence and adherence to the requirements of the programme.

**Aim**
The programme will convert a traditional Architecture, Engineering or Construction graduate into a skilled postgraduate with an understanding of the digitisation of Architecture, Engineering and Construction (AEC), Building Information Modelling (BIM) as well as the potential of digitisation in the delivery of Sustainable Energy Systems and Policies or Facility and Asset Management. The programme will focus on professionals originating from the AEC sector to enhance skills in BIM and Information Technology (IT) to address a current skills gap in the industry.

The underlining philosophy of the postgraduate diploma is the enhancement and deepening of professional practice skills. In addition to learning and developing BIM and digitisation skills, the key aspect of the postgraduate diploma, through the industrial project, is to ensure graduates will gain an understanding of how these skills can be implement in a professional workplace environment.

**Duration & Delivery**
This is a part-time course that will be delivered 2 evenings and one afternoon per week. Refer to go.mtu.ie/CRCABIM9

**Award**
Postgraduate Diploma in Science in Applied Building Information Modelling and Digital AEC (Level 9, 60 ECTS on the National Framework of Qualifications)
The Department offers two taught MEng programmes specialising in the fields of
1) Structural and
2) Civil Engineering (Environment and Energy).

The programmes are fully accredited by Engineers Ireland as satisfying the new educational standard for the title Chartered Engineer.

Duration & Delivery
These programmes are delivered on a part-time basis, i.e. two academic years, requiring attendance on two evenings, and a Friday afternoon per week, in each semester.

Please refer to the webpage below for the latest information in relation to next course delivery.
1) Structural: go.mtu.ie/CRSTEN9
2) Civil Engineering (Environment and Energy): go.mtu.ie/CRCCEEE9

Admission Requirements
Advance Entry: Part-time studies
Holders of existing Level 8 qualifications in Civil, Structural or Environmental Engineering are eligible to apply for advanced entry to Year 4 or Year 5 of the programme. Applications are assessed on a case by case basis to determine the stage of entry (direct to Year 5, to Year 5 post Bridging Studies, or direct to Year 4).

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.
Programmes in Building Regulatory Engineering, Fire Safety Engineering, Fire Safety Certification, and Fire Engineering Design are offered, subject to demand, on a rotational basis over a two year period.

The course is based on the Module Descriptor CIVL8004 Building Regulatory Engineering.

**Duration & Delivery**

**Delivery Mode A – On-Campus Attendance:**
Typically, the hours will be 6pm – 9pm Friday evenings and 9am – 4pm Saturdays for a total of four weekends, exact dates are published on the programme webpage. Information updates may be obtained by contacting the Department of Civil, Structural & Environmental Engineering; the Course Coordinator is Mr Andrew Macilwraith, contact details as above.

**Delivery Mode B – Online Delivery:**
Subject to demand, the Department will also offer a web based distance learning delivery of this programme available for part-time students; the course can be completed in one semester (13 weeks). Attendance at MTU will be required for the final assessment.

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

**Overview**
This course, will cover the recently enacted Building Control Amendment Regulations 2014, together with its associated Code of Practice. This SI 9 has significantly changed the way buildings are inspected and certified, and will hopefully in turn bring more work to construction professionals. Part of the inspection procedure includes CE marking of materials in accordance with the Construction Products Regulations which came into effect July 2014. A third area that has been added to this short course is the 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.

**Award**
Single Module Certification (5 ECTS credits at Level 8 on the National Framework of Qualifications).
Programmes in Building Regulatory Engineering, Fire Safety Engineering, Fire Safety Certification, and Fire Engineering Design are offered, subject to demand, on a rotational basis over a two year period.

**Duration & Delivery**

**Delivery Mode A – On-Campus Attendance:**
Typically, the hours will be 6pm – 9pm Friday evenings and 9am – 4pm Saturdays for a total of four weekends, exact dates are published on the programme webpage. Information updates may be obtained by contacting the Department of Civil, Structural & Environmental Engineering; the Course Coordinator is Mr Andrew Macilwraith, contact details as above.

**Delivery Mode B – Online Delivery:**
Subject to demand, the Department will also offer a web based distance learning delivery of this programme available for part-time students; the course can be completed in one semester (13 weeks). Attendance at MTU will be required for the final assessment.

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

**Overview**
This course will cover many areas of fire safe building design including commercial and residential sprinkler design, smoke control in atria, fire detection systems, emergency lighting systems, portal frame boundary collapse design, together with domestic and non-domestic gas installations. This course should be invaluable to both new users of the relevant fire safety codes, and those that may enjoy a refresher course. All building designers and many contractors will find this short course useful, particularly those involved in fire safety design, and certification of building projects.

This course analyses specific fire safety engineering elements of building design, such as steel portal frame boundary collapse, domestic/commercial sprinkler design, and smoke control in atria. Building system designs, including fire detection, emergency lighting, and gas installations are also analysed.

On successful completion of this course, the learner will be able to

- Understand and analyse active fire safety systems in buildings
- Understand and analyse residential and commercial sprinkler system design
- Understand and analyse the steel portal frame design under fire related boundary conditions
- Understand and analyse smoke control design in atria

**Award**
Single Module Certification (5 ECTS credits at Level 8 on the National Framework of Qualifications).
Programmes in Building Regulatory Engineering, Fire Safety Engineering, Fire Safety Certification, and Fire Engineering Design are offered, subject to demand, on a rotational basis over a two year period.

The course is based on the Module Descriptor INTR8029 Fire Safety Certification.

**Overview**

This newly developed module addresses fire safety certification legislation and guidance documents for all of the main building types, it should be invaluable to both new users of the relevant fire safety codes, and those that may enjoy a refresher course. All building designers and many contractors will find this short course useful, particularly those involved in fire safety design, and certification of building projects.

**Content**

- **Key Fire Engineering Concepts**
  Introduction, history of fire engineering design, key fire safety concepts, fire related legislation, fire related statistics.
- **Fire Safety in Buildings**
  Means of Escape (ASET-RSET), combustibility of linings, compartmentalization, and building separation design.
- **Fire Safety Legislation**
  Irish and International Fire Safety Legislation.
- **Prescriptive Fire Safety Design**
  Prescriptive Fire Safety Codes and Standards, both Irish and International, for each occupancy type and classification, including more complex buildings.
- **Accessibility and Escape from Fire**
  Accessibility relating to means of escape, relevant legislation, safety aspects and accessible design.

**Award**

Single Module Certification (5 ECTS credits at Level 8 on the National Framework of Qualifications).
Programmes in Building Regulatory Engineering, Fire Safety Engineering, Fire Safety Certification, and Fire Engineering Design are offered, subject to demand, on a rotational basis over a two year period. The short course is based on the Module Descriptor CIVL8030.

**Duration & Delivery**

**Delivery Mode A – On-Campus Attendance:** Typically, the hours will be 6pm – 9pm Friday evenings and 9am – 4pm Saturdays for a total of four weekends, exact dates are published on the programme webpage. Information updates may be obtained by contacting the Department of Civil, Structural & Environmental Engineering; the Course Coordinator is Mr Andrew Macilwraith, contact details as above.

**Delivery Mode B – Online Delivery:** Subject to demand, the Department will also offer a web based distance learning delivery of this programme available for part-time students; the course can be completed in one semester (13 weeks). Attendance at MTU will be required for the final assessment.

**Admission Requirements**

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

**Overview**

This newly developed course, will cover design using fire safety engineering principles, together with prescriptive design of several building types, and should be invaluable to both new users of the relevant fire safety codes and standards, and those that may enjoy a refresher course. All building designers and many contractors will find this short course useful, particularly those involved in fire safety design, and certification of building projects.

**Content**

- **Fire development within an enclosure**
  Analyses of time to flashover, fire growth rates, effects of suppression, heat release rates, and calorific values.
- **Fire & smoke spread outside initial fire enclosure**
  Analyses of smoke containment, plume shape, stratification of smoke, optical density of smoke, and mechanisms of fire spread.
- **Fire safety of residential and industrial buildings**
  Fire safety engineering comparisons with prescriptive standards for residential and industrial buildings.
- **Probabilistic fire safety risk assessments**
  Analyses of fire safety risks using, probabilistic risk assessment, comparative and absolute analysis, event tree and fault tree analysis, survivor probability distributions and damage areas after flashover.

**Award**

Single Module Certification (5 ECTS credits at Level 8 on the National Framework of Qualifications).
The course is based on the Module Descriptor CIVL7025 Practical Land Surveying.

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.

Having completed this module, 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

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

Data Processing

Global Positioning Systems

Duration & Delivery
The course is typically offered over a number of days, including Saturdays. Exact dates and timetable arrangements are available on the programme webpage. 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 Coordinator is Mr Jim O’Byrne, contact details as above.

Award
MTU Single Module Certification in Practical Land Surveying (5 ECTS credits at Level 7 on the National Framework of Qualifications).
The course is based on the Module Descriptor CIVL7005 Digital Land Surveying and GPS.

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.

Having completed this module, 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

**Content**

**Ordnance Survey**

**Global Positioning Systems**

**Data Processing**

**Setting Out**

**Duration & Delivery**
The course is typically offered over a number of days, including Saturdays. Exact dates and timetable arrangements are available on the programme webpage. 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 Coordinator is Mr Jim O’Byrne, contact details as above.

**Award**
MTU Single Module Certification in Digital Land Surveying and GPS (5 ECTS credits at Level 7 on the National Framework of Qualifications).
HIGHER CERTIFICATE IN
SCIENCE IN CONSTRUCTION

COURSE CODE
CR_CCONE_6
(LEVEL 6)

LOCATION
MTU Bishopstown
Campus, Cork

COURSE FEE
€220 per 5 credit module
(inc. exam fee)

ENQUIRIES
Carmel Collins
T: 021 433 5950
E: carmel.collins@mtu.ie

Course & Module Information, and to apply online, visit go.mtu.ie/CRCCONE6

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

Admission 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.

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
go.mtu.ie/CRCCONE6
MTU 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.

Content
Among the areas you would be required to study are:

Stage 1

Stage 2

Award

Further Studies at MTU
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.
BACHELOR OF SCIENCE IN CONSTRUCTION MANAGEMENT

LOCATION
MTU Bishopstown Campus, Cork

COURSE FEE
€220 per 5 credit module (inc. exam fee)

ENQUIRIES
Carmel Collins
T: 021 433 5950
E: carmel.collins@mtu.ie

Course & Module Information, and to apply online, visit go.mtu.ie/CRCCMNE7

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

Admission 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
go.mtu.ie/CRCCMNE7
MTU 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.

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.
BACHELOR OF SCIENCE IN QUANTITY SURVEYING

LOCATION
MTU Bishopstown Campus, Cork

COURSE CODE
CR_CCECE_7
(LEVEL 7)

COURSE FEE
€220 per 5 credit module (inc. exam fee)

ENQUIRIES
T: 021 433 5950
E: carmel.collins@mtu.ie

Course & Module Information, and to apply online, visit go.mtu.ie/CECCECE7

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

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

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
go.mtu.ie/CRCCECE7
MTU 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.

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.
CERTIFICATE IN MECHANICAL & ELECTRICAL QUANTITY SURVEYING

LOCATION
MTU Bishopstown Campus, Cork

COURSE FEE
Overall Fee: €1,500 (only applicable when ALL three modules are taken in Semester 1)
Individual module fee: €600

ENQUIRIES
Mark Higgins
T: 021 433 6198
E: mark.higgins@mtu.ie

Course & Module Information, and to apply online, visit go.mtu.ie/CRCMEQS8

Duration & Delivery
The course is delivered in one semester. All three modules are undertaken in Semester 1 between September and January.

Admission Requirements
Applicants must have achieved a minimum Level 7 Quantity Surveying qualification or equivalent. Where an applicant has not completed a relevant Level 7 programme, equivalence is assessed through the formal Recognition of Prior Learning (RPL) process used in MTU.

Aim
This Certificate programme will provide academically qualified Quantity Surveying graduates with the technical skills and capability in the area of Mechanical and Electrical Quantity Surveying. It enhances their abilities as highly effective practitioners in this specialised area once they have a number of years of practical work experience. It develops the core technical skills of a Mechanical and Electrical Quantity Surveyor in the specific areas of services technology, cost planning and measurement of mechanical and electrical services.

Career Opportunities
It is anticipated that undertaking this programme will enable practitioners, both in Quantity Surveying and Services, to develop their careers in this specialised area of Mechanical and Electrical Quantity Surveying.

Content
Building Services Technology Evaluation
Identification of, characteristics and selection criteria for cost-effective and sustainable environmental, public health, power supply, security and operational services in residential, commercial and industrial buildings.

M&E Cost Planning
This module will enable the student to understand and use cost data and resource information for the purpose of cost planning and control of Mechanical and Electrical Services.

M&E Measurement
This module will enable the student to measure Mechanical and Electrical Services and build up corresponding rates.

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

Award
Certificate in Mechanical and Electrical Quantity Surveying (Level 8 on the National Framework of Qualifications).
**Duration & Delivery**
Part-time students may take modules on a phased basis and achieve the programme qualification over a number of academic years, typically 2 years.

**Admission requirements**
Applicants must have successfully completed a Level 8 Built Environment Programme or equivalent* with a minimum Second Class Honours Grade 2.

*Equivalence: Where an applicant has not completed a relevant Level 8 programme equivalence is assessed through the formal Recognition of Prior Learning (RPL) process used in MTU.

**Aim**
A unique programme, developed following Industry demand and Government calls for upskilling, which will provide students with advanced managerial skills in Construction Project Management.

Graduates will be equipped to meet the challenges of managing the design and construction of modern complex developments in a diverse business environment.

The comprehensive module range offers the student extensive choice, facilitating individual areas of expertise.

The learning experience involves a variety of modes, including classroom based lectures, individual and group project work, tutorials, seminars and presentations by visiting experts.

A research dissertation is completed by each student during Stage 2/Semester 1.

**Career Opportunities**
The programme has been designed to suit the distinctive needs of the construction industry and offers excellent career opportunities for graduates as project managers or contract managers with design and construction companies, project management consultants, and government agencies.

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**Content**

**Stage 1/Semester 1**
- Contract Administration/Dispute Resolve
- Sustainability in Engineering
- Research Skills and Practice
- Construction Project Management
- Org Management & Knowledge Management

**Electives (choose 1)**
- Corporate Construction Finance
- Mechanical & Electrical Services Cost Planning
- Strategic Construction
- Development Appraisal
- Advanced Measurement
- Entrepreneurship
- New Venture Management & Growth
- Strategic Business Management

**Stage 1/Semester 2**
- Eng. Project Management
- Global Project Management
- Research Project Development
- Construction Value & Risk Management

**Electives (choose 2)**
- M&E Measurement
- Site Management and Technology
- Construction Psychology
- Construction Project Controls
- Commercial Management
- Infrastructure Asset Management
- Adaptation and Reuse 2
- Environmental Management
- Intl Strategies & Organisation
- Leadership & Change Management
- Managing Innovation

**Stage 2/Semester 1**
- Research Project Realisation (30 ECTS)

**Note:** Delivery of this programme is subject to sufficient number of applicants.
This course is designed for persons who have previously worked in the technical national craft area or for those who want to pursue a career in mechanical and electronic (mechatronics) engineering and need to develop their knowledge and skills. The course combines the fundamental principles of mechanical engineering technology with knowledge of electrical and electronic circuits to design, develop, test and manufacture electrical and computer-controlled mechanical systems. Graduates from this certificate will be involved in a range of careers that include process automation, robotics, system integration, embedded programming, sensor systems and control systems.

**Duration**
This programme will be delivered in a blended format part-time from September 2022 to May 2023. The majority of content will be delivered online, however, students will be required to attend a number of workshops (approximately six) on-campus over the duration of the programme.

**Entry Requirements**
Applicants must hold a national craft qualification or equivalent, in a related area. The University’s policy in relation to recognition of prior learning (RPL) also applies.

**Modules**
- Instrumentation
- Mathematics for Engineers
- Computer Integrated Manufacturing and Automation Technology
- Programming, Communications and Interfacing
- Applied Work-Based Project

**Progression Opportunities**
Students who have successfully completed this programme may progress onto the following full-time NFQ level 7 award, gaining relevant subject exemptions:
- Bachelor of Engineering in Mechanical and Automation Engineering
OR students may also progress to either:
- Certificate in Mechatronics (Minor Award NFQ level 7) see page 78.
- Certificate in Quality Management, Tools and Techniques in Practice (Special Purpose Award NFQ level 7) see page 113.

**Cost**
Fees do not apply to applicants who meet the eligibility criteria under the Springboard+ initiative (see https://springboardcourses.ie/eligibility). For applicants who do not meet the Springboard+ eligibility criteria the fee is €2,700.

**Closing date for applications**
22nd July 2022

**For further information contact**
Lifelong Learning Office
E: parttimekerry@mtu.ie
T: 353 (0)66 719 1701

**Apply online:** [www.springboardcourses.ie](http://www.springboardcourses.ie)
### MECHANICAL ENGINEERING SCIENCE

**COURSE CODE**

<table>
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**ENQUIRIES**

Dan O’Brien  
T: 021 433 5425  
E: dan.obrien@mtu.ie

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**Course & Module Information, and to apply online, visit** [go.mtu.ie/CREMSCI6](go.mtu.ie/CREMSCI6)

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. It is offered on a part-time basis and requires attendance of two evenings per week for the academic year.

**Admission Requirements**

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

**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.  
2. Identify and quantify all forces associated with a static framework using either the method of joints or the 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 Bernoulli’s 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.  
3. 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.

**Award**

Certificate in Mechanical Engineering Science (Level 6 on the National Framework of Qualifications).
CERTIFICATE IN 3D CAD AND SOLID MODELLING

LOCATION
MTU Bishopstown Campus, Cork

COURSE FEE
€840 for the academic year (incl. exam fee)

ENQUIRIES
Niall Morris
T: 021 433 5798
E: niall.morris@mtu.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.

Admission Requirements
The applicant should be competent in two-dimensional CAD.

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 coordinates in the construction of 3D drawings.
2. Use multiple viewports and views to construct 3D drawings.
3. Create and edit polygon meshes for surface modelling.
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.
4. Illustrate the benefits of parametric modelling for design intent.

Award
Certificate in 3D CAD and Solid Modelling (Level 6 on the National Framework of Qualifications).
Mechatronics is a combination of mechanical, electronic and software engineering. The purpose of this field is the study of industrial instrumentation and automation from an engineering and technology perspective with the aim of developing a strong knowledge of controlling advanced hybrid mechatronics systems. Graduates with a good grounding and understanding in this field can look to a bright and rewarding career. In an era where it is necessary for manufacturing industries to be located in less expensive environments, the advanced technical communication techniques and skilled workforce created with this level 7 programme allows such manufacturing industry to be controlled in Ireland, keeping the high skilled jobs in Ireland despite the migration of unskilled jobs to other countries.

Duration
This programme will be delivered in a blended format part-time from September 2022 to May 2023. The majority of content will be delivered online, however, students will be required to attend workshops (approximately six) on-campus over the duration of the programme.

Entry Requirements
Applicants must hold a minimum NFQ Level 6 Higher Certificate in an engineering qualification, or equivalent. The University’s policy in relation to recognition of prior learning (RPL) also applies.

Modules
• Analogue Electronics
• Digital Electronics
• Electrical Power Systems
• Embedded Systems (Engineering)
• Instrumentation; Monitoring and Control
• Operations Management

Progression Opportunities
Students who have successfully completed this programme may progress onto the following full-time NFQ level 7 award, gaining relevant subject exemptions:
• Bachelor of Engineering in Mechanical and Automation Engineering.

Cost
Fees do not apply to applicants who meet the Springboard+ initiative funding (see https://springboardcourses.ie/eligibility). For employed applicants the HEA will pay 90% of the programme fee, the remaining 10% - €331 will be payable before registration. For applicants who do not meet the Springboard+ eligibility criteria the fee is €3,310.

Closing date for applications
22nd July 2022

For further information contact
Lifelong Learning Office
E: parttimekerry@mtu.ie
T: 353 (0)66 719 1701

Apply online: www.springboardcourses.ie
This course is designed for persons who want to pursue a career in quality engineering and need to develop their knowledge and skills accordingly. An EGFSN report entitled Digital Transformation: Assessing the Impact of Digitalisation on Ireland’s Workforce, December 2018 stated that, “Improving productivity is the key foundation of sustainable, longer term wealth creation. Being able to perform core business processes faster, with higher quality and at a lower cost, is the desire of every business.” The high technology manufacturing sector is particularly singled out as being critical to economic recovery. Aligned to this growth potential is the identified need to increase efficiency through measures such as the implementation of lean manufacturing and quality assurance methods. Improved performance in these areas will not only enhance profitability but improve performance in areas such as international competitiveness and statutory compliance, items which are clearly identified as critical aspects of skills development within the report.

The tools, techniques and skills addressed in this course can also transfer among several other areas of identified economic growth potential including green business, waste management and the food and beverage manufacturing sector. This course has been designed in consultation with industrial partners in the region who are associated with MTU programmes in manufacturing engineering management, production engineering and mechanical and mechatronic engineering. Quality management skills and experience have been singled out as having high potential for upskilling among prospective and existing staff in order to produce gains for the companies.

**Modules**
- Quality Management and Lean Techniques
- Statistics for Quality
- Project 1
- Quality Standards and Auditing
- Six Sigma Tools
- Project 2

**Progression Opportunities**
On successful completion of the programme students will have gained 30 credits at NFQ level 7 which may contribute to the achievement of other academic awards.

**Cost**
€1,600.

**Closing date for applications**
19th August 2022

**For further information contact**
Lifelong Learning Office
E: parttimekerry@mtu.ie
T: 353 (0)66 719 1701
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.

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

**Content**
The following four modules are likely to be offered in the 2022/2023 academic year:

**Semester 1**
Modules (September to December)

- **MECH7010 CAE & Mechanical Design**
  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 a team design project by applying systematic design principles.
  4. Design for fatigue a range of mechanical components.
  5. Integrate major international standards (DIN, ISO, BS, Machinery Directive) and hazard analysis techniques into the mechanical design, operation and safety of components and machines.

- **MECH 7030 SCADA & Robotics**
  On successful completion of this module the learner will be able to:
  1. Configure and use a PLC in an Integrated Control Environment.
  2. Design and integrate a SCADA system.
  3. Validate the operation of internal and external sensors used in Robotic Systems.
  4. Programme and control a Robotic System.

**Semester 2**
Modules (January to May)

- **MATH7020 Technological Maths 301**
  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.

- **MECH7014 Mechatronics 3 – PLC Control**
  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. Select suitable feedback and final control elements for pneumatic control systems.
  4. Design PLC controlled systems, to performance specifications, using standard software for electro-pneumatic systems.
  5. Use an HMI to interact with a control system.
Industry 4.0 and Industrial Internet of Things (IIoT) have become extremely relevant and increasingly important in manufacturing for a multitude of reasons. It helps manufacturers with current challenges by allowing greater connectivity of their machines, greater operational insight into the process, makes reacting to changes in the manufacturing process easier, faster and more efficient and allows greater product traceability. The implementation of Industry 4.0 and IIoT techniques within a manufacturing facility can increase yield, quality and product throughput, while reducing downtime and improving process efficiency.

These methods can increase the speed of process improvement and innovation, leading ultimately to more profitable manufacturing and subsequently to a more sustainable and profitable future in the industry. This programme is designed for persons who are currently working in the manufacturing sector or want to pursue a career in the sector and need to develop their knowledge and skills accordingly. The modules on this programme address current technologies in advanced manufacturing and provide students with the broad range of skills needed in industry today.

Duration
This programme will be delivered in a blended format part-time from September 2022 to May 2023. The majority of content will be delivered online, however, students will be required to attend a number of workshops (approximately six) on-campus throughout the duration of the programme.

Entry Requirements
Applicants must hold an NFQ level 7 or equivalent qualification in a science or engineering discipline. The University’s policy in relation to recognition of prior learning (RPL) also applies.

Modules
- Instrumentation, Monitoring & Control
- Industrial Internet of Things: Applications
- Industrial Networks, Distributed Systems & Cloud Computing
- Industry 4.0: Cyber Physical Systems
- Machine Learning/Data for Internet of Things

Progression Opportunities
On successful completion of the programme students will have gained 30 credits at NFQ level 8 which may contribute to the achievement of other academic awards.

Cost
Fees do not apply to applicants who meet the Springboard+ initiative funding criteria (see https://springboardcourses.ie/eligibility). For employed applicants the HEA will pay 90% of the programme fee, the remaining 10% – €360 will be payable before registration. For applicants who do not meet the Springboard+ eligibility criteria the fee is €3,600.

Closing date for applications
19th August 2022

For further information contact
Lifelong Learning Office
E: parttimekerry@mtu.ie
T: 353 (0)66 719 1701
SPECIAL PURPOSE AWARD CERTIFICATE COURSES (LEVEL 6)

The Special Purpose Award certificate courses (Level 6) are industry relevant short courses and includes a Certificate in Cleanroom Manufacturing Practices and a Certificate in Biotechnological Manufacturing Operations. These special purpose award certificates encompass one module per semester (13 weeks) for an evening a week over 1 academic year and start in September.

We will only offer students the courses in September, we will not take in students during the academic year.

€500 per 5 credit module, total cost of Special Purpose Award Certificate is €1,000 (2 modules).

One evening a week per module over 13 weeks in semester 1 and 2 (one academic year).

SCIENCE OF BIOTECHNOLOGICAL MANUFACTURING OPERATIONS

LOCATION
MTU Bishopstown Campus, Cork

COURSE FEE
€1,000 (€500 per 5 credit module x 2 modules)

ENQUIRIES
Elaine McCarthy/Tammy Browne
T: 021 433 5150
E: PET.DeptCork@mtu.ie
E: cert.biotechmanuCork@mtu.ie

Course & Module Information, and to apply online, visit go.mtu.ie/CRESBMO6

Duration & Delivery
The programme is delivered in one academic year.
One module per semester.

Semester 1: Tuesday evenings 6.00pm – 10.00pm and Wednesday evening (x 4) in October 6.00pm – 10.00pm.

Semester 2: Tuesday evenings 6.00pm – 10.00pm

Aim
This award aims to introduce the participants to basic concepts of chemistry such as structures, bonding and their relationship to chemical properties. The industrial biotechnology content includes environmental biotechnology, biopharmaceutical engineering, bioreactor design and bioprocess design considerations. The programme is designed for existing employees or potential new recruits in the Biopharmaceutical, Pharmaceutical, and Medical Devices, and Food industries who would like an accredited qualification. The programme has two modules, namely Chemical Principles (semester 1), and Introduction to Industrial Biotechnology (semester 2).

Admission Requirements
Applications are welcome from persons over 23 years of age by 1 January of year of entry.

Leaving Certificate Grade O6/H7 (pre. 2017, D3 Ordinary Level) in five subjects to include Mathematics and English. Alternative Mathematics does not qualify applicants on this basis. Other examinations/qualifications taken such as GCE/GCSE, trade/craft exams are considered.

Further Studies
Credits and Certificates are awarded for each module passed, allowing participants to gain credits at level 6. They may be used for advanced entry to the BSc in GMP and Technology, see go.mtu.ie/CRSGMPE7Y1

Award
Special Purposed Award - Certificate in Science of Biotechnological Manufacturing Operations (Level 6, 10 ECTs, on the National Framework of Qualifications)
CERTIFICATE IN CLEANROOM MANUFACTURING PRACTICES

LOCATION
MTU Bishopstown Campus, Cork

COURSE FEE
€1,000 (€500 per 5 credit module x 2 modules)

ENQUIRIES
Elaine McCarthy
T: 021 433 5150
E: PET.DeptCork@mtu.ie
E: Cert.CleanManuCork@mtu.ie

Duration & Delivery
The programme is delivered in one academic year. One module per semester, Mondays 6.00pm – 9.00pm.

Aim
This is an industrial relevant course specifically designed for existing employees to upskill and build on their professional experience as well as for potential new recruits in the Biopharmaceutical, Pharmaceutical, Medical Devices and Food industries who would like an accredited qualification. This course aims to develop skills, knowledge and confidence to work within these highly regulated manufacturing environments.

Contamination Control module’s key topics include
- Understand the importance of contamination control
- Sources, detection and identification of contamination within the manufacturing environment
- Contamination control strategies used and cleaning validation
- Effective sterilisation methods and the emergence of single-use-technology
- Facility design
- Practical skills using microbiological, sterilisation and detection methods
- Completion of GMP check sheets

On successful completion of the module, Cleanroom Management, you will gain an understanding of the following
- Identify and measure sources of cleanroom contamination
- Selection process and use of cleaning agents
- Classification of cleanrooms according to ISO14644
- Cleanroom design and construction
- Cleanroom garbing and behaviour
- Cleanroom, control and monitoring and validation
- Practical skills in environmental monitoring, interpretation of psychrometric charts, gowning practices

Admission Requirements
Leaving Certificate Grade O6/H7 (pre. 2017, D3 Ordinary Level) in five subjects to include Mathematics and English. Alternative Mathematics does not qualify applicants on this basis.

Applications are welcome from mature students over 23 years of age by 1st January of year of entry. Leaving Certificate is desirable but not essential. Relevant work experience; skills gained through experiential learning; and other qualifications, will be considered when assessing applications. Eligible candidates may be interviewed.

Further Studies
Students may seek to gain another industrial relevant short course certificate in MTU’s Science of Biotechnological Manufacturing Operations.

Completing this Special Purpose Award together with relevant industrial experience, students may have the opportunity to progress towards an Advanced Entry of MTU’s Bachelor of Science in Good Manufacturing Practices and Technologies).

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

Award
Special Purposed Award – Certificate in Cleanroom Manufacturing Practices (Level 6, 10 ECTs, on the National Framework of Qualifications).
CERTIFICATE IN BREWING & DISTILLING SCIENCE

COURSE CODE: CR_EBRDS_7
(LEVEL 7)

LOCATION
MTU Bishopstown Campus, Cork

COURSE FEE
€500 per module (includes course notes, and MTU exam fee)

ENQUIRIES
Ian O’Sullivan
T: 021 433 5888
E: brewing.distillingcork@mtu.ie

Course & Module Information, and to apply online, visit go.mtu.ie/CREBRDS7

*Applicants whose companies are eligible for support via the Taste4Success Skillnet may be eligible for a fee waiver or fee reduction. Please visit go.mtu.ie/CREBRDS7 for more details.

This programme provides candidates with the scientific background required to work in craft and traditional breweries and distilleries. The modules on the programme are closely aligned with the Institute of Brewing and Distilling (IBD) syllabi for the Diploma in Brewing and Diploma in Distilling examinations (specifically Diploma 1 and 2).

Delivery
The programme takes 1.5 years to complete. It is expected that classes will be conducted online and/or live streamed from campus and that laboratory practicals will take place in small groups in MTU Bishopstown Campus on two separate Saturdays (10am – 4pm). Therefore, it will be possible for students to take these modules and only have to attend campus for labs, the final exam, and any site visits.

Attendance at laboratories is mandatory whereas attendance at site visits is not. Lecture sessions will take place from 6.30pm – 8.30pm on Tuesday evenings. The programme is delivered over 3 Semesters.

Admission Requirements
Candidates are expected to have at least a Level 6 qualification in science or engineering on the National Framework of Qualifications.

Applications from students who have passed the
• IBD General Certificate in Brewing
• IBD General Certificate in Distilling or
• MTU Certificate in the Science of Biotechnological Manufacturing Operations are also eligible to join the programme.

Award
On successful completion of three modules, graduates will be awarded a MTU Certificate in Brewing & Distilling (Level 7 on the National Framework of Qualifications).

Content
Candidates may choose to take any number of modules on a stand-alone basis and will receive individual certification for each module completed. Lectures will be supplemented by industry relevant laboratory practicals, guest lectures, and visits to breweries, distilleries and maltings.

• Yeast & Beer module covers fermentation, maturation and cold storage, yeast and beer properties, spoilage and quality. The module considers aspects of brewing from the conversion of wort to the storage of beer.

• Raw Material & Wort Processing module covers barley, malting, malt preparation on site, mashing, wort, hops, quality management, and laboratory testing. The module covers aspects of cereal science, malt processing and fermentable extract production relevant to the brewing and distilling industry.

• Spirit Production module covers yeast & fermentation, pot distillation, continuous distillation, maturation, quality & hygiene. The module considers aspects of the distillation process from the conversion of wort to the maturation of whiskey.
Duration and Delivery
The programme is delivered in one year, a module per semester, 6.30pm – 9.30pm, one evening per week. Each module comprises of weekly lectures and biweekly practicals. Practicals are delivered both at MTU and at the National Institute for Bioprocessing Research & Training (NIBRT) in Dublin.

Overview
This Certificate (Special Purpose Award) allows students to attain a knowledge and an understanding of the principles of Biopharmaceutical Processing and its underpinning science. The course predominately covers both cell culture and purification of biopharmaceuticals covering all unit operations, good manufacturing practices, validation and process analytical technology. The Certificate comprises of two modules namely, Biopharmaceutical Upstream and Downstream whereby the students gain significant theoretical knowledge through lectures and site visits. This Certificate upskills professionals from small to large molecule processing. It has an excellent reputation as a Continuing Professional Development (CPD) enabler.

Aim
This Special Purpose Award is 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.

On successful completion of the Biopharmaceutical Upstream Processing module you will be able to:
- Evaluate the significance of biotechnology as a method for the production of pharmaceutically active substances.
- Examine the key aspects of bioreactor design and contrast the various types of reactors including application, operation and limitations.

On successful completion of the Biopharmaceutical Downstream Processing module you will be able to:
- Evaluate options for media design, control and feeding regimes of cell culture systems.
- Compare and contrast the key aspects of mammalian and microbial cell culture systems and their ability to express biopharmaceutical products.
- Conduct, write and critically evaluate biopharmaceutical upstream based practicals.
- Explain the properties of proteins that are exploited in their separation and purification.
- Elaborate on the theoretical principles of a range of capture, concentration and purification unit operations, including any limitations in their use.
- Justify the key quality/purity requirements for Biopharmaceutical products.
- Evaluate the issues associated with the scale up of downstream unit operations and apply appropriate problem solving approaches.
- Conduct and critically report on a range of practical experiments on downstream processing unit operations.

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

Note: All part-time courses at MTU will run subject to sufficient student numbers. Where a course cannot proceed, applicants will be contacted and advised on alternative study options.

Award
Special Purposed Award - Certificate in Biopharmaceutical Processing (Level 7, 10 ECTs, on the National Framework of Qualifications).
COURSE CODE
CR_EPRSF_7
(LEVEL 7)

LOCATION
MTU Bishopstown Campus, Cork

COURSE FEE
€1,250

ENQUIRIES
Rachel O’Farrell
E: rachel.ofarrell@mtu.ie
M: 083 020 9930

Springboard+ application procedure
You must register with Springboard https://springboardcourses.ie/ and apply for the Certificate in Process Safety. Once your application on the Springboard website has been accepted, MTU Admissions office in Cork will be in contact with you to complete your registration.

Delivery and duration
Tuesday 6.30pm – 9.30pm – one evening per week for one academic year.
Both modules are delivered through Screencasts & Associated Learning, Workshops & Webinars.

Admission requirements
All qualified candidates are required to have a minimum of a Level 6 in an engineering or science discipline.
Recognition of Prior Learning (RPL) will be applicable for candidates entering from the workplace or applying for admission from other institutes.

Aim
The programme has been developed in conjunction with MTU and UCC. It addresses the key challenge identified over the next decade to ensure an adequate supply of qualified individuals with consistent learnings aligned with industrial needs across the Universities based in the South West (MTU & UCC).

This Special Purpose Award in Process Safety provides an online accredited Level 7 qualification in Process Safety over 1 year for individuals who need to safely handle, store and use potentially hazardous materials and processes. It targets employment roles in production/manufacturing, commissioning and operation roles within pharmaceutical/ biotechnology/ food & drink manufacturing companies.

Students will attain knowledge and understanding of the theory and application of Process safety. This involves online delivery of the main theoretical elements of the programme combined with Industry delivered seminars and workshops. The first module is designed to give students a theoretical grounding in the issues that must be addressed when assessing the hazards arising from the process industries. The second module addresses Process Safety in practice.

Award
Certificate in Process Safety (10 ECTS, Level 7, on the National Framework of Qualification)

Register with Springboard https://springboardcourses.ie
Admission Requirements
All qualified candidates are required to have a minimum of a Level 6 qualification (120 credits), or equivalent, in an engineering or science discipline. Candidates may also be interviewed for positions on the programme.

Delivery
Online

The programme is delivered over two semesters of 13 weeks by online delivery and in the classroom followed by examinations.

Semester 1
Industry Workshops 4 times over the semester, 6pm – 9pm on Wednesdays. You will be given more information on the specific Wednesdays once the programme commences in September. Online presentations and webinars to be taken at your own time throughout the semester.

Semester 2
Lectures every Wednesday 6pm – 9pm.

Overview
This Special Purpose Award in Validation Science provides an accredited level 7 qualification in Validation Science over one year for individuals who are seeking to up-skill or cross-skill in order to gain suitable employment in sectors such as biopharmaceutical, pharmaceutical and medical device industries.

This programme has been developed in response to the requests from the industrial participants in the South Western Skills Forum.

The programme targets employment roles in production/manufacturing, quality assurance, regulatory affairs, commissioning, qualification, validation and operation roles within pharmaceutical/biotechnology/medical device manufacturing companies.

Students gain valuable knowledge and key skills in subject areas pertinent to working in highly regulated manufacturing environments such as GMP, QA, QC and Validation.

Students will attain a knowledge and understanding of the principles of quality regulation as required by the principles of current Good Manufacturing Practice. The importance of validation of equipment, plant, utilities, processes and procedures in industry will be shown to be an essential approach to consistently producing products of the intended quality. The student will gain an understanding of the increasing regulatory requirements relevant to the biomedical, pharmaceutical and biopharmaceutical industry. The proposed modules are focused not only on the biotechnological industries but also find applications into other regulatory compliant environments such as the pharmaceutical and medical technology sectors.

The programme uses a mixture of online multiple choice question assessments and online submission of assignments. The first introductory module is a blended module and will consist of a mixture of online teaching, lectures and workshops. Several industry champions will deliver workshops and webinars that will reinforce the fundamental content delivered by the academic lecture team. Industry generated case studies focusing on different aspects linked to different learning outcomes, online lectures/seminars, Industry Guest Lecturers for webinars.

The second module gives the student a broad understanding of the application of current Good Manufacturing Practices to the validation of equipment, plant, utilities, processes and procedures in the pharmaceutical and medical device industries. The principles of risk assessment techniques in validation are applied.
Duration and Delivery
The programme is delivered in one year, a module per semester, 6.30pm – 9.30pm, one evening per week. Each module comprises of weekly lectures and biweekly practicals. Practicals are delivered both at MTU and at the National Institute for Bioprocessing Research & Training (NIBRT) in Dublin.

Overview
This Certificate (Special Purpose Award) allows students to attain a knowledge and an understanding of the principles of Biopharmaceutical Processing and its underpinning science. The course predominately covers both cell culture and purification of biopharmaceuticals covering all unit operations, good manufacturing practices, validation and process analytical technology. The Certificate comprises of two modules namely, Biopharmaceutical Upstream and Downstream whereby the students gain significant theoretical knowledge through lectures and site visits. This Certificate upskills professionals from small to large molecule processing. It has an excellent reputation as a Continuing Professional Development (CPD) enabler.

Aim
This Special Purpose Award is 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.

On successful completion of the Biopharmaceutical Upstream Processing module you will be able to:
- Evaluate the significance of biotechnology as a method for the production of pharmaceutically active substances.
- Examine the key aspects of bioreactor design and contrast the various types of reactors including application, operation and limitations.
- Evaluate options for media design, control and feeding regimes of cell culture systems.
- Compare and contrast the key aspects of mammalian and microbial cell culture systems and their ability to express biopharmaceutical products.
- Conduct, write and critically evaluate biopharmaceutical upstream based practicals.

On successful completion of the Biopharmaceutical Downstream Processing module you will be able to:
- Explain the properties of proteins that are exploited in their separation and purification.
- Elaborate on the theoretical principles of a range of capture, concentration and purification unit operations, including any limitations in their use.
- Justify the key quality/purity requirements for Biopharmaceuticals products.
- Evaluate the issues associated with the scale up of downstream unit operations and apply appropriate problem solving approaches.
- Conduct and critically report on a range of practical experiments on downstream processing unit operations.

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

Note: All part-time courses at MTU will run subject to sufficient student numbers. Where a course cannot proceed, applicants will be contacted and advised on alternative study options.

Award
Special Purposed Award - Certificate in Biopharmaceutical Processing (Level 7, 10 ECTs, on the National Framework of Qualifications).

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**LOCATION**
MTU Bishopstown Campus, Cork

**COURSE FEE**
€500 per module

**ENQUIRIES**
Elaine McCarthy
T: 021 433 5150
E: PET.DeptCork@mtu.ie

Course & Module Information, and to apply online, visit go.mtu.ie/CRSGMPE7
ADMISSION REQUIREMENTS TO THE BSC IN GOOD MANUFACTURING PRACTICE & TECHNOLOGY

There are two routes of entry to this BSc course: Direct Entry and Advanced Entry.

**Direct Entry**
Candidates are required to have a Higher Certificate or higher in an engineering or science discipline (minimum 120 credits). It is required that all qualifying candidates have completed modules in basic chemistry and biology (Level 6), and have a knowledge of GMP, to undertake the complete programme. A Level 6 mathematics module must be part of the qualification.

**Advanced Entry**
This route was developed for individuals who have relevant industrial experience seeking to gain a Bachelor of Science degree.

Students complete a technical portfolio which must be approved for entry into the BSc. The recognition of Prior

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

1. Leaving Certificate Grade O6/H7 (pre. 2017, D3 Ordinary Level) in five subjects to include Mathematics, and either English or Irish.

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 (details of these modules can be found on the MTU website: go.mtu.ie/CRSGMPE7Y1):

   a. MANU6011 Calibration Science
   b. STAT6008 Lean Manufacturing
   c. MANU6013 Manufacturing Technology
   d. BIOM6003 Cleanroom Management
   e. MGMT6021 GMP1/Quality Assurance
   f. INFO6017 Information Technology
   g. BIOM6004 Contamination Control
   h. MATH6000 Essential Maths Skills

3. The following modules of the Higher Cert in Science in GMP and Technology or their equivalent:
   CHEM6002 Chemical Principles
   BIOT6003 Introduction to Industrial Biotechnology

These modules may be offered at night this academic year (September 2022 to June 2023) in MTU Bishopstown Campus, Cork.

**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.
NURSING AND HEALTH CARE

Level 8
Bachelor of Arts (Honours) in Counselling with Addiction (Add-On)
Since 2019 graduates of counselling and psychotherapy programmes are regulated under CORU and all of the relevant Irish professional bodies require practitioners in counselling to hold, as a minimum entry qualification, an NFQ level 8 degree in counselling. This one-year programme has been specifically designed to facilitate holders of an NFQ level 7 qualification in counselling to upskill and bring their qualifications in line with the regulations.

The BA (Honours) in Counselling with Addiction is a collaborative programme between Munster Technological University and Cuan Mhuire/Galilee House of Studies in Athy, Co. Kildare. Cuan Mhuire is Ireland’s largest multi-site provider of residential detoxification and treatment for those suffering from addiction (see www.cuanmhuire.ie for further details). Counsellors may work with individuals, couples, families or groups and may provide counselling face-to-face, over the telephone or online. There are significant employment opportunities in the various specialised areas, such as addiction, victim support, marriage guidance, bereavement, substance abuse, homelessness, youth and community. Many counsellors work in private practice, private or public residential and non-residential youth and adult centres, schools, colleges, hospitals, etc. Some choose to work in a specialised way, for example, by employing methods such as cognitive behaviour therapy or psychodynamic counselling.

Duration
The first semester will be delivered on Thursday evenings, Fridays and Saturdays over 12 weeks commencing September 2022 excluding mid-term. The second semester will commence January 2023 and will run every Saturday for 12 weeks.

Entry Requirements
Applicants must be 23 years of age or over on the 1st of January of the year of entry AND hold an NFQ level 7 in counselling (or equivalent) AND be accredited as counsellors with any relevant counselling body. Where English is not the applicant’s first language, they must provide documentary evidence indicating a minimum of 6.0 IELTS score (or equivalent). Vetting by An Garda Síochána is a mandatory requirement for this programme. The University’s policy in relation to recognition of prior learning (RPL) will also apply. Recommendation from interview panel (score above threshold).

Modules
- Research Methods
- Psychodynamic Perspective
- Motivational Interviewing
- Clinical Supervision
- Dissertation
- Advanced Addiction Studies

Progression Opportunities
Successful students are eligible to progress onto a relevant postgraduate programme such as the Certificate in Gambling Addiction or a Master of Science programme. For example, the Master of Science by Research programme will support learners in developing their research interests and skills to NFQ level 9

Cost
Fees for this course are €5,000. This fee includes the student contribution charge of €3,000 and €2,000 tuition fees. Applicants may be eligible for a student grant, for further details visit www.susi.ie

Closing date for applications
19th August 2022

For further information contact
Admissions Office
E: admissionskerry@mtu.ie
T: 353 (0)66 714 5638
BIOLICAL, PHYSICAL, AND PHARMACEUTICAL SCIENCES

**Level 6**
Certificate in Accuracy Checking for Pharmacy Professionals
Higher Certificate in Science in Industrial Measurement & Control
Certificate in Introduction – PLCS, Control & Scada
Certificate in Process Instrumentation & Calibration
Certificate in Quality Assurance

**Level 7**
Bachelor of Science in Instrumentation and PLC Systems
Certificate in Validation
Certificate in Manufacturing Sterilisation Control
Bachelor of Science in Pharmacy Management and Practice
Certificate in PLC Based Automation Systems
Certificate in Process Analytical Instrumentation
Diploma in Quality Management – Part 1
Diploma in Quality Management – Part 2

**Level 8**
Certificate in Circular Economy
Certificate in Distributed Control Systems and Industrial Networks
Higher Diploma in Quality Systems Validation with Data Analytics

**Level 9**
Postgraduate Diploma in Bioeconomy with Business
Postgraduate Diploma in Innovative and Sustainable Agriculture
As dispensing and the delivery of medicines is becoming increasingly complex and time consuming, the availability of highly trained staff in pharmacy is necessary to ensure patient safety. Both hospital pharmacy departments and community pharmacies are receiving more complex drug therapies which require a greater level of skill in dispensing than was ever required before. As pharmacists and pharmacy teams strive to deliver excellent pharmaceutical care, the multidisciplinary team that delivers that care must be upskilled and trained to allow that care need to be met. A high-quality learning programme, such as this, will allow pharmacists/pharmacy technicians to improve their accuracy skills when dispensing. It will provide learners with the skills and knowledge necessary to check for and enhance their capabilities in the dispensing process, ensuring patient safety and improving patient care.

The Certificate aims to support pharmacists and pharmacy technicians to:
• Develop the skills required to be safer and more accurate dispensers;
• Improve leadership skills to direct the dispensary team;
• Support the multi-disciplinary team to deliver patient-facing services.

Duration
This programme will be delivered online part-time from September 2022 to December 2022 over 12 weeks.

Entry Requirements
Entry to this programme is open to qualified pharmacist/pharmacy technicians. Technicians may be qualified through a Higher Certificate in Science in Pharmacy Technician programme or through the Irish Pharmacy Union Pharmacy Technician programme.

Modules
• Accuracy Checking for Pharmacy Professionals

Progression Opportunities
On successful completion of the programme students will have gained 10 credits at NFQ level 6 which may contribute to the achievement of other academic awards.

Cost
€500

Closing date for applications
22nd July 2022

For further information contact
Lifelong Learning Office
E: parttimekerry@mtu.ie
T: 353 (0)66 719 1701
ACCS Mode

Year 1, Year 2 and Year 3 will be offered 3 evenings a week/semester subject to student numbers.

Note: This level 6 programme will be delivered over 3 academic years. All students holding a cognate craft qualification (Electrical, Instrumentation and Electrical & Instrumentation crafts) will gain advanced entry against Year 1 and therefore must only complete Year 2 and 3. All other students must complete Year 1, Year 2 and Year 3. Advanced entry may be gained against certain Year 1 modules.

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.

Admission Requirements

1. Leaving Certificate Grade O6/H7 (pre. 2017, D3 Ordinary or Higher Level) in five subjects to include Mathematics, and either English or Irish.
2. Mature and other special category applicants will be admitted according to MTU regulations for part-time enrolment;
3. Applicants holding a relevant FETAC (now QQI) 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.

Content

All applicants who do not hold an Electrical, Instrument or Electrical Instrumentation Craft Certificate must complete SIMCT Stage 1 before entering SIMCT stage 2.

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<tr>
<th>SIMCT STAGE 1 TIMETABLE</th>
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<th>Semester 2</th>
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</thead>
<tbody>
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<td>Mon</td>
<td>Maths for Craftpersons</td>
<td>Signal Measurement</td>
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<tr>
<td>Tues</td>
<td>Introduction to Instrumentation Technology</td>
<td>Signal Conditioning</td>
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<tr>
<td>Wed</td>
<td>Technology</td>
<td>Fundamental Physics</td>
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<tr>
<td>Thurs</td>
<td>Overflow Lab sessions</td>
<td>Overflow Lab sessions</td>
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</tbody>
</table>

All applicants who hold an Electrical, Instrument or Electrical Instrumentation Craft Certificate enter the programme at SIMCT Stage 2.

<table>
<thead>
<tr>
<th>SIMCT STAGE 2 TIMETABLE</th>
<th>Year 2</th>
<th>Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mon</td>
<td>Industrial Automation</td>
<td>Instrument Calibration</td>
</tr>
<tr>
<td>Tues</td>
<td>Instrument Measurement</td>
<td>Process Control</td>
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<tr>
<td>Wed</td>
<td>Practical Computer Technology</td>
<td>Maths for Physical Sciences</td>
</tr>
<tr>
<td>Thurs</td>
<td>Overflow Lab Sessions</td>
<td>Overflow Lab Sessions</td>
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</tbody>
</table>
## SIMCT STAGE 3 TIMETABLE

**Year 3**

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Semester 2</th>
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</thead>
<tbody>
<tr>
<td><strong>Mon</strong></td>
<td></td>
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<tr>
<td>Intro to Stats for</td>
<td>Maths for</td>
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<tr>
<td>Physical Sciences</td>
<td>Science 2.1</td>
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<td><strong>Tues</strong></td>
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<tr>
<td>Applications of</td>
<td>Graphics &amp; Engineering</td>
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<tr>
<td>Automation</td>
<td>Design</td>
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<tr>
<td><strong>Wed</strong></td>
<td></td>
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<tr>
<td>Introduction to Utilities</td>
<td>Process Instrumentation</td>
</tr>
<tr>
<td><strong>Thurs</strong></td>
<td></td>
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<tr>
<td>Overflow Lab Sessions</td>
<td>Overflow Lab Sessions</td>
</tr>
</tbody>
</table>

**Note:** Exemptions from certain modules on this programme are automatically granted to holders of FETAC (now QQI) 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 (Level 6 on the National Framework of Qualifications) will be received by students who successfully complete the course programme.

**Further Studies**

Graduates of the Higher Certificate in Science in Industrial Measurement & Control may proceed onto the Level 7 Bachelor of Science in Instrumentation and PLC Systems, subject to availability of places.
CERTIFICATE IN INTRODUCTION - PLCs, CONTROL & SCADA

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COURSE CODE

CR_SIPLC_6

(LEVEL 6)

LOCATION

Online and
MTU Bishopstown
Campus, Cork

COURSE FEE

€325 per 5
credit module
(incl. exam fees)

ENQUIRIES

Conor O’Farrell
E: conor.ofarrell@mtu.ie
T: 021 433 5870

Course & Module Information, and to apply online, visit go.mtu.ie/CRSIPLC6

Duration & Delivery
Part time blended learning - online theory and on campus practical work for one academic year over 2 semesters.

Admission requirements
Target learners on this programme will include those who wish to reactivate their career to upskill and reskill or cross-skill from non-related disciplines as well as upskilling those already in employment in related industrial sectors. While there will not be a specific qualification requirement, there is an expectation that candidates will have obtained a minimum of Junior Certificate Level (NFQ-QQI level 3) and experience in related industrial sectors would be beneficial for the student.

Applicants will be assessed individually on a case by case basis.

Aim
The course is designed to meet the industry skills shortage in the area of PLC based automation and to provide the fundamental skills required by a learner to be able to interact with PLC based automation.

The 4 modules that make up this special purpose award cover the fundamental introductory skills required for a learner to be able to interact with PLC based automation.

• Introduction to PLC Digital Automation
• Introduction to PLC Analog Automation
• Introduction to PLC SCADA
• Introduction to PLC Kinematic Systems

On successful completion of this course graduates will be eligible to continue their studies on

1. The Level 6 120 ECTS credit
2. The level 7 20 ECTS credit Special Purpose Award

Award
Special Purpose Award, Certificate in Introduction in PLC Based Automation Systems (20 ECTS, Level 6, on the National Framework of Qualification)
CERTIFICATE IN PROCESS INSTRUMENTATION & CALIBRATION

LOCATION
Online and MTU Bishopstown Campus, Cork

COURSE FEE
€250 per 5 credit module (incl. exam fees)

ENQUIRIES
Conor O'Farrell
E: conor.ofarrell@mtu.ie
T: 021 433 5870

Course & Module Information, and to apply online, visit go.mtu.ie/CRSICAL6

Duration & Delivery
1 academic year over 2 semesters (Mon, Tues & Wed evenings 7pm to 10pm)

<table>
<thead>
<tr>
<th>Semester 1 (Sept – Dec)</th>
<th>Semester 2 (Jan – May)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mon MATH6047 Math for Craftpersons</td>
<td>Mon PHYS6007 Instrument Calibration</td>
</tr>
<tr>
<td>Tues PHYS6008 Instrument Measurement</td>
<td>Tues PHYS6035 CAD for Instrumentation</td>
</tr>
<tr>
<td>Wed PHYS6015 Introduction to Utilities</td>
<td>Wed PHYS6031 Process Instrumentation</td>
</tr>
</tbody>
</table>

Mode of Study
Part time blended learning (online theory and on-campus practical work)*

Online learning is via MTU’s Learning Management System called Canvas.

Aim
This minor award of 30 ECTS credits is designed to meet the industry skills shortage in the areas of industrial instrumentation and calibration and thus provides an opportunity for companies to sponsor their employees whilst they upskill or allow people to reactivate their career to upskill, reskill and cross-skill from non-related disciplines.

Admission requirements
Target learners on this programme will include those who wish to reactivate their career to upskill and reskill or cross-skill from non-related disciplines as well as upskilling those already in employment in related industrial sectors.

While there will not be a specific qualification requirement, there is an expectation that candidates will have obtained a minimum of junior cert level (NFQ-QQI level 3) and experience in related industrial sectors would be beneficial for the student. Applicants will be assessed individually on a case by case basis.

Progression
On successful completion of this course graduates will be eligible to continue their studies on

- The Level 6, 120 ECTS credit
- The Level 6, 20 ECTS credit Special Purpose Award

Award
Certificate in Industrial Instrumentation and Calibration (Level 6 30 ECTS credits on the National Framework of Qualification)
CERTIFICATE IN QUALITY ASSURANCE

COURSE CODE

CR_SQUAS_6 (LEVEL 6)

LOCATION
Online and MTU Bishopstown Campus, Cork

COURSE FEE
€400 per module, i.e. €800 overall (inc. registration exam fee)

ENQUIRIES
Dr Mary Lehane
T: 021 433 5866
E: mary.lehane@mtu.ie

Duration & Delivery
Monday or Tuesday or Wednesday, 7pm – 10pm (Usually Monday).

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. The format for this academic year through blended delivery.

The course consists of two modules, each worth 5 credits.

Admission 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.

Overview
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.

Suitable to Applicants
This programme is suitable for those wishing to pursue a career in Quality in the following sectors: Pharma, Biopharma, Medical Device, MedTech, Clinical, Water, Food, Beverage, Security, Agri-food, Warehousing, Construction, Retail, Building Supplies and IT.

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

Award
Certificate in Quality Assurance – Special Purpose Award (Level 6 on the National Framework of Qualifications).

Awarding Body
Munster Technological University.

Closing Date for Application
Friday, 16th September 2022.
BACHELOR OF SCIENCE IN INSTRUMENTATION & PLC SYSTEMS

COURSE CODE  
CR_SINPS_7  
(LEVEL 7)

LOCATION  
Online and MTU Bishopstown Campus, Cork

COURSE FEE  
€350 per module per 5 credits (total course cost for 60 ECTS credits is €4,200

ENQUIRIES  
Mr James Barrett  
james.barrett@mtu.ie

Course & Module Information, and to apply online, visit go.mtu.ie/CRSINPS7

Aim
This BSc Instrumentation and PLC Systems is designed to deliver graduates with range of key skills, knowledge and competence relevant to modern advanced manufacturing industries, most notably those associated with industrial instrumentation and sensors, Programmable Logic Controllers (PLC) systems and industrial automation. This course replaces the long-standing BSc Applied Physics & Instrumentation programme, with core subject areas as follows:

• Industrial Instrumentation & Calibration
• Industrial Process Control & Programmable Logic Controller (PLC) systems
• Industrial Automation & SCADA
• Work placement / work-based project

Duration & Delivery
The programme is delivered over 2 academic years, with two semesters per year, two or three evenings per week, 7pm to 10pm. The programme is delivered in a part-time ACCS (Accumulation of Credits & Certificate of Subjects) mode.

Mode of Study
Part time blended learning (online theory and on-campus practical work)
Online learning is via MTU’s Learning Management System called Canvas, practical learning taking place within the lab environment at MTU’s Department of Physical Sciences on the Bishopstown campus. Further details of the specialist facilities used can be found at https://physicalsciences.cit.ie/ facilities.

Content
The programme adopts a practical, hands on, approach to learning, where all modules are fully assessed using continuous assessment methods. There is no formal end of semester written examination. The programme is delivered over two academic years, four semesters as follows:

Year 1
Semester 1
PHYS7036  Analytical Instrumentation
PHYS7004  Industrial Communications & Networks
Semester 2
PHYS7035  PLC Kinematic Control
PHYS7009  Process Control
PHYS7038  Instrument System Design

Year 2
Semester 1
PHYS7037  Calibration and Asset Management
ELEC7028  Industrial Electrical Systems
PHYS7034  PLC SCADA Systems
Semester 2
PHYS7021  Process Quality
PHYS7033  Control Systems Integration
PHYS7014  Dissertation (Work Placement)

Entry Requirements
Applicants should have a Level 6 qualification in a relevant science and engineering discipline (e.g. Instrumentation or related area). Applicants with significant relevant industrial experience or professional qualifications and/or training may also be considered via MTU’s RPL policy. Further details can be found here: https://www.cit.ie/course?id=721

Award
BSc Instrumentation and PLC Systems (60 credits, major award, NFQ level 7)

Validating Body & Accreditation
Quality and Qualifications Ireland (QQI).
This degree is currently undergoing accreditation review by the Institute of Measurement and Control https://www.instmc.org/
Validation is a critical part of the quality management regime across the manufacturing sectors, with certain sectors more heavily regulated than others, such as Pharmaceutical, Medical Devices and Food Processing. Notably, validation is becoming increasingly important in manufacturing areas within these highly regulated sectors. As a result, the need for skilled personnel and the challenges that companies are encountering in recruitment and internal progression pathways is a very clear thematic in a range of reports on the manufacturing sector.

This certificate programme is designed in response to the clear industry demand to equip science and engineering graduates, working in manufacturing sectors of industry, with the necessary skills to be able to work in validation roles. The Certificate in Validation will equip graduates with a science or engineering background working in the pharmaceutical sector, food processing sector or medical devices sector to work in a validation environment. Validation is a very specialist field and expertise is built over time in practice. Our programme is designed to provide a comprehensive appreciation of the role of validation in quality assurance.

Duration
This programme will be delivered online part-time from September 2022 to May 2023.

Entry Requirements
Applicants must hold an NFQ level 6 award in an engineering or science related area. The University’s policy in relation to recognition of prior learning (RPL) also applies.

Modules
- Introduction to Validation
- Validation Science

Progression Opportunities
On successful completion of the programme students will have gained 10 credits at NFQ level 7 which may contribute to the achievement of other academic awards.

Cost
Fees do not apply to applicants who meet the Springboard+ initiative funding criteria (see https://springboardcourses.ie/eligibility). For employed applicants the HEA will pay 90% of the programme fee, the remaining 10% – €125 will be payable before registration. For applicants who do not meet the Springboard+ eligibility criteria the fee is €1,250.

Closing date for applications
22nd July 2022

For further information contact
Lifelong Learning Office
E: parttimekerry@mtu.ie
T: 353 (0)66 719 1701

Apply online: www.springboardcourses.ie
CERTIFICATE IN MANUFACTURING STERILISATION CONTROL

Apply online: www.springboardcourses.ie

This programme will provide participants with the knowledge and key skills required to work with products, and within manufacturing environments, that require sterilisation control. These personnel will benefit from an insight into and knowledge of the various aspects involved in sterility assurance and its importance in the manufacturing of products and processes requiring sterilisation. It is open to individuals currently working in the sector as well as those considering transitioning into the life sciences sector. Future working environments are expected to be more complex and increased adaptability will be required by the workforce. A graduate of the Certificate in Manufacturing Sterilisation Control will:

• Understand the critical elements of the various sterilisation modalities and the suitability of their application;
• Appreciate the differences between the various standards and regulations and their relevance to the stage of product lifecycle/process flow;
• Have the skills needed to determine potential sources and types of contamination that can affect sterility assurance;
• Be able to determine suitable methods of controlling/eliminating the risk of contamination;
• Have acquired skills in the critical assessment of personnel behaviour in relation to contamination control.

Duration
This programme will be delivered in a blended format part-time from September 2022 to December 2022. The majority of content will be delivered online, however, students will be required to attend 4 workshops days on-site over the duration of the programme.

Entry Requirements
Applicants must hold an NFQ level 6 award in an engineering or science related area. The University’s policy in relation to recognition of prior learning (RPL) also applies.

Modules
• Manufacturing Sterilisation Control

Cost
Fees do not apply to applicants who meet the Springboard+ initiative funding criteria (see https://springboardcourses.ie/eligibility). For employed applicants the HEA will pay 90% of the programme fee, the remaining 10% – €87 will be payable before registration. For applicants who do not meet the Springboard+ eligibility criteria the fee is €870.

Closing date for applications
22nd July 2022

For further information contact
Lifelong Learning Office
E: parttimekerry@mtu.ie
T: 353 (0)66 719 1701

This programme is offered subject to approval.
The Bachelor of Science in Pharmacy Management and Practice is specifically designed to provide qualified pharmacy technicians with the additional skills, knowledge and competency required to progress to a management or senior role in a community or hospital pharmacy setting. Learners, who are already qualified pharmacy technicians, will develop the academic, professional, and practical skills required for progression to a management role in pharmacy. A knowledge of human resource management, business strategy and financial management, and of clinical pharmacy and pharmaceutical care, upskills the pharmacy technician and enables them to progress their career within the pharmacy team structure. Central to the philosophy of this programme is that graduates will attain a sound basis in business management skills, while furthering their knowledge as pharmacy technicians working under the auspices of the Pharmacy Act. The programme includes pharmacy work-based learning which can be carried out either in a hospital or community pharmacy setting.

**Duration**
This programme will be delivered in a blended format part-time from September 2022 to August 2023. Students will be required to attend a number of 2-day workshops on-campus throughout the duration of the programme.

**Entry Requirements**
Applicants must hold an NFQ level 6 qualification in Pharmacy Technician Studies. Applicants who currently hold a pharmacy technician qualification obtained through the Irish Pharmacy Union (IPU) and 3 years work experience as a pharmacy technician may apply for entry through recognition of prior learning (RPL).

**Modules**
- Leadership & Management Development
- Pharmacy Procurement & Purchasing
- Clinical Pharmacy & Pharmaceutical Care
- Financial Management & Business Strategy
- Dispensary Management
- Retail Human Resource Management
- Advanced Pharmacy & Accuracy Skills
- Pharmacy Work-Based Learning
- Pharmacy Work-Based Learning Review

**Progression Opportunities**
On successful completion of the programme students may progress to a level 8 qualification in a relevant area.

**Cost**
Fees do not apply to applicants who meet the Springboard+ initiative funding criteria (see https://springboardcourses.ie/eligibility). For employed applicants the HEA will pay 90% of the programme fee, the remaining 10% - €582 will be payable before registration. For applicants who do not meet the Springboard+ eligibility criteria the fee is €5,820.

**Closing date for applications**
22nd July 2022

**For further information contact**
Lifelong Learning Office
E: parttimekerry@mtu.ie
T: 353 (0)66 719 1701
CERTIFICATE IN PLCS, CONTROL & SCADA SYSTEMS

LOCATION
MTU Bishopstown
Campus, Cork

ENQUIRIES
Conor O’Farrell
T: 021 433 5870
E: conor.ofarrell@mtu.ie

Springboard+ application procedure
You must register with Springboard https://springboardcourses.ie/ and apply for the Certificate in PLCS, Control & Scada Systems. Once your application on the Springboard website has been accepted, MTU Admissions office in Cork will be in contact with you to complete your registration.

Admission requirements
Target learners on this programme will include those who wish to reactivate their career to upskill and reskill from closely related disciplines as well as upskilling those already in employment in related industrial sectors with complementary qualifications. Each candidate will be assessed individually on their own merits.

Aim
Ireland’s economic output value is led by the Food, Chemical, Pharmaceutical and IT/Computing industries and each of these sectors underpinned by a globally recognised expertise in advance manufacturing. Key to maintaining quality and regulatory standards, in addition to maintaining manufacturing competitive advantage, is design, build, commission, and maintenance of industrial PLC-based automation processes and systems.

This one year part-time Special Purpose Award is designed to address the ongoing skills shortage in the area of industrial PLC-based automation processes and systems. Graduates will be equipped for the various roles currently available primarily in the manufacturing, pharmaceutical, biopharmaceutical and medical device sector.

The programme is aimed at individuals who have basic PLC programming and SCADA experience and are looking to upskill in these areas. A strong emphasis is placed on enabling learners to further develop all their key skill sets required to support career opportunities. Utilising Siemens PLC hardware and software (TIA and PLCSIM Advanced) the learner will experience first-hand practical applications whilst enhancing the theory in order to expand their understanding of industrial PLC-based automation systems.

The course will be offered over one academic year and comprises four modules, two per semester.

1. Industrial Communications & Networks: Communications protocols such as Modbus, Ethernet, Profibus.
2. PLC SCADA Systems: HMIs, Subnet, trending, data historians.
3. PLC Kinematic Control Systems: Motion-based manufacturing systems

Award
Special Purpose Award, Certificate in PLC based Automation Systems (20 ECTS, Level 7, on the National Framework of Qualification).
CERTIFICATE IN PROCESS ANALYTICAL INSTRUMENTATION

LOCATION
Online and MTU Bishopstown Campus, Cork

ENQUIRIES
Mr Conor O’Farrell
021 433 5870
conor.ofarrell@mtu.ie

Course & Module Information, and to apply online, visit https://physicalsciences.cit.ie/parttime

Duration & Delivery
1 academic year over 2 semesters (Two evenings per week, 7pm to 10pm)

Mode of Study
Part time blended learning (online theory and on-campus practical work).
Online learning is via MTU’s Learning Management System called Canvas. More details can be found here.

Aim
This minor award comprising of 20 credits is embedded within the BSc Instrumentation and PLC Systems major award. The award focuses on upskilling learners in the speciality of Analytical and Process Instrumentation, specifically focusing on areas such as liquid and gas analysis, Instrument Calibration & Asset Management, etc. The award is primarily targeted towards learners who have relevant experience in a regulated industrial setting working with analytical and process instrumentation and are wishing to seek an instrumentation-related qualification for industrial sectors such as BioPharma, Food and Beverage production, Oil and Gas, etc. The award is particularly suited to those who have qualified from level 6 qualification Higher Certificate in Industrial Measurement & Control.

Content
The programme adopts a practical, hands on, approach to learning, where all modules are fully assessed using continuous assessment methods. There is no formal end of semester written examination. The programme is delivered over two 10 credit semesters.

Semester 1 (Sept - Dec):
PHYS7036 Analytical Instrumentation
PHYS7037 Calibration & Asset Management

Semester 2 (Jan - May):
PHYS7038 Instrumentation Design Engineering
PHYS7021 Process Quality Systems

Entry Requirements
Applicants should have a Level 6 qualification in a relevant science and engineering discipline (e.g. Instrumentation or related area). Applicants with significant relevant industrial experience or professional qualifications and/or training may also be considered via MTU’s RPL policy.

Award
Certificate in Process and Analytical Instrumentation (NFQ level 7).
DIPLOMA IN QUALITY MANAGEMENT
PART 1

LOCATION
Online and MTU Bishopstown Campus, Cork

COURSE FEE
€700 (payable to MTU). Exam fee: Currently €150 (payable to the external examining body EIQA)

ENQUIRIES
Dr Ambrose Furey
T: 021 433 5875
E: ambrose.furey@mtu.ie

Course & Module Information, and to apply online, visit go.mtu.ie/CRSQMAN7Y1

Duration & Delivery
Monday or Tuesday or Wednesday, 7pm – 10pm (Usually Tuesday)

This course is not semesterised and runs for one evening per week for one academic year. The format for this academic year through blended delivery.

The course consists of one module, worth 10 credits.

Admission Requirements
Applicants are required to have the MTU Certificate in Quality Assurance Special Purpose Award or an equivalent qualification. Extensive experience in a wide variety of Quality Management, Quality Assurance and Statistical Techniques in lieu of formal qualifications may be taken into account when assessing suitability for entry onto the Diploma in Quality Management (Part 1). Each application will be 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.

Suitable to Applicants
This programme is suitable for those wishing to pursue a career in Quality in the following sectors: Pharma, Biopharma, Medical Device, MedTech, Clinical, Water, Food, Beverage, Security, Agri-food, Warehousing, Construction, Retail, Building Supplies and IT.

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.

Award

Awarding Body
Excellence Ireland Quality Association (EIQA).

Closing Date for Application
Friday, 16th September 2022.
DIPLOMA IN QUALITY MANAGEMENT
PART 2

LOCATION
Online and MTU Bishopstown Campus, Cork

COURSE CODE
CR_SQMAN_7_Y2

COURSE FEE
€800 (payable to MTU). Exam fee: Currently €150 (payable to the external examining body EIQA)

ENQUIRIES
Dr Ambrose Furey
T: 021 433 5875
E: ambrose.furey@mtu.ie

Course & Module Information, and to apply online, visit go.mtu.ie/CRSQMAN7Y2

Duration & Delivery
Monday or Tuesday or Wednesday, 7pm – 10pm
(Usually Wednesday)

This course is not semesterised and runs for one evening per week for one academic year. The format for this academic year through blended delivery.

The course consists of one module, worth 10 credits.

Admission 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.

Suitable to Applicants
This programme is suitable for those wishing to pursue a career in Quality in the following sectors: Pharma, Biopharma, Medical Device, MedTech, Clinical, Water, Food, Beverage, Security, Agri-food, Warehousing, Construction, Retail, Building Supplies and IT.

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.

Award

Awarding Body
Excellence Ireland Quality Association (EIQA).

Closing Date for Application
Friday, 16th September 2022
The circular economy (CE) challenges the fundamentals of how we manufacture, distribute, use and consume products and services. It is recognised as the most systemic shift in global industrial economics since the industrial revolution and has the attention of policymakers, CEOs, business and society at large. Responding to and embracing the business models, supply chains and enabling technologies of the circular economy requires new knowledge, skills and networks. This Certificate in Circular Economy will provide participants with state-of-the-art knowledge on the circular economy model versus traditional linear business/economic models, outlining how the circular economic model can achieve the sustainability goals of a business.

In semester 1, students will take “Circular Economy: A framework for a sustainable economy and society” engaging with CE theory, frameworks and practices, business models, material flows, value chains and the e-business case for CE. This module includes the Circular Economy in practice series with case studies exploring resource management, plastics and packaging, supply chains and logistics, ICT as a CE enabler, circular food systems, towns, cities, and regions. Semester 2 will focus on ‘Innovate Circular: Strategies and Planning’ which explores systems innovation and circular design strategies to enable the companies to transition to more circular operations and key skills on communicating the circular economy, policy and funding.

**Entry Requirements**
Applicants must hold a minimum NFQ level 7 degree in science, business, management, engineering, or a relevant degree area. Ideally candidates will possess relevant experience in one of the following areas: manufacturing, research and development, supply chain, procurement, engineering sales & marketing in one or more of the following sectors: manufacturing, supply chain management, agriculture, food & beverage, life science, chemical, packaging, waste management or construction. The University’s policy in relation to recognition of prior learning (RPL) also applies.

**Modules**
- Circular Economy
- Innovate Circular

**Progression Opportunities**
On successful completion of the programme students will have gained 20 credits at NFQ level 8 which may contribute to the achievement of other academic awards.

**Cost**
Fees do not apply to applicants who meet the Springboard+ initiative funding criteria (see https://springboardcourses.ie/eligibility). For employed applicants the HEA will pay 90% of the programme fee, the remaining 10% - €145 will be payable before registration. For applicants who do not meet the Springboard+ eligibility criteria the fee is €1,450.

**Closing date for applications**
19th August 2022

**For further information contact**
Lifelong Learning Office
E: parttimekerry@mtu.ie
T: 353 (0)66 719 1701

Apply online: [www.springboardcourses.ie](http://www.springboardcourses.ie)
Aim
This level 8 minor award comprising of 20 credits focuses on upskilling learners in the speciality of Distributed Process Control & Networking Systems. The award is targeted towards learners seeking a qualification in the discipline of Industrial Automation, DCS and Industrial Networking in relevant industry sectors such as Industrial Automation, BioPharma, Food and Beverage production, Oil and Gas, etc.). The course is particularly suited to those who already have a level 7 qualification in a related area (e.g. Instrumentation, PLCs) and wish to specialise in the area of DCS using platforms such as the Emerson DeltaV industrial automation and process control system.

Duration & Delivery
This minor award (20 ECTS credits) programme is delivered over 1 academic years, with two semesters per year. Delivery is over two evenings per week, 7pm to 10pm. The programme is delivered in a part-time ACCS (Accumulation of Credits & Certificate of Subjects) mode.

Mode of Study
Part time blended learning (online theory and on-campus practical work).

Online learning is via MTU’s Learning Management System called Canvas. More details can be found here. The programme is strongly lab and practical skills focussed with approximately 60% of learning taking place within the lab environment at MTU’s Bishopstown campus by the Department of Physical Sciences. Further details of the specialist facilities used in the delivery of this programme can be found at https://physicalsciences.cit.ie/facilities.

Content
The programme adopts a practical, hands on, approach to learning, where all modules are fully assessed using continuous assessment methods. There is no formal end of semester written examination. The programme is delivered over one academic years, two semesters as follows:

Semester 1 (Sept-Dec)
- Distributed Control Systems
- Networking & Computer Security

Semester 2 (Jan-May)
- Advanced Industrial Automation
- Adv Control for Automation

Entry Requirements
Applicants should have a Level 7 qualification in a relevant science and engineering discipline (e.g. Instrumentation, SCADA, Process Control or related area). Applicants with significant relevant industrial experience or professional qualifications and/or training may also be considered via MTU’s RPL policy. Application for the programme is via MTU’s online application system (OLAPPS), further details can be found here: https://www.cit.ie/course?id=721

Award
Certificate in Distributed Control Systems and Industrial Networks (minor award, 20 credits, level 8)

Validating Body & Accreditation
Quality and Qualifications Ireland (QQI).

This degree is currently undergoing accreditation review by the Institute of Measurement and Control https://www.instmc.org/
HIGHER DIPLOMA IN QUALITY SYSTEMS VALIDATION WITH DATA ANALYTICS

LOCATION

MTU Bishopstown Campus, Cork

ENQUIRIES

Dr Gráinne Conneely
021 433 5870
E: Grainne.conneely@mtu.ie

Springboard+ application procedure

You must register with Springboard https://springboardcourses.ie and apply for the Higher Diploma in Quality Systems Validation with Data Analytics. Once your application on the Springboard website has been accepted, MTU Admissions office in Cork will be in contact with you to complete your registration.

Admission requirements

Target learners on this programme will include those who wish to upskill and reskill from closely related disciplines as well as upskilling those already in employment in related industrial sectors with complementary qualifications. Each candidate will be assessed individually on their own merits.

Aim

Higher Diploma in Quality Systems Validation with Data Analytics is a 60 credit, 12-month programme. The course is industry focussed to address scientific skills gaps within the Pharmaceutical, Biopharmaceutical, Food, Beverage, Water & MedTech sectors. Graduates will have an expert knowledge on the methodologies to ensure validation and associated data analytics. The regulatory and validation sections of the course provide an overview of the regulatory requirements for industry, including the requirements on validation of software systems, electronic records and signatures, Data Integrity and Quality Risk Management as applied to Computer Systems Validation.

Content

The programme adopts a practical, hands on, approach to learning, where all modules are fully assessed using continuous assessment methods. There is no formal end of semester written examination. The programme is delivered over two 30 credit semesters. Each taught semester has several modules – Semester 1: Data Analytics and Chemometrics, Validation of Quality Systems, LIMS & SQC, Regulatory Affairs and Auditing, Professional Development and Communication, Management and Leadership. The Experimental Industrial Project and Regulatory Industrial Placement takes place in Semester 2 of the programme where students can be placed in industry to complete an industry related project.

Entry Requirements

Open to graduates and experienced personnel with a Level 8 qualification in science, life science, business, engineering, or related disciplines. Applicants with a Level 7 in a Science/Engineering discipline AND extensive relevant industrial experience or training may be considered via the University’s recognition of prior learning (RPL) policy and process.

Award

Higher Diploma in Quality Systems Validation with Data Analytics (60 ECTS, Level 8 on the National Framework of Qualification).
The Postgraduate Diploma in Bioeconomy with Business is a flexible, one-year part-time, blended programme designed to enable upskilling of those in the workplace and those seeking to engage in further study. The bioeconomy is one of the EU’s largest and most important sectors encompassing agriculture, forestry, fisheries, food, bio-energy and bio-based products with an annual turnover of circa €2 trillion, employing around 18 million people, creating €621 billion benefits and 4.2% of the EU’s GDP. The bio-based industries have the potential to generate 1 million innovative jobs across the EU by 2030.

This level 9 programme is positioned at the interface of primary production, sustainable processing, biotechnology, new product development, supply chain dynamics, innovation, business and policy. Co-developed by an interdisciplinary team from MTU, UCD and Teagasc, students will gain a deep and critical understanding of the theories, concepts and frameworks of the bioeconomy from technological, environmental, social and business perspectives. A suite of innovative pedagogies (peer-to-peer learning, place-based learning, action learning, professional and work-based learning, site visits and case studies) will be applied across the curriculum. This approach will equip graduates with the skills and competencies to exchange and apply learnings (bioeconomy in practice) within the workplace, be that public or private sectors, SMEs or large organisations.

Duration
This programme will be delivered in a blended format part-time from September 2022 to August 2023.

Entry Requirements
Applicants must hold a minimum NFQ level 8 degree (minimum level 2nd class honours) in science, agricultural science, business management, engineering or other relevant area. Ideally applicants will possess relevant experience in one of the following areas: manufacturing; research and development; laboratory; quality; supply chain; procurement; engineering policy; funding or sales and marketing in one or more of the following sectors: agricultural; food & beverage; life science; chemical; packaging; construction and policy. The University’s policy in relation to recognition of prior learning (RPL) also applies.

Modules
- Bioeconomy Model for the Transition to a Low Carbon Economy
- Bioeconomy Feedstocks
- Life Cycle Assessment
- Conventional Valorisation Technologies
- Biorefinery Processes and Technologies
- Bio based Value Chains, Products, Processes and Markets
- Green Technologies Project
- Policy and Social Aspects of the Bioeconomy
- Knowledge, Innovation and Industry
- Work-based Learning-Bioeconomy Improvement Opportunity

Progression Opportunities
On successful completion of the programme students will have gained 60 credits at NFQ level 9 and may have the option to progress to the MSc in Bioeconomy with Business.

Cost
Fees do not apply to applicants who meet the Springboard+ initiative funding criteria (see https://springboardcourses.ie/ eligibility). For employed applicants the HEA will pay 90% of the programme fee, the remaining 10% – €540 will be payable before registration. For applicants who do not meet the Springboard+ eligibility criteria the fee is €5,400.

Closing date for applications
19th August 2022

For further information contact
Lifelong Learning Office
E: parttimekerry@mtu.ie
T: 353 (0)66 719 1701
The Postgraduate Diploma in Innovative and Sustainable Agriculture aims to meet the growing demand for knowledge, leadership and understanding in the protection of land and natural resources along with the urgency for a more sustainable approach to agriculture. The programme will provide learners with the skills to recognise intrinsic issues which require both environmental and agricultural understanding to ensure a framework of sustainability for the agri-food industry for future generations. This programme facilitates learners to focus on advanced education and training in creating, implementing, and overseeing solutions to minimise the environmental impact of agriculture production and utilising pathways to mitigate the biodiversity challenges. This postgraduate diploma has been designed to meet the high demand for scientists at level 9, with the knowledge and technical leadership requirements to develop solutions together with local and global networks.

Key features include the identification of areas where environmental stresses are evident from water and air quality to biodiversity and the intradisciplinary skills required to implement solutions. The programme examines the move towards more sustainable farming practices by improving the environmental and climate-related performance resilience of the farming sector, demonstrating that well-functioning agricultural knowledge and innovation systems can deliver knowledge flow and new insights. The One Health approach – that the health of humans is linked to that of animals and the environment they occupy is examined as are emerging techniques in the area of agricultural innovation and the utilisation of Big Data.

**Duration**

This programme will be delivered in a blended format part-time from January 2023 to December 2023.

**Entry Requirements**

Applicants must hold an honours NFQ level 8 qualification (minimum level 2nd class honours) in Agriculture/Wildlife/Environmental Science or a related discipline. The University’s policy in relation to recognition of prior learning (RPL) also applies.

**Modules**

- Sustainable Soil Management
- One Health
- Climate Change and Mitigation
- Knowledge Innovation and Industry
- Biodiversity
- Sustainable Air and Water Quality

**Progression Opportunities**

On successful completion of the programme students will have gained 60 credits at NFQ level 9 which may contribute to the achievement of other academic awards e.g. pathway for Master of Science qualification.

**Cost**

Fees do not apply to applicants who meet the Springboard+ initiative funding criteria (see https://springboardcourses.ie/eligibility). For employed applicants the HEA will pay 90% of the programme fee, the remaining 10% – €540 will be payable before registration. For applicants who do not meet the Springboard+ eligibility criteria the fee is €5,400.

**Closing date for applications**

18th November 2022

**For further information contact**

Lifelong Learning Office
E: parttimekerry@mtu.ie
T: 353 (0)66 719 1701
Mathematics

Level 8
Higher Diploma in Science in Data Science & Analytics
Certificate in Process Data Analytics

Computer Science

Level 6
Higher Certificate in Science in Software Development

Level 7
Bachelor of Science in Software Development

Level 8
Certificate in Artificial intelligence (Cork Campus)
Certificate in Artificial Intelligence (Kerry campus)
Higher Diploma in Science in Cloud Computing

Level 9
Master of Science in Artificial Intelligence
Master of Science in Cloud Computing
Master of Science in Cybersecurity
Master of Science in Cybersecurity Management
Master of Science in Information Design & Development
Master of Science in Software Architecture & Design
HIGHER DIPLOMA IN SCIENCE IN DATA SCIENCE & ANALYTICS

LOCATION
MTU Bishopstown Campus, Cork

COURSE CODE
CR_SDAAN_8

ENQUIRIES
Dr David Goulding
T: 021 433 5123
E: mathematicsCork@mtu.ie

Duration
2 Years Part-time
(subject to demand)

Admission Requirements
Applicants will already hold a primary degree, and must be highly motivated, interested in data science and capable of independent learning. Preference will be given to applicants with a background in cognate and analytical disciplines, who would benefit from an opportunity to gain expertise in ICT (data science) skills which are particularly relevant to industry.

All candidates with a Level 8 qualification or equivalent will be considered. Candidates with a Level 7 qualification and significant relevant experiential learning may be eligible through our recognition of prior learning processes.

Aim
The importance of the field of Data Science has exploded in recent years with a growing demand for experts in a variety of different industries. With ever increasing growth in data generation and collection, the value of data to industries is highly dependent on appropriate analysis. Consequently, data science and analytics has become a core component of both government bodies and private industry wishing to maintain competitiveness and gain advantages.

The Higher Diploma in Science in Data Science & Analytics (NFQ Level 8) in MTU is a collaboration between the Department of Mathematics and the Department of Computer Science. The programme aims to develop highly skilled and competent graduates in the rapidly expanding field of Data Science. The programme has been designed and developed with industry experts to ensure that graduates develop core skills in programming, database management, statistical modelling, time series analysis, machine learning, data visualisation and interpretation.

Structure
This is a 60 credit programme, in which three core strands: Data Science, Statistics, and Computer Science, are developed over two semesters with an increasing specialisation on statistical analysis and machine learning. There will be significant opportunity throughout to apply theoretical knowledge and develop problem solving skills through practical and laboratory sessions. The learner will also undertake a capstone project, which will be a key opportunity to demonstrate the ability to synthesise the learning acquired in the programme, and to apply it to the solution of an authentic problem in Data Science and Analytics.

The graduate will gain significant practical experience, in software packages and programming languages including R, Python, Excel, SQL, NoSQL, Tableau, Spark and Hadoop for example.

Content
Mandatory
Intro to R for Data Science
Data Science and Analytics
Scientific Programming in Python
Applied Statistics and Probability
Data Management Systems
Mathematical Methods and Modelling
Regression Analysis
Distributed Data Management
Data Visualisation and Analytics
Data Science Analytics Project

Electives
Time Series and PCA
Machine Learning

Award
Higher Diploma in Science in Data Science & Analytics (Level 8 on the National Framework of Qualifications).
CERTIFICATE IN PROCESS DATA ANALYTICS

Duration and Delivery
This part-time blended programme will run online over one academic year, for three evenings per week, providing a flexible learning environment for applicants.

Our online programmes are delivered online and are instructor led. You can attend live lectures or playback on demand. You log in at home but you join a virtual classroom where you can chat and support your classmates. You can participate fully in lectures through polls and activities. Our engaging and relevant courses reflect real world skills, give you access to MTU’s world class resources and encourage connections between you, your classmates and your lecturers.

Admission Requirements
Applicants must hold a Level 8 degree and must be highly motivated and capable of independent learning. Preference will be given to applicants with a background in cognate and analytical disciplines, who would benefit from an opportunity to rapidly and successfully convert their qualifications to industry-relevant skills. All candidates with a Level 8 qualification or equivalent will be considered.

Candidates with a Level 7 qualification and significant relevant experiential learning may be eligible through our recognition of prior learning (RPL) processes. MTU has an extremely well-established and supported RPL process.

Overview
Competitiveness is critical as manufacturing sites within networks globally compete to be selected to manufacture products. With advancements in manufacturing process technologies and the drive towards Industry 4.0, companies increasingly seek to make data-driven decisions about both their operations and supply chains to achieve this competitiveness.

Process data analytics refers to a combination of tools and techniques that are used to make inferences and process decisions based on measured system data. The field of data analytics has become progressively important due to the huge increases in the amount of data being collected, reductions in the cost of computer hardware, advances in data analytics algorithms, and the increased availability of powerful software tools.

This Certificate in Process Data Analytics has been designed, with significant industrial engagement, to provide learners with an opportunity to rapidly upskill in the ever-expanding field of data analytics. The programme will provide graduates with a theoretical underpinning of process data analytics, but more importantly, provide the practical skills required to meet the demands of the current and future data-driven industry. This course will enable learners to apply the transferable skills developed as part of their original degree to a specific expertise within data analytics.

Modules
**Semester 1**
- Process Data Analysis with R
- Introduction to Data Analytics

**Semester 2**
- Regression Analysis
- Data Mining and Visualisation
- Data Analytics Case Study

Award
Certificate in Process Data Analytics (Level 8, 30 ECTS on the National Framework of Qualifications)

Progression Route
On successful completion of this Certificate, you may progress to the Higher Diploma in Data Science & Analytics.
HIGHER CERTIFICATE IN
SCIENCE IN SOFTWARE DEVELOPMENT

LOCATION
MTU Bishopstown Campus, Cork

COURSE FEE
€250 per 5 credit module

ENQUIRIES
Gerard MacSweeney
T: 021 433 5574
E: gerard.macsweeney@mtu.ie

Course & Module Information, and to apply online, visit go.mtu.ie/CRKCOME6

The programme provides students with the relevant skills and knowledge in the area of modern software development focusing on languages, techniques, tools and methodologies needed to pursue a career as a software or computer technician.

Admission Requirements
Non-Standard Applicants: Mature Students, FETAC (now QQI) Level 5 applicants are particularly welcome.

Standard Applicants: Leaving Certificate Grade O6/H7 (pre. 2017, D3 Ordinary Level) in five subjects to include Mathematics and either English or Irish.

Duration
At least six semesters, depending on the number of modules taken per semester.

Overview

The second stage of the Higher Certificate programme builds on the stage one foundation and has a deeper focus on software development with modules in Object-Oriented Programming, Requirements Engineering, Data Structures & Algorithms, OO Analysis & Design, Database Design, NoSQL Data Architectures, and many more.

Progression
Graduates of the Higher Certificate may progress to stage three of the Bachelor of Science in Software Development programme which is also offered part-time by night.

Award
(Single module certification possible)

Career Opportunities
Potential areas of employment include working as a Software Developer, Software Tester, Software Support Engineer or Database Developer, to name but a few career possibilities.
This 60 credit programme is designed as a follow on programme from the Higher Certificate in Science in Software Development.

**Admission Requirements**
To be eligible to undertake the programme you must hold a Higher Certificate in Science in Software Development or equivalent. The Department operates a policy of recognising prior learning (RPL) in compliance with the overall University policy of RPL.

**Duration**
At least three semesters, depending on the number of modules taken per semester.

**Overview**
The BSc in Software Development is a level 7 degree programme designed to provide students with the theoretical and practical skills necessary to gain employment in the software development industry.

More specifically, the programme provides students with the relevant skills and knowledge in the area of modern software development focusing on languages, techniques, tools and methodologies, and their application to real-world problems.

**Content**
The first part of this 60 credit programme is comprised of 6 five credit modules. Two 30 credit elective groups are offered in the second part of this programme. The elective groups are:

1. Work Placement (RPL options)
2. Four taught modules.

The four taught modules are:
- Emerging Technological Trends (5 credits)
- Technical Communication Skills (5 credits)
- Open Source Projects (15 credits)
- Free Choice Elective (5 credits)

Among the areas you would be required to study are:
- Distributed Sys. Programming
- Group Project
- Client-side Web Development
- Agile Processes
- Programming for Data Analytics

**Further Studies**
Graduates from the programme may apply for the BSc (Honours) in IT Management or the BSc (Honours) in Software Development.

**Career Opportunities**
Potential areas of employment include working as a Software Developer, Software Tester, Software Support Engineer or Database Developer, to name but a few career possibilities.

**Award**
Bachelor of Science in Software Development (Level 7 on the National Framework of Qualifications). (Single module certification possible)
CERTIFICATE IN ARTIFICIAL INTELLIGENCE
The Certificate in Artificial Intelligence is aimed at graduates from other computing programmes to provide a foundation in artificial intelligence for those who have not previously studied in this area. This programme builds and strengthens skills in the fields of artificial intelligence and in data analytics. Learners are introduced to the principles and techniques of artificial intelligence; how these concepts are implemented; how third-party applications allow definition and production of an AI product, and the deployment of this product to a problem-solving application. They gain the knowledge and skills to analyse large volumes of data and information to extract true patterns.

This programme will enable learners to implement artificial intelligence solutions from first principles i.e. using only standard programming language, to recognise the theory and practice of AI techniques within third party software, to critically evaluate performance/reliability of various AI products, to deploy an appropriate AI product to a problem-solving application and to demonstrate knowledge of how the analytics lifecycle can be applied to various application areas/industries. Learners will also learn how to employ data analysis and modelling using software tools, to apply advanced analytics and statistical modelling for Big Data and to acquire the skills required to successfully communicate the result of analysis.

Duration
This programme will be delivered online part-time from September 2022 to December 2022.

Entry Requirements
Applicants must hold an NFQ level 7 or NFQ level 8 award in computing. The University’s policy in relation to recognition of prior learning (RPL) also applies. Applicants may also be required to attend for interview.

Modules
• Artificial Intelligence
• Big Data

Progression Opportunities
On successful completion of the programme students will have gained 10 credits at NFQ level 8 which may contribute to the achievement of other academic awards.

Cost
Fees do not apply to applicants who meet the Springboard+ initiative funding criteria (see https://springboardcourses.ie/ eligibility). For employed applicants the HEA will pay 90% of the programme fee, the remaining 10% - €140 will be payable before registration. For applicants who do not meet the Springboard+ eligibility criteria the fee is €1,400.

Closing date for applications
19th August 2022

For further information contact
Lifelong Learning Office
E: parttimekerry@mtu.ie
T: 353 (0)66 719 1701
HIGHER DIPLOMA IN SCIENCE IN CLOUD COMPUTING

COURSE CODE
CR_KCLCO_8
(LEVEL 8)

LOCATION
Online

ENQUIRIES
Eoin O’Regan
T: 021 433 5040
E: eoin.oregan@mtu.ie

Register with Springboard https://springboardcourses.ie

**Springboard+ application procedure**
You must register with Springboard https://springboardcourses.ie/ and apply for Higher Diploma in Science in Cloud Computing. Once your application on the Springboard website has been accepted, MTU Admissions office in Cork will be in contact with you to complete your registration.

**Delivery and Duration**
The course begins on 12th September 2022 and ends 30th June 2024
This two year, part-time, fully online Higher Diploma in Cloud Computing aims to develop students both technically and personally and produce focused graduates of high academic and practical standards to match the needs of both the Irish and international IT industry.”

**Admission Requirements**
Applicants will already hold a Level 8 degree and must be highly motivated and capable of independent learning. Preference will be given to applicants with a background in cognate and analytical disciplines, who would benefit from an opportunity to rapidly and successfully convert their qualifications to industry-relevant ICT skills. All candidates with a Level 8 qualification or equivalent will be considered.

Candidates with a Level 7 qualification and significant relevant experiential learning may be eligible through our recognition of prior learning (RPL) processes. MTU has an extremely well-established and supported RPL process.

In order to process your application you will need to submit the following supporting documentation:
• Up-to-date CV (include all information that may be relevant to your application in terms of qualifications, work experience)
• Academic Transcripts (this must include your degree qualification at a minimum and can also include any additional qualifications and/or certifications)
• Statement of Purpose (minimum 400 words)

Please note, your application will not be reviewed until the above documents are submitted.

**Aim**
This programme aims to develop students both technically and personally and produce focused graduates of high academic and practical standards to match the needs of both the Irish and international IT industry. It will also meet the needs for IT infrastructure and support roles in a broad range of other sectors.

During the first year, students will be immersed in a broad set of modules in the fundamentals of computing covering: Object Oriented Principles, Requirements Engineering, Network Systems, Operating Systems, Data Management Systems and Systems Scripting.

In the second year, the focus will be on developing Cloud Infrastructure skills. Students will learn about the Virtual Datacenter and the required composite skills to create a Virtual Datacenter of virtualisation, enterprise storage, networking & scripting as well as cloud architecture.

Uniquely to this course, the lab environment in MTU will enable students to build out a Virtual Datacenter giving them the practical skills desired by industry as well as the required theory.

Please note this is an intensive part-time programme run over two years. It will be very demanding and will require a significant commitment from all students. However, at the end of the course, you will have acquired an excellent, industry-recognised qualification.

**Award**
Higher Diploma in Science in Cloud Computing (Level 8, 60 ECTS on the National Framework of Qualifications).
This programme is available part-time online and full-time on campus. In online mode, all classes are delivered over the Internet and all practical work is completed using MTU’s cloud infrastructure.

Artificial intelligence (AI) is a field of computer science that enables computers and machines to perform tasks normally requiring human intelligence. Its many applications range from chess-playing robots and autonomous cars to speech, image, and language processing, robotic manufacturing, and surveillance systems. AI simulates human intelligence processes by combining large datasets, machine learning, and computational power with algorithms capable of solving problems.

In the 21st century, AI techniques have experienced a resurgence following concurrent advances in computer power, large amounts of data, and theoretical understanding. AI techniques have become an essential part of the technology industry, helping to solve many challenging problems in computer science.

This Master’s degree programme provides a technical deep-dive into the area of AI. The programme will produce AI graduates with a highly relevant skillset in AI topics. You’ll learn how to use and develop intelligent computer systems that can learn from experience, recognise patterns in vast amounts of data and reason strategically in complex decision making situations. The programme places significant emphasis on student learning by doing. It adopts a practical, hands-on, approach to learning, where all modules are fully assessed using continuous assessment methods.

Duration of Online Delivery
This is a two-year part-time programme taught over 24 months (4 semesters). The programme is delivered and accessed fully online using state of the art Cloud based technologies. Lectures are delivered online by night, streamed live over the Internet and recorded to facilitate easy playback for students. This offers great flexibility for students who can access lectures and labs anytime, anywhere on any device that has a web browser.

Admission Requirements
Entry to the MSc in Artificial Intelligence will require a minimum of a Level 8 honours degree in Computer Science, Engineering, Computing or an honours degree in a cognate discipline. As this is an expert level programme, it is essential for applicants to have a strong proficiency in mathematics, including statistics, and an advanced level of coding competency in a modern high-level computer programming language such as Python or Java. Applicants who do not meet the above criteria will be considered on a case by case basis.

Aim
The aim of this programme is to produce expert AI developers. Successful completion of the programme will equip these graduates with the desired skills and provide them with the following benefits:

• Ability to deal with technically complex problems
• Support in making strategically important decisions within their profession
• Gain a qualification that is in high demand in the market place
• Attain expertise to carry out AI research in academic and R&D environments
• Provide intelligent solutions to IT problems in companies and organisations
• Pursue doctoral studies within the domain of AI and Machine Learning (ML)

Structure
The programme contains challenging and interesting modules delivered by lecturers who are experts in AI. Students will have the opportunity to study topics such as deep learning, natural language processing and machine vision. Students will also complete an AI research project that is either academic or industry focused.

The MSc in a 60 credit programme. The full-time programme is delivered over two 30 credit semesters. The part-time online programme is delivered over four 15 credit semesters. Each semester has a number of mandatory modules and a choice of electives (all electives may not be offered).

Award
Master of Science in Artificial Intelligence (Level 9 on the National Framework of Qualifications).
MASTER OF SCIENCE
IN CLOUD COMPUTING

LOCATION
Online

COURSE CODE
CR_KCLDC_9
(LEVEL 9)

COURSE CODE

COURSE FEE
€7,500 in total.
(payment by instalments
is an option)

ENQUIRIES
Eoin O’Regan
T: 021 433 5525
E: eoin.oregan@mtu.ie

Course & Module Information, and to apply online, visit go.mtu.ie/CRKCLDC9

Duration of Online Delivery
24 months (4 semesters) is the minimum duration. This programme is available online only. All classes are delivered over the Internet and all practical work is completed using MTU’s cloud infrastructure.

Admission Requirements
Entry to the MSc in Cloud Computing will require a minimum of a Level 8 Honours Degree in Computing or in a cognate discipline. As this programme is designed specifically for computing professionals working in the IT industry only graduates with experience will gain direct entry into this programme.

Overview
Cloud Computing is considered a relatively new field in Internet computing where novel perspectives in internet-working technologies have emerged. To successfully deal with issues relating to this new paradigm the MSc in Cloud Computing programme aims to equip the graduate with the advanced conceptual understanding, detailed factual knowledge, and specialist architectural and technical skills required to design and implement cloud based solutions and services.

More recently the convergence of the cloud with big data has created additional opportunities for IT professionals to gain valuable insights into their business data. Such insights are critical for companies to maintain their competitive edge, increase their revenues and deliver new innovative services and solutions. The programme also aims to address the skills gap in this area so the graduate is equipped with not only the skills to store the data in the cloud but also to derive meaningful analytics from it to deliver true business value.

The content seeks to reflect current and likely future practice in cloud planning and management, the design and management of virtual environments, data analytics, the consolidation of data centres, security techniques in multi-tenant virtualised environments and related areas that contribute to the building of both private and public cloud environments.

Content
The MSc in Cloud Computing is taught online using Cloud based technologies, so students can learn about the cloud in the cloud. Learning technologies such as Canvas, Zoom, and virtualised lab infrastructures are just some of the systems that are used to deliver this innovative programme. Lectures, which are delivered at night are streamed live over the Internet and recorded to facilitate easy playback for students. This offers great flexibility to students as they can access their lectures and labs anytime, anywhere on any device that has a Web browser. It is a testament to the online delivery platform in MTU that students can participate in the programme irrespective of their physical location or working status.

Modules

Mandatory
Virtual Environments
Cloud Automation & Orchestration
Cloud Strategies & Optimisation
Next Generation Networks
Research Practice & Ethics
Cloud Storage Infrastructures
Research Project

Electives (choose 2)
Distributed Ledger Technologies
Malware Investigations
Scripting for Cybersecurity
Fraud & Anomaly Detection
Malware Reverse Engineering
Scalable Microservices

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

Closing Date for Application
31st August 2022
Master of Science in Cybersecurity

**Location**
Online or MTU Bishopstown Campus, Cork

**Course Fee**
€9,000
This is typically paid in 4 instalments: €2,000 x 3 and a final instalment of €3,000.

**Enquiries**
Vincent Ryan
E: vincent.ryan@mtu.ie
T: 021 433 5112

This programme is available part-time online and full-time on campus. In online mode, all classes are delivered over the Internet and all practical work is completed using MTU's cloud infrastructure.

**Duration of Online Delivery**
24 months (4 semesters) is the minimum duration.

The MSc in Cybersecurity part-time offering is taught fully online and is designed specifically for computing professionals working in the IT industry. The modules are assessed by online continuous assessment. The programme is hands-on in nature and provides the learner with detailed working knowledge of the techniques and tools used in the field of Cybersecurity. Online lectures are delivered to students 2 evenings per week. Lectures are streamed live over the Internet and recorded to facilitate easy playback for learners.

The full-time offering is taught on campus over one academic year and some elective modules may be taken online.

**Overview**
Cybersecurity can be defined as the protection of information and information systems from unauthorised access, use, disclosure, disruption, modification, or destruction in order to provide confidentiality, integrity, and availability.

Today, Cybersecurity is becoming a function of increasing importance for the continued operation of commercial entities. The increasing level of interconnectedness of information networks and the reliance of business models on this interconnectedness has resulted in a network (currently the Internet) that has over a yottabyte of information stored, much of which is unsecured. This continuing trend is predicted to strongly increase the importance of Cybersecurity within most multinational entities.

This programme aims to fill the ever increasing skills gap in this area and delivers material that follows the most current practise. Upon successful completion of this programme the student will both understand and deploy the most advanced methods to protect information at rest, in transit, and at work.

**Admission Requirements**
Enter to the MSc in Cybersecurity will require a minimum of a Level 8 Honours Degree in Computer Science or in a cognate discipline. Applicants who do not hold a Level 8 degree but have significant industrial experience will be considered on a case by case basis.

**Content**
**Mandatory**
- Incident Response and Digital Forensics
- Networking Security & Forensics
- Offensive Security
- Security Risk and Compliance
- Applied Cryptography
- Scripting for Cybersecurity
- Cybersecurity Research Project

**Electives**
- Malware Investigations
- Malware Reverse Engineering
- Threat Intelligence
- Software Vulnerabilities
- Fraud and Anomaly Detection
- Distributed Ledger Technology
- Free Choice Module

**Award**
Master of Science in Cybersecurity (Level 9 on the National Framework of Qualifications).
(Single module certification is possible)

**Closing Date for Applications**
31st August 2022. However, please note that this programme has been full well in advance of this closing date in past years.
MASTER OF SCIENCE IN CYBERSECURITY MANAGEMENT

Course & Module Information, and to apply online, visit go.mtu.ie/CRKCYMA9

COURSE CODE CR_KCYMA_9 (LEVEL 9)

Location: Online

COURSE FEE: €8,700

ENQUIRIES:
Triona McSweeney
E: triona.mcsweeney@mtu.ie

Duration of Online Delivery
Part-time online delivery 24 months (4 semesters). The MSc in Cybersecurity Management part-time offering is taught fully online. The modules are assessed by online continuous assessment. The programme helps to develop the management skills necessary to move into cybersecurity leadership roles. Online lectures are delivered to students 3 evenings per week. Lectures are streamed live over the Internet and recorded to facilitate easy playback for learners.

Admission Requirements
Entry to the MSc in Cybersecurity Management will require a minimum of a Level 8 Honours Degree. Applicants who do not hold a Level 8 degree but have significant industrial experience will be considered on a case by case basis.

Overview
The MSc in Cybersecurity Management is a 90 credit programme, consisting of 60 credits worth of taught modules and a 30-credit project.

The programme will prepare a broad range of graduates for roles as cybersecurity professionals with leadership responsibilities within industry. This programme is targeted at Business, Humanities and Arts graduates who would like to move into roles with cybersecurity responsibilities. The programme is also suitable for those from technical backgrounds who would like to develop the management skills necessary to move into a leadership role in cybersecurity.

In the event that a student completes the 60 taught credits and is unable to complete the project (30 credits), that student can opt to receive the Postgraduate Diploma (PGDip) in Cybersecurity Management.

A student who receives a PGDip in Cybersecurity Management, and who, after some time, decides that (s)he wishes to complete the MSc, has the option of revoking their PGDip, completing the 30-credit project and then presenting themselves for the MSc in Cybersecurity Management.

Content
Mandatory
Security Risk & Compliance
Security Architecture
Security Contingency Planning
Security Management & Law
Communications & Cybersecurity
Research Project

Electives
Scripting for Cybersecurity
Strategic Thinking
Security Group Project
Security Work-Based Project
Applied Cryptography
People Management Strategies
Fraud and Anomaly Detection
Emerging Cyber Trends

Award
Master of Science in Cybersecurity (Level 9 on the National Framework of Qualifications).

Closing Date for Applications
31st August 2022. However, please note that this programme has been full well in advance of this closing date in past years.
**Duration of Delivery**
24 months (4 semesters) is the minimum duration.

The MSc in Information Design and Development is delivered and accessed fully online using state of the art Cloud based technologies. Lectures are delivered online by night and streamed live over the Internet and recorded to facilitate easy playback to students. The programme offers great flexibility to students as they can access their lectures and labs anytime, anywhere on any device that has a Web browser.

The MSc in Technical Communication is a 90 credit programme, consisting of 60 credits worth of taught modules and a 30-credit project.

**Overview**
Increasingly, information developers need to understand communication and technology in addition to their specialised fields. Information development roles include but are not limited to: Technical Communicators, Technical Editors, Information Architects, Content Strategists, Instructional Designers, Technical Illustrators, Localisation Specialists, Usability and Human Factors Professionals, Visual Designers, Web Designers and Developers, Trainers and E-Learning Developers, and Information Project Managers.

Information developer activities range from documenting standard operating procedures (SOPs) to designing information for artificial intelligence (AI) technology. Information developers bridge the gap between industry and the end user. Coupling technical communication with cutting-edge technology skills gives prospective students the knowledge and ability to analyse, create, and manage information for today’s users. Information developers should understand concepts of programming, AI, machine learning, natural language processing (NLP), application programming interfaces (APIs), cyber security, and localization engines. Information development ensures that designs, products, systems, and methodologies are documented and conveyed to their target audiences to maximise the business value to the organisation.

**Admission Requirements**
Applicants who hold a Level 8 degree in any discipline are eligible to apply. Applicants who do not hold a Level 8 degree but have significant industrial experience will be considered on a case by case basis.

**Content**
All modules are worth 5 credits (ECTS) unless otherwise noted.

**Mandatory**
- Intro to Information Design
- Information Experience Design
- Information Project Management
- Research Practice & Ethics
- Advanced Info Design & Develop
- XML in Technical Communication
- Writing for Industry
- Comp Research Project Implementation

**Electives**
- Cloud Infrastructure
- Security Contingency Planning
- Scientific Programming for Biologists
- Processing & Visualisation
- Communications & Cybersecurity

**Award**
Master of Science in Information Design & Development (Level 9 on the National Framework of Qualifications). (Single module certification is possible)

**Closing Date for Application**
31st August 2022.
COURSE CODE
CR_KSADE_9
(LEVEL 9)

GENERAL INFORMATION

Duration of Online Delivery
24 months (4 semesters) is the minimum duration. This programme is available online only. All classes are delivered over the Internet and all practical work is completed using MTU’s cloud infrastructure.

Admission Requirements
Entry to the MSc in Software Architecture & Design requires a minimum of a Level 8 Honours Degree in Computing or in a cognate discipline with a minimum of 3 years post qualification experience. Particular attention will be paid to the applicant’s software development experience and motivation.

Aim
The aim of the Programme is to develop students’ knowledge and skills in Software Architecture & Design, Software Development Processes, Analysis and Design of Algorithms, Programming Language Design, Decision Analytics, Software Vulnerabilities, Microservices, and Data Analytics.

Students will develop advanced skills for analysing requirements and designing appropriate software solutions; creating complex software systems to solve real-world problems, evaluating and using advanced software environments, design methods and programming languages, and evaluating and responding to recent trends in interoperability and software development. Students will also complete a research project that is either academic or industry focused.

Content
The MSc in Software Architecture & Design programme is an advanced industry-focused programme that addresses the skills gap of software developers and/or architects in the face of evolving software development practices. It aims to provide students the opportunity for in-depth study of the advanced design and architectural and software development and process skills required for the successful design and development of complex software distributed systems. It provides students with the theoretical and practical knowledge necessary to advance their career in software development as a senior member of the development team or as a software architect.

Delivered exclusively online, the programme offers working professionals flexible opportunities to learn more about technological advances in the industry. The programme places a major emphasis on developing higher level software development skills. Students are exposed to current state-of-the art principles, methods and research of software design and architecture.

Mandatory
Software Architecture & Design
Software Process Engineering
Metaheuristic Optimisation
Scalable Microservices
Research Practice & Ethics
Research Project

Electives
Programming Language Design
Source Code Analysis
Fraud & Anomaly Detection
Natural Language Processing
Big Data Processing
Malware Investigations
Malware Reverse Engineering

Award
Master of Science in Software Architecture & Design (Level 9 on the National Framework of Qualifications).

Closing Date for Application
31st August 2022.

Course & Module Information, and to apply online, visit go.mtu.ie/CRKSADE9
SPORT, PHYSICAL ACTIVITY, AND LEISURE

Level 7
Bachelor of Arts in Outdoor Learning

Level 6/7/8
Pool Instructor, Fitness Training and Continuing Professional Development Programmes
The BA in Outdoor Learning is specifically designed to meet the needs of those who are actively employed in the delivery of programmes using the outdoors. This includes outdoor education (OE), environmental education, learning outside the classroom, outdoor based youth work and much more. This programme will enable graduates to consolidate their professional practice with a nationally and internationally recognised degree. The degree will merge aspects of education theory and cutting-edge outdoor learning practice. This is a blended learning programme for part-time learners who are working in an outdoor learning related sector.

Duration
The programme will be delivered in a manner that suits adult learners who may be based throughout the country and who will have to combine their studies with full-time work. It will include intensive blocks of learning time at MTU Kerry North Campus spread over approximately 10-12 days each semester.

Entry Requirements
Applicants must meet the following five minimum entry requirements:
• Hold 60 credits at NFQ level 6, or equivalent or higher-level award, in any one of the following areas: outdoor education, adult education, community education, health and leisure, youth and community studies, social care, sport and recreation; OR have completed a recognition of prior learning (RPL) process with the University RPL co-ordinator to the value of 60 credits as identified in the European Qualifications Framework for Outdoor Animators (EQFOA/CLO2)
• Provide evidence of cumulated experience of working in the sector for the equivalent of no less than 24 months on a full-time basis
• Complete a Garda vetting process through MTU
• Be employed or engaged on a full-time basis in an appropriate organisation to facilitate the work-based requirements of the programme (subject to approval of suitability by the course co-ordinators)
• Possess sufficient conversational and written English language skills – an IELTS requirement of 6.5.

Modules
• The Practice of Teaching and Learning Outdoors
• The Philosophy and Origins of Modern Outdoor Education
• Adventure Therapy
• Applied Sociology and Psychology in Outdoor Learning
• Adapted Adventure Education
• Environmental Outdoor Education
• Using Research in Practice
• Evaluation and Assessment in OE Based Experiential Programmes
• International Models of Excellence and Innovation in Outdoor Education

Students choose one of the following elective modules which are offered subject to demand and resources:
• Principles and Practices of Youth and Community Work
• Entrepreneurship – Business Development

Progression Opportunities
Students of the BA in Outdoor Learning have gone on to complete a number of undergraduate and postgraduate degrees, including outdoor education and further education teacher.

Cost
€2,595 per academic year. Applicants may be eligible for a student grant, for further details visit www.susi.ie.

Closing date for applications
19th August 2022

For further information contact
Admissions Office
E: admissionskerry@mtu.ie
T: 353 (0)66 714 5638
The Department of Health and Leisure Studies, located in the Kerry Sports Academy, offers part-time courses for initial basic qualifications, follow-on qualifications as well as opportunities for continuing professional development.

Courses consist of one or more modules (subjects) from the department’s bachelor of science degree programmes, which are mapped to national and international qualifications standards and frameworks. The part-time courses consist of both theory and practical elements. They are taken with the full-time undergraduate students and so are typically delivered during normal business hours on weekdays.

Course duration is described here in terms of semesters. A semester typically consists of a 12-week study period followed by a 3-week final examination and assessment period.

Courses are categorised into:
- Pool Instructor e.g. theory with pool-based practice courses;
- Fitness Instructor e.g. fitness instructor, personal training courses; and Continuing professional development

**Common Entry Requirements to CPD/Instructor Programmes**

Applicants must be a minimum of 18 years of age on entry to the following programmes. Satisfactory health clearance and Garda vetting are mandatory.

**For further information**

Head of Department,
Health & Leisure Studies
E: fiona.oflynn@mtu.ie
T: 353 (0)66 714 5607

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**FITNESS INSTRUCTOR COURSES**

**CERTIFICATE IN FITNESS INSTRUCTION (INCLUDING GROUP FITNESS)**

**NFQ: Level 6**
**Credits: 30**
**Award Type: Minor Award**

This is a two-semester, part-time (12-14 hours per week) course, incorporating gym, body conditioning and exercise to music. The course can lead to eligibility for inclusion at level 2 (Fitness Instructor and Group Fitness) on the Register of Exercise Professionals (REPs) in Ireland. Eligibility to register with REPs is conditional on achievement of a specified threshold grade.

**Additional Entry Requirements**

Applicants must hold an FET/QQI award at NFQ level 5 or equivalent.

**Progression Opportunities**

Personal Training

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**PERSONAL TRAINER**

**NFQ: Level 7**
**Credits: 5**
**Award Type: Single Subject Certification**

This is a one-semester part-time (4-6 hours per week) course with client-focused practice. This course can lead to eligibility for inclusion at Level 3 (Personal Trainer) on the Register of Exercise Professionals (REPs) in Ireland. Eligibility to register with REPs is conditional on achievement of a specified threshold grade.

**Additional Entry Requirements**

Applicants must be qualified fitness instructors who are eligible to register with REPs Ireland.

**Progression Opportunities**

Further single subject awards (as continuing professional development) at NFQ level 6 or 7. Advanced Exercise for Health course.
ADVANCED EXERCISE FOR HEALTH

NFQ: Level 8  
Credits: 5  
Award Type: Single Subject Certification

This is a one-semester part-time (4 hours per week) course with client-focused practice. Clients will typically have a chronic illness requiring careful individualised exercise programme development, implementation and monitoring.

Additional Entry Requirements
Applicants must be qualified personal trainers who are eligible to register with REPs Ireland.

Progression Opportunities
Depending on the applicant’s existing qualifications, this course can lead to eligibility for inclusion at Level 4 (Exercise Health Specialist) on the Register of Exercise Professionals (REPs) in Ireland. Eligibility to register with REPs is conditional on achievement of a specified threshold grade.

POOL INSTRUCTOR COURSES

EDUCATION IN AQUATICS 1 & 2: POOL SAFETY, FIRST AID AND POOL LIFEGUARDING

NFQ: Level 6  
Credits: 10  
Award Type: Single Subject Certification

A part-time, one-semester course (5 hours per week plus a first aid course), with theory and pool-based content. This course includes significant pool practice and a first aid course delivered over 4-consecutive days. Achievement of the aquatics awards in this course is subject to successfully passing the relevant examinations.

Additional Entry Requirements
Applicants must be confident swimmers.

Progression Opportunities
Progression to Education in Aquatics 3 (Assistant Swim Teacher).

EDUCATION IN AQUATICS 3 (INCLUDING ASSISTANT SWIM TEACHING)

NFQ: Level 6  
Credits: 5  
Award Type: Single Subject Certification

A part-time, one-semester (5 hours per week) course, with theory and pool-based content. This course includes significant pool practice and client-focused pool-based swim teaching practice. Achievement of the Assistant Swim Teacher qualification is subject to successfully passing the relevant examinations.

Additional Entry Requirements
Applicants should be confident swimmers who have completed the Pool Safety, First Aid and Pool Lifeguarding course.

Progression Opportunities
Progression to Education in Aquatics 4 (Assistant Swim Teacher).

EDUCATION IN AQUATICS 4 (INCLUDING SWIM TEACHING)

NFQ: Level 6  
Credits: 5  
Award Type: Single Subject Certification

A part-time, one-semester (5 hours per week) course, with theory and pool-based content. This course includes significant pool practice and client-focused pool-based swim teaching practice. Achievement of the Assistant Swim Teacher qualification is subject to successfully passing the relevant examinations.

Additional Entry Requirements
Applicants should be confident swimmers who have completed the Pool Safety, First Aid and Pool Lifeguarding course.

Progression Opportunities
Progression to Disability Swim Teacher and Halliwick Instructor.
DISABILITY SWIM TEACHER AND HALLIWICK INSTRUCTOR

NFQ: Level 6
Credits: 5
Award Type: Single Subject Certification

A part-time, one-semester (4 hours per week) course, with theory and pool-based content. This course includes client-focused pool practice.

Additional Entry Requirements
Applicants will have, at least, pool lifeguard and assistant swim teacher qualifications and will ideally be qualified (full) swim teachers.

Progression Opportunities
Progression to Aquatic Rehabilitation as continuing professional development.

CONTINUING PROFESSIONAL DEVELOPMENT PROGRAMMES

Continuing professional development courses can be taken with or without examinations, however there is no reduction in cost when not taking the examinations.

DISABILITY STUDIES: ADAPTED ACTIVITY LEADERSHIP

NFQ: Level 8
Credits: 5
Award Type: Single Subject Certification

A part-time, one-semester course, with theory and practical content. This course includes hall, gym and aerobic studio activity leadership with guests with mild intellectual disabilities.

Additional Entry Requirements
Applicants must be qualified fitness instructors or personal trainers.

ADVANCED RESISTANCE TRAINING METHODS

NFQ: Level 6
Credits: 5
Award Type: Single Subject Certification

This is a one-semester, part-time (4 hours per week) theory and gym-based advanced performance training course.

Additional Entry Requirements
Applicants will typically be qualified fitness instructors or personal trainers.

PRINCIPLES AND PRACTICE OF AQUATIC REHABILITATION

NFQ: Level 6
Credits: 5
Award Type: Single Subject Certification

A part-time, two-semester course, with theory and pool-based content. The second half of this course includes client-focused pool practice.

Additional Entry Requirements
Applicants will have certified ancillary pool-related competencies (e.g. pool lifeguard, Halliwick, etc.) and will have a swim teacher qualification.

HIGH PERFORMANCE TRAINING

NFQ: Level 7
Credits: 5
Award Type: Single Subject Certification

This is a two-semester, part-time (4 hours per week) gym-based performance training course with significant theoretical content.

Additional Entry Requirements
Applicants must be qualified personal trainers who are eligible to register with REPs Ireland.
PERFORMANCE TRAINING (PLANNING AND PERIODISATION)

NFQ: Level 7  
Credits: 5  
Award Type: Single Subject Certification

This is a one-semester, part-time (4 hours per week) course with theory and some practice-based performance planning and training.

Additional Entry Requirements  
Applicants will typically be qualified fitness instructors or personal trainers but may equally be people engaged in regular high – level physical activity, from serious active leisure pursuits up to elite sports.

SPORTS NUTRITION

NFQ: Level 7  
Credits: 5  
Award Type: Single Subject Certification

This is a one-semester, part-time (3 hours per week) course on the principles of sports nutrition. The course is delivered from January to May each year.

Additional Entry Requirements  
Applicants will typically be qualified fitness instructors or personal trainers but may equally be people engaged in regular structured physical activity, from active leisure pursuits up to elite sport.

PERFORMANCE NUTRITION

NFQ: Level 7  
Credits: 5  
Award Type: Single Subject Certification

This is a one-semester, part-time (3 hours per week) course on advanced nutrition concepts and trends in sports performance. This course is delivered from September to December each year.

Additional Entry Requirements  
Applicants will typically be qualified fitness instructors or personal trainers but may equally be people engaged in regular high-level physical activity, from active leisure pursuits up to elite sports.

Further Information  
Head of Department,  
Health & Leisure Studies  
E: fiona.oflynn@mtu.ie  
T: 353 (0)66 7145607
LOCATION
Ringaskiddy, Co. Cork.

HEAD OF COLLEGE
Cormac Gebruers

HEAD OF DEPARTMENT
Capt. Sinéad Reen

ENQUIRIES
T: 021 433 5600
E: NMCI.Admissions@mtu.ie
W: www.nmci.ie

The courses offered are subject to demand and places may be limited. All online applicants will receive an email confirmation. Details about eligibility, programme orientation, and timetable arrangements will be sent to all applicants in advance of programme commencement.

NMCI also offers
- Full-time degree programmes Level 7 and Level 8
- Professional Maritime Short Courses
- GAC Training & Service Solutions (GTSS)
- Offshore courses
MARITIME STUDIES

Level 7
Bachelor of Business in Supply Chain and Transport Management
Certificate in Customs and Global Trade Management

Level 8
Bachelor of Business (Honours) in Global Supply Chain Management
Certificate in Biopharmaceutical Supply Chain Management
BACHELOR OF BUSINESS IN SUPPLY CHAIN AND TRANSPORT MANAGEMENT

Duration & Delivery
1 Year. The lectures take place at the National Maritime College of Ireland in Ringaskiddy, Co. Cork, on Saturdays and one night a week (after discussion with group).

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.

Admission Requirements
This qualification is a one year step up degree for participants holding the Chartered Institute of Logistics and Transport (CILT); Logistics Associate Apprenticeship (LAA); or IIPMM (Procurement and Supply Chain Management); Higher Certificate, Graduateship or degree in Supply Chain Management, or an equivalent Level 6 qualification in a relevant 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 Logistics and Supply Chain Management.

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 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.

Content
• Quality and Lean Operations
• Managing Performance Measurement
• Warehousing and Inventory Management
• Business and Supply Chain Strategy
• Transport Management in the International Supply Chain
• Management Accounting and Managerial Finance
• 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

Closing Date for Application
Completed applications must be made online with MTU before 5pm on 7th September 2022.

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

Further Studies
Suitably qualified graduates may progress to the Bachelor of Business (Honours) in Global Supply Chain Management which is run by NMCI on a part-time study mode basis.

Location
National Maritime College of Ireland

Course Fee
€3,900

Enquiries
Dr Jane O’Keeffe
T: 021 433 5600
E: jane.okeeffe@mtu.ie

Course & Module Information, and to apply online, visit go.mtu.ie/CRBSCTM7
CERTIFICATE IN CUSTOMS AND GLOBAL TRADE MANAGEMENT

DELIVERY AND DURATION
Online. One Semester – September to December

ADMISSION REQUIREMENTS
Level 6 qualification preferred. At least three years’ experience in a suitable working environment with logistics and supply chain exposure. Suitable for those engaging with freight forwarding and customs in regard to the movement of goods globally.

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 Logistics and Supply Chain Management.

Suitably qualified applicants who have been out of the work environment for a number of years due to childcare or other caring obligations and have a previous history of employment but may require upskilling, reskilling or cross-skilling to transition back to the workforce are most welcome. Applicants will also be considered under MTU’s well-established RPL process.

Aim
This Special Purpose Award (SPA) affords a review of Customs Law on International Trade by providing a formal grounding in aspects of European Union Customs Law and Regulations that govern International Trade.

The role, functions and current challenges relating to Customs in an era of Globalisation are examined, having regard for the aims and functions of key influencers. These influencers include The World Trade Organisation (WTO); The World Customs Organisation (WCO); and trading alliances such as The Single Market, and the implications of Brexit.

The interaction between global trade, and how customs policies facilitate such trade is examined in the context of global trade facilitation initiatives and the role of customs and border control is examined in terms of Brexit implications and the US Presidential rulings. The programme critically analyses situations of potential difficulty and further examines appropriate legal remedies.

Award
Special Purpose Award - Certificate in Customs and Global Trade Management (Level 7, 10 ECTS on the National Framework of Qualifications).

Course & Module Information, and to apply online, visit go.mtu.ie/CRBCGTM7

Dr Jane O’Keeffe
T: 021 433 5600
E: jane.okeeffe@mtu.ie
BACHELOR OF BUSINESS (HONOURS) IN GLOBAL SUPPLY CHAIN MANAGEMENT

LOCATION
Online and National maritime College of Ireland

COURSE CODE
CR_BGSCM_8

COURSE FEE
€4,500

ENQUIRIES
Dr Jane O’Keeffe
T: 021 433 5600
E: jane.okeeffe@mtu.ie

Course & Module Information, and to apply online, visit go.mtu.ie/CRBGSCM8

Springboard+ Application Procedure
You must register with Springboard https://springboardcourses.ie/ and apply for the Bachelor of Business Honours Degree Award in Global Supply Chain Management. Once your application on the Springboard website has been accepted, MTU Admissions office in Cork will be in contact with you to complete your registration.

Duration and Delivery
This one-year programme (delivered two evenings per week, and some Saturdays), is a production, distribution and service-focused Level 8 programme. Integral elements of this programme are the blended delivery involving online delivery (at least 60%) of modules and supplemented with class tutorials. The programme is focused on continuing professional development (CPD), incorporating skills training in: effective interpersonal communication; teamwork; analytical thinking; creative problem solving; negotiation management; and business acumen. The programme is delivered over three semesters with the third semester dedicated to a dissertation. Academic year: 12th September 2022 to 31st August 2023.

Overview
The programme is designed to broaden and deepen the knowledge and skill base of graduates of the NMCI/MTU L7 SCM degree. This programme will also appeal to Business, Engineering and IT graduates (L7/L8/L9) who have some experience in Logistics and Supply Chain Management. Supply chain graduates and their companies have shown particular interest in enhancing their knowledge of issues such as international customs regulations, strategic management of global logistics and supply chain and transport planning management (considering the implications of disruptor events such as Brexit and COVID-19).

Aim
Students gain valuable knowledge and skills in key subject areas, which are relevant to managing global logistics and supply chain networks for indigenous and multinational corporations in the medical device, pharmaceutical, biopharmaceutical, electronics, energy, sectors; and the third party and fourth-party logistics (3PL, 4PL) providers and service companies that support these sectors. This programme is suited to those with a wide range of backgrounds, from engineering and science to business and the arts; those already in supply chain management careers; and those keen to join this dynamic and rewarding sector.

Admission Requirements
Ordinary Bachelor degree in Supply Chain or equivalent, at grade H2.2 or higher. (Examples of equivalence: a degree holder in business or engineering disciplines with experience in logistics/supply chain management in the industry). Suitably qualified applicants who have been out of the work environment for a number of years due to childcare or other caring obligations and have a previous history of employment but may require upskilling, reskilling or cross-skilling to transition back to the workforce are most welcome. Applicants will also be considered under MTU’s well-established RPL process.

Content
Semester 1
Global Supply Chain Sustainable Management
Advanced Financial Planning
Supply Network Optimisation
Research Project Proposal
Strategic Procurement Sustainable Management
Lean Sigma Fundamentals

Semester 2
Int’l Supply Chain in the Customs Environment
Transport Planning and Logistics
Enterprise Systems
Basic Stats and Lean Sigma Tools
Project Management (PM) in SCM
Port Operations Management

Semester 3
Research Dissertation Supply Chain

Closing date for application
26th August 2022

Award
Bachelor of Business (Honours) in Global Supply Chain Management (60 ECTS, Level 8 on the National Framework of Qualifications)
**Springboard+ Application Procedure**

You must register with Springboard https://springboardcourses.ie/ and apply for the Bachelor of Business Honours Degree Award in Global Supply Chain Management. Once your application on the Springboard website has been accepted, MTU Admissions office in Cork will be in contact with you to complete your registration.

**Duration of Online Delivery**

Four modules over two semesters. The programme is delivered and accessed fully online using state of the art Cloud based technologies. Lectures are delivered online by night, streamed live over the Internet and recorded to facilitate easy playback to students. This offers great flexibility for students who can access lectures and labs anytime, anywhere on any device that has a web browser.

**Admission Requirements**

Applicants must have achieved a minimum of a Level 7 Bachelor degree in Supply Chain Management, or equivalent. (Examples of equivalence: a degree holder in business or engineering disciplines with substantial experience in logistics/supply chain management in the Biopharmaceutical and Pharmaceutical sector).

Suitably qualified applicants who have been out of the work environment for a number of years due to childcare or other caring obligations and have a previous history of employment but may require up-skilling, re-skilling or cross-skilling to transition back to the workforce are most welcome.

**Overview**

This Special Purpose Award in Supply Chain Management is designed to broaden and deepen the knowledge and skill base of graduates of a Level 7 degree in Supply Chain Management or in Business and Engineering disciplines who already have experience of Logistics and Supply Chain Management. Supply Chain graduates have shown particular interest in enhancing their knowledge of issues such as the strategic management of global logistics and supply chain management.

This one-year programme is an industrially focused Level 8 programme where students gain valuable knowledge and skills in key subject area, which are pertinent to working in highly regulated and automated manufacturing and distribution environments such as GMP, QA, QC, Lean Manufacturing, Operations Management, Lean Supply Chains.

**Award**

Certificate in Biopharmaceutical Supply Chain Management, 20 ECTS (Level 8 on the National Framework of Qualifications).
MTU CORK SCHOOL OF MUSIC

HEAD OF SCHOOL
Dr Ciara Glasheen-Artem

LOCATION
Union Quay, Cork
E: Csm.InfoCork@mtu.ie
T: 021 480 7310

The School consists of the following Departments
○ Keyboard Studies
○ Orchestral Studies
○ Pop, Jazz, Trad, Voice & Theatre Studies
○ Musicianship & Academic Studies

csm.cit.ie
HEAD OF THE DEPARTMENT OF KEYBOARD STUDIES
Dr Gabriela Mayer
E: gabriela.mayer@mtu.ie

HEAD OF THE DEPARTMENT OF ORCHESTRAL STUDIES
Joan Scannell
E: joan.scannell@mtu.ie

HEAD OF THE DEPARTMENT OF POP, JAZZ, TRAD, VOICE & THEATRE STUDIES
John O’Connor
E: john.oconnor@mtu.ie

HEAD OF THE DEPARTMENT OF MUSICIANSHIP & ACADEMIC STUDIES
Maria Judge
E: maria.judge@mtu.ie

csm.cit.ie

Choral Groups
Fleischmann Choir Union

Instrumental Groups
Symphonic Wind Band
Jazz Big Band
Symphony Orchestra

Musicianship Skills for Adults
Sight-Singing Classes
Courses for Teachers
Concerts, Performances & Productions
Individual Tuition
Choral Groups

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

The conductor is Conor Palliser and the group specialises in singing large-scale works for choir. It recent years, it has performed music by Beethoven, Brahms, Bruckner, Dvorák, Finzi, Fleischmann, Handel, Haydn, Jenkins, Mozart, Orff, Schubert, Saint-Saens, Stanford, Tchaikovsky, Vaughan Williams and Vivaldi to name but a few. The choir regularly performs with orchestra and internationally-renowned soloists and future concerts include a performance of music by Rheinberger and Fauré in Como Cathedral, Italy.

Membership is open to enthusiastic and committed choral singers; auditions are held when there are vacancies for certain sections in the choir. Applicants should complete the online application form which can be found at: https://csm.cit.ie/performing-groups-application

Union
Union is an adult choir open to all performers who are interested in developing their vocal skills and musicianship through legit and contemporary musical theatre repertoire. Membership is open to all (there’s no need to be a current student or graduate of MTU) and all that’s expected from our members is a love for musical theatre and singing! Enquiries to: CSM.InfoCork@mtu.ie Subject line: Union

Instrumental Groups

Symphonic Wind Band
The Symphonic Wind Band rehearses on Wednesdays from 5.30pm to 7.30pm and is directed by Antony Neal and caters for students of senior and advanced standard.

Applications are welcome from external players who may be members of other bands, entry is subject to audition.

Applicants should complete the online application form which can be found at: https://csm.cit.ie/performing-groups-application

Jazz Big Band
Rehearsals for this 20-piece ensemble take place on Wednesday lunchtime from 1.15pm – 3.15pm under the direction of Cormac McCarthy.

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. The Jazz Big Band played at Jazz Standard Club in Mahattan, USA during Easter 2017, and has recently collaborated with Ariel Posen who is a world renowned singer/songwriter, internationally-renowned guitarist and producer.

Symphony Orchestra
Rehearsals take place on Tuesday nights from 7.00pm - 9.30pm. The conductor is Conor Palliser.

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.

In recent seasons, the orchestra has performed Tchaikovsky’s Symphony No. 6 and Capriccio Italien Overture, Sibelius’ Symphony No. 5, Schumann’s Cello and Piano Concertos, Violin Concertos by Bruch, Barber and Brahms, Shostakovich’s Cello Concerto No. 1, Humperdinck’s Prelude to Hansel and Gretel, and Bernstein’s Overture to Candide.

Applications are welcome from external players who may be members of other orchestras; entry is subject to audition. Applicants should complete the online application form which can be found at: https://csm.cit.ie/performing-groups-application.

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 weekdays. Enquiries to: CSM.InfoCork@mtu.ie Subject line: Musicianship Skills for Adults.
Sight-Singing Class

This weekly class facilitates those who would like to develop their sight-singing skills in a group setting. This course is popular with those who are interested in choral singing and with parents wishing to support their children’s musicianship studies. Enquiries to: CSM.InfoCork@mtu.ie Subject line: Sightsinging

Courses for Teachers

We offer short courses aimed at pre-school, primary and post-primary teachers offering choral skills, musicianship and literacy development, music technology, classroom percussion, and curriculum support. Contact maria.judge@mtu.ie for more information.

Concerts, Performances and Productions

The MTU Cork School of Music hosts a wide-ranging series of productions, 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.

For detailed information about concerts and events, please visit csm.cit.ie/events.

Further information may be obtained from the MTU Cork School of Music, Union Quay, Cork T: 021 480 7310 and also on the events section of the CSM website – csm.mtu.ie

Individual Tuition

A limited number of vacancies may arise for individual tuition in singing, speech, theory of music including diploma preparation, 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 and complete the relevant online application form.

Full details about the enrolment procedure is available from the General Office at MTU Cork School of Music. Students should also refer to the Information for Students & Staff booklet available at https://csm.mtu.ie and also available at the General Office, CSM.
MTU CRAWFORD COLLEGE
OF ART & DESIGN

HEAD OF COLLEGE
Rose McGrath

LOCATION
Sharman Crawford Street, Cork
T: 021 433 5220
E: crawford.enquiries@mtu.ie

The College consists of the following Departments:

- Arts in Health & Education
  (based in 46 Grand Parade)
- Fine Art & Applied Art
  (based in Sharman Crawford Street)
- Media Communications
  (based in MTU, Bishopstown Campus)

Queries to crawford.enquiries@mtu.ie re programmes in the Department of Arts in Health & Education and the Department of Fine Art & Applied Art.

Queries to veronique.osullivan@mtu.ie re programmes in the Department of Media Communications. Each programme can be found under “Areas of Study” on the Crawford website – http://crawford.mtu.ie.

All programmes offered are subject to demand and places may be limited. All online applicants will receive an email confirmation. Where appropriate, details about eligibility, programme orientation, and timetable arrangements will be sent to applicants in advance of programme commencement.

All part-time courses will run subject to sufficient student numbers. Where a course cannot proceed, applicants will be contacted and advised on alternative study options.

http://crawford.mtu.ie
DEPARTMENT OF ARTS IN HEALTH & EDUCATION

Courses

- Master of Arts in Art Therapy (Level 9)
- Certificate in Creativity & Change (Level 9)
- Master of Arts in Arts and Engagement (Level 9)
- Certificate in Eco Arts Practice (Level 9)
- Certificate in Socially Engaged Theatre (Level 8)
- Certificate in Principles of Art Therapy (Level 8)
- Certificate in Arts in Group Facilitation (Level 8)
- Art Therapy Summer School
- Introductory Days – Art Therapy & Participatory Arts

Location

46 Grand Parade, Cork

http://crawford.mtu.ie

HEAD OF DEPARTMENT
Louise Foott

ENQUIRIES TO
E: crawford.enquiries@mtu.ie
T: 021 433 5220

All programmes offered are subject to demand and places may be limited. All online applicants will receive an email confirmation. Where appropriate, details about eligibility, programme orientation, and timetable arrangements will be sent to all applicants in advance of programme commencement.

All part-time courses will run subject to sufficient student numbers. Where a course cannot proceed, applicants will be contacted and advised on alternative study options.
COURSE CODE
CR_AARTT_9
(LEVEL 9)

MASTER OF ARTS IN ART THERAPY

Duration & Delivery

Location: 46 Grand Parade

The Master of Arts in Art Therapy is a taught Masters providing professional training in Art Therapy. Through theoretical studies, experiential learning and clinical placement, students develop an understanding of the theories and practices of art therapy necessary for safe therapeutic work. The MA in Art Therapy is a recognised Art Therapy qualification which, on completion, allows individuals to register with the professional body, Irish Association of Creative Arts Therapists (IACAT).

The course is delivered on a full time basis over two years (2 college days and 2 clinical placement days) or part-time over 3 years (1 college day and 1 clinical placement day).

Admission Requirements

Applicants normally require

• An Honours degree, or equivalent, in Visual Art. Where graduate qualifications are not in the visual arts, for example, Psychiatric Nursing, Social Work or Teaching, evidence of a substantial and developing body of current and recent art work is essential
• 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 showing the applicants relationship and connection to their creative process
• Two satisfactory references from clinical and professional persons who have knowledge of the candidate’s education, training and experience
• A good understanding of therapeutic and professional working of Art Therapy and the implications of working as a therapist
• Pre-course experience in personal therapy or counselling is preferred

Early Assessment

Because of the clinical placement component of this course, it is a condition of entry that all successful applicants will be subject to the National Vetting Bureau (NVB) procedure carried out by the NVB facilitator at MTU. Offers of a place on this programme will be provisional and contingent on the applicant’s satisfactory completion of MTU’s NVB procedure.

Overview

The programme aims to equip Art Therapy practitioners with a range of therapeutic skills and interventions to work with both individual and group clients in a variety of health and community settings. It follows three strands of learning:

• Theoretical Studies (25 Credits)
• Experiential Art Therapy Training (20 Credits)
• Clinical Placement and Professional Studies (45 Credits)*

* 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. 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.

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.

Award

Master of Arts in Art Therapy (Level 9 on the National Framework of Qualifications).

COURSE FEE

Full-time: EU Applicants €7,950 + €7 USI Levy
Full Time: Non EU Applicants €12,000
Part-time: EU Applicants €2,650 per annum over 3 years

ENQUIRIES

Gráinne Young
T: 021 433 5220
E: crawford.enquiries@mtu.ie

Course & Module Information, and to apply online, visit go.mtu.ie/CRATHPY9

http://crawford.mtu.ie
COURSE CODE
CR_ACRCH_9
(LEVEL 9)

COURSE FEE
€680*

ENQUIRIES
Chriszine Backhouse
T: 021 433 5220
E: chriszine.backhouse@mtu.ie
W: www.creativityandchange.ie

What you can expect from the programme
• Participate in a transformative learning experience
• Explore your place in our interconnected, rapidly-changing and unequal world
• Connect your passions for change
• Discover connections between the local to the Global
• Recognise that small actions can have big impacts
• Reflect on your values actions and behaviours of Global citizens
• Boost your confidence in your own creativity
• Innovate as you put your learning and passion into practice to engage others on a journey of transformation and growth as global citizens.
• Develop skills in facilitating meaningful dialogue, collaborative and transformative learning
• Build a tool kit of exercises to design learning processes to nurture global citizenship
• Apply design thinking to creating imaginative learning environments and opportunities in wide range of contexts, from a workshop setting to a festival to the street
• Plug into a network of people passionate about creativity learning and change in the world

Award
Certificate in Creativity & Change, 20 ECTS credits (Level 9 on the National Framework of Qualifications).

CERTIFICATE IN CREATIVITY & CHANGE

*This course is supported by Irish Aid’s Development Education funds and is therefore offered at this subsidised rate.

Duration
Location: 46 Grand Parade
The course runs over 8 weekends September to May.

Admission Requirements
Applicants for this course should note that it is a Level 9 (normally postgraduate) course, so there is an expectation that they will have a first degree or equivalent experience. Applicants will be invited to attend an interview, to ensure that there is a good match between their aspirations and the course.

Overview
This accredited Special Purpose Award programme targets educators, change-makers, activists, artists, community workers, adult educators, youth workers, volunteers, and anyone who is interested in how creative engagement can nurture global citizenship and empathic action around local and global justice themes.

The programme is designed for people who can say ‘YES’ to the following questions
• Are you passionate about change?
• Do you believe that you can make a difference in the world?
• Do you believe that we need creativity to think in new ways about the challenges that face the world?
• Are you curious about how creative processes and learning environments can transform how people engage with the world around them?
• Do you want to build skills to bring others on a journey of transformation and growth as global citizens?

Course & Module Information, and to apply online, visit go.mtu.ie/CRACRCH9
COURSE CODE
CR_ARAEN_9
(LEVEL 9)

Course & Module Information, and to apply online, visit go.mtu.ie/CRARAEN9

Duration & Delivery
Location: 46 Grand Parade

Part-time. 2 academic years, 4 Semesters. The course will run part-time, one day a week over two years. Electives are timetabled in 2-day blocks once a month. Successful applicants who have completed the Certificate in Principles of Art Therapy can chose to be exempted from the year one elective.

Successful applicants who have completed the Certificate in Creativity & Change can chose to be exempted from the year two elective.

Overview
This Masters programme builds on a number of existing Special Purpose Awards all centred on learning through expressive meaning-making: Arts-based Facilitation Training, Creativity and Change-making, and Art Therapy. These programmes educate through and activate different modes of communication, promote learning through experiential and reflective practice, and engage with other perspectives and diverse intelligences.

Participants on the Masters will develop an understanding of the role of the arts within learning and engagement and will develop the skills to apply this to a range of contexts. Core modules over the two-year programme relate to the arts in engaged practices which recognise neurodiversity, equality, social justice, power and autonomy. Through research, reflection, group and practical work, participants will explore different ways of learning, investigating the transformational power of the arts in personal and societal activation or regulation through a broad scope of contemporary methodologies.

Through elective modules in year one, opportunities will be provided to broaden skill sets through Socially Engaged Theatre, Eco-Arts Practice, or Art Therapy. In the second year, opportunity will be given for students to develop their ongoing arts practice informed by, and in relation to, one of two strands of engagement – Health & Wellbeing or Global Citizenship.

Admission requirements
The MA in Arts & Engagement welcomes applicants from a range of backgrounds who are interested in
• Developing their own arts practice in relation to others
• Developing arts-based processes to incorporate into existing work place
• Developing arts engagement facilitation skills

Applicants normally require
• An Honours degree, or equivalent, in Visual Art/Theatre/ Music or a relevant area, with a minimum of an Honours 2.2 (or equivalent) are eligible to apply for the programme. Where graduate qualifications are not in the Visual Arts, for example, Community Development, Social Work or Teaching, evidence of a developing body of current and recent art work is essential
• In certain circumstances mature applicants with professional experience will be considered for eligibility through recognition of prior and experiential learning.

Award
Master of Arts in Arts and Engagement (Level 9, 90 ECTS credits on the National Qualification of Ireland).
CERTIFICATE IN ECO PRACTICES

**COURSE FEE**
€1,450

**ENQUIRIES**
Louise Foott
E: crawford.enquiries@mtu.ie

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**Course & Module Information, and to apply online, visit [go.mtu.ie/CRAEAPR9](go.mtu.ie/CRAEAPR9)**

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**Duration & Delivery**
One academic year (part-time, 2-day blocks, once a month)

**Overview**
The Eco Arts Practice course is a Level 9 certificate 10 credit programme. Through experiential learning, this course provides an opportunity to explore Eco Arts Practice theory and application within a group setting.

The aim of the course is to provide participants with approaches to Eco Art Practice that could be applied in a range of different contexts, making it attractive to teachers, therapists, youth and community workers or artists looking to broaden the scope of their practice.

Explore nature and the environment within an art context, from ethical use of materials, to eco literacy through to the natural environment as a classroom, a therapeutic space, and a material that can be worked with.

**Why do the course?**
- Explore current and historical debates on the ethical, psychological and sociological underpinnings of Eco Arts Practice.
- Develop novel techniques to explore the interconnection between humans and the natural world
- Develop and apply advanced practical tools for engaging through the arts with groups in specific fields of practice.

**Admission requirements**
- An Honours degree, or equivalent, in Visual Art/Theatre/Music or a relevant area, with a minimum of an Honours 2.2 (or equivalent) are eligible to apply for the programme.
- In certain circumstances mature applicants with professional experience will be considered for eligibility through recognition of prior and experiential learning.
- When you are applying online, please upload a CV, and a motivational statement detailing why you want to do the course

**Award**
Certificate in Eco Arts Practice (Level 9, 10 ECTS on the National Framework of Qualifications)
CERTIFICATE IN SOCIALLY ENGAGED THEATRE

COURSE FEE
€1,450

ENQUIRIES
Chriszine Backhouse
E: chriszine.backhouse@mtu.ie

Course & Module Information, and to apply online, visit go.mtu.ie/CRASETH8

Duration & Delivery
One academic year (Part-time, 2-day blocks, once a month - Friday/Saturday)

Overview
The socially engaged theatre programme is a Level 8 certificate comprising of two 5 credit assessed modules. Through experiential learning, this course provides an opportunity to explore socially engaged theatre theory and application within a group setting. The learning environment will be a blended mix of indoor and outdoor locations. When we are outdoors, we will travel to nearby greenspaces including city parks. Outdoor environments enhance learning experiences by connecting us to nature, ourselves, and real-world applications.

The aim of the course is to introduce participants to the basic principles of socially engaged theatre. Graduates will learn how to effectively use theatre in both formal and non-formal contexts as a means for positive change.

The first module introduces students to a range of socially engaged theatre processes. Through experiential learning, students will explore the aesthetics, ethical considerations, and transformative potential of socially engaged theatre. In the second module, students will devise and perform socially engaged theatre pieces aimed to address social challenges.

Why do the course?
• Learn fresh ways to inspire participants to explore social issues
• Learn approaches to theatre which bring an ethical and aesthetic awareness of socially engaged practices
• Develop your ability to devise, perform and evaluate socially engaged theatre practices that effectively respond to social issues.

Admission requirements
• Demonstrated interest in Visual Art/Theatre/Music or a relevant area
• When you are applying online, please upload a CV, and a motivational statement detailing why you want to do the course

Award
Certificate in Socially Engaged Theatre (Level 8, 10 ECTS on the National Framework of Qualifications)
CERTIFICATE IN PRINCIPLES
OF ART THERAPY

COURSE FEE

€1,400

ENQUIRIES

Catherine Phillips
T: 021 433 5249
E: catherine.phillips@mtu.ie

Course & Module Information, and to apply online, visit go.mtu.ie/CRAATPY8Y1

Duration & Delivery

Location: 46 Grand Parade
One academic year. Part-time, once a month in 2-day blocks (Friday - Saturday) from October to April.

Admission Requirements

Applicants will be invited to attend an interview, with examples of their work, in order to ensure that there is a good match between their aspirations and the course.

Overview

The programme offers an introduction to the core principles of Art Therapy – boundaries, the image, self-inquiry, process and the triangular relationship. Through experiential workshops, lectures and seminars, the course aims to provide a deeper understanding of the art therapy process.

The course provides an opportunity to find out more about art therapy, exploring the history of Art Therapy and its theoretical underpinning through an extensive lecture programme. An opportunity is provided, through experiential workshops to experience and reflect on the process of Art Therapy within a group setting. Seminars, journaling and essay writing challenge participants to develop the practice of reflecting on their experiential learning and relating it to theory.

For many, this introduction may be a step towards training as a qualified Art Therapist, for others it may introduce them to a more sympathetic understanding of the role of art in rehabilitation and development work.

Aim

Upon successful completion of this programme the graduate will be able to demonstrate

- An understanding of the role of creativity as a therapeutic methodology
- An awareness of the core principles of the practice of art therapy
- Understanding and awareness of the variety of clinical areas where art therapy is practised
- Understanding of the theory of Art Therapy in practice through experiential workshops
- Ability to engage with and develop their own understanding of the creative process

Award

Certificate in Principles of Art Therapy, 10 ECTS credits (Level 8 on the National Framework of Qualifications).
CERTIFICATE IN ARTS IN GROUP FACILITATION

COURSE CODE
CR_AGRPA_8
(LEVEL 8)

COURSE FEE
€1,400

ENQUIRIES
Jessica Carson
T: 021 433 5220
E: jessica.carson@mtu.ie

Course & Module Information, and to apply online, visit go.mtu.ie/CRAGRPA8

Duration & Delivery
Location: 46 Grand Parade
This course runs once a month from October to May in three-day blocks (Thursday - Saturday), from 10.00am - 5.00pm.

Admission Requirements
Applicants will be invited to attend an interview, in order to ensure that there is a good match between their aspirations and the course.

Overview
The Arts in Group Facilitation Certificate (Level 8, 10 credits) focuses on the practical skills of planning and running creative workshops with groups in a range of non-formal contexts. Participants learn these skills through experiential learning processes, taking part in visual arts, drama, dance and music workshops and reflecting on the experience. The focus is on acknowledging the individual within learning, recognising the importance of play and the need for learning to be engaging. There is a strong emphasis on engaging with diversity and learning to adapt a range of arts approaches to meet the varying needs within a group.

This course would suit
• Graduates who want to work in a health or social context
• Educators in both formal and informal learning sector looking for fresh ways to inspire learners
• Social workers/community workers looking for arts based approaches to group work

Why do this course?
• Learn approaches to group work that take the emphasis off words and place it on finding your own unique voice within the group through a range of possible arts-based media.
• Develop your creative skills to work with groups
• Develop and promote confidence and sense of belonging in a group
• Learn fresh ways to inspire learners in formal and informal learning
• Develop practical resources and training to work with a wide variety of groups in community and more specialised settings

Award
Certificate in Arts in Group Facilitation, 10 ECTS credits (Level 8 on the National Framework of Qualifications).
ART THERAPY SUMMER SCHOOL

COURSE FEE
€499 (early bird and concession options available)

ENQUIRIES
Marianne Adams
M: 087 061 6662
E: marianne.adams@mtu.ie

To apply online, visit http://crawford.mtu.ie/courses/art-therapy-summer-school/
To register for the accredited option, click on the ‘apply’ tab at go.mtu.ie/ARTS9016

Duration & Delivery
Location: MTU Crawford College of Art & Design, Sharman Crawford Street, Cork
Saturday to Wednesday (usually last Saturday in June)

Overview
The Cork Art Therapy Summer School welcomes up to sixty participants annually, providing them with a unique opportunity to learn about and experience the Art Therapy process. Visiting art therapists, from Ireland and further afield, facilitate an immersive experience of the Art Therapy process over the five days.

Participants are offered the chance to explore the therapeutic potential of art through a series of themed experiential workshops. A series of related lectures and seminars during the week provide a context for the current practice of art therapy. Participants have the option (if they meet the academic requirements) to register and take this course as a Level 9, 5-credit module. For some, this summer school may be the first step on the road to a career in Art Therapy. For others, it may be an opportunity to re-engage with their creative identity. For trainee and qualified therapists, it may provide continuing professional development.

Aim
• Understand the role of creativity as a therapeutic methodology
• Learn about the history of art therapy and some of the clinical contexts where it is practiced
• Experience the theory of Art Therapy in practice through experiential workshops
• Engage with and develop your own understanding of the creative process
INTRODUCTORY DAYS -
ART THERAPY & PARTICIPATORY ARTS

COURSE CODE
ARTS9016

COURSE FEE
€100 (€80 concession)
All materials are provided, no artmaking experience necessary

ENQUIRIES
T: 021 433 5220
E: crawford.enquiries@mtu.ie

Location: 46 Grand Parade

The Introductory Days provide a taster opportunity to learn about and experience either the Art Therapy process or Participatory Arts Process.

Participants will explore the potential of art in different health or education contexts through an experiential workshop. This experience is grounded by some of the theory behind the practice of art therapy or participatory arts. Opportunity is provided to explore the role of art within health or learning through questions and discussion.

• **The Art Therapy Introductory Day** consists of an exploration of the theory and practice of Art Therapy, together with an opportunity to work experientially. It is intended as a way for individuals, new to Art Therapy, to gain an understanding and experience of the process. All materials are provided. Places are offered on first come first served basis.

• **The Participatory Arts Introductory Day** provides an opportunity to explore arts-based collaborative engagement. It is designed for those interested in incorporating the arts within formal/informal learning and community contexts to gain an understanding and experience of the process and its potential. The day is workshop based. All materials are provided. No previous art-making experience necessary.

To apply online, visit [http://crawford.mtu.ie](http://crawford.mtu.ie) and click on the courses tab
DEPARTMENT OF FINE ART & APPLIED ART

Courses

- MA in Art & Process (Level 9)
- Portfolio Preparation
- Summer Portfolio Preparation Course
- Evening Classes – see Page 199

Location

Sharman Crawford Street, Cork

HEAD OF DEPARTMENT
Trish Brennan

ENQUIRIES TO
E: crawford.enquiries@mtu.ie
T: 021 433 5220

All programmes offered are subject to demand and places may be limited. All online applicants will receive an email confirmation. Where appropriate, details about eligibility, programme orientation, and timetable arrangements will be sent to all applicants in advance of programme commencement.

All part-time courses at will run subject to sufficient student numbers. Where a course cannot proceed, applicants will be contacted and advised on alternative study options.
How to Apply
Online application opens in May for course commencing the following January. The MA in Art & Process operates a rolling closing date, the 31st October is the regular closing date after which offers are made to successful applicants. Late applications will continue to be accepted up until 30th December for course commencing in late January.

Admission Requirements
MA:AP welcomes applicants with diverse backgrounds. Those holding a Level 8 Honours Bachelor Degree in Fine Art or an associated discipline, with a minimum of an Honours 2.2 (or equivalent) are eligible to apply for the programme. Graduates from other subject areas are invited to apply provided they meet the entry requirements.

Applicants who hold a Level 8 award at pass level or a Level 7 award (or equivalent) may be considered on the basis of significant relevant experience.

In certain circumstances mature applicants with professional experience will be considered for eligibility through recognition of prior and experiential learning, policies for which are well established in MTU.

Duration and Delivery
Location 46 Grand Parade

12 months delivered full-time over 3 semesters, from January to December, and part-time over 2 calendar years.

Overview
The concept of process is understood in a variety of ways: as material exploration and the engagement with medium and technique; as theoretical investigation and systems of enquiry without resolved or object-based endpoints; as innovative models of art distribution, including the possibilities of working outside traditional sites of art production and reception. Process also refers to the progression each student achieves over the course of the MA, which involves the observation, critique, deconstruction, documentation, and rebuilding of individual practice.

MA:AP is an intensive and stimulating taught masters course. This research-intensive programme enables students to investigate, develop, and position their art practice in a rigorous learning environment. MA:AP offers innovative approaches to learning, individual studio spaces, access to college workshops and facilities, professional experience through collaborative projects, peer-to-peer exchange, and a bespoke visitor lecture series. Students engage in seminars, tutorials and lectures to strengthen their individual practice.

• Critique: The spring trimester opens the course with an intensive period of interaction and events, contextualising art practice within contemporary critical thinking through seminars, visiting lectures, and a study trip.
• Research: The summer trimester is defined by independent research. Having rehearsed research methodologies, this is a period to reflect on and consolidate practice.
• Presentation: The autumn/winter trimester is defined by intensive studio development with a high level of critical input, which builds towards an exhibition of work. This exhibition is then the object of further learning opportunities, through a final period of critical reflection, characterised by writing, documentation, and working with audience groups.

Award
Master of Arts in Art & Process (Level 9, 90 ECTS on the National Framework of Qualifications).
COURSE FEE

€480

ENQUIRIES

T: 021 433 5200
E: crawford.enquiries@mtu.ie

To apply online, visit http://crawford.mtu.ie

Duration & Delivery

Location: Sharman Crawford Street
Time: Saturday morning 10.00am - 1.00pm commencing early October 2022.

Admission Requirements

No prior qualifications necessary

Classes are held on Saturday mornings over fifteen weeks commencing in October.

This course is suitable for those seeking art college entry and participants can have their portfolio assessed for Crawford College of Art & Design undergraduate courses on completion. Participants will be tutored in composition, observational drawing, life drawing, painting, and developing a sketchbook. Specialist lecturers take the students through a number of set projects including creative disciplines such as: drawing, painting, printmaking, photography, 3D construction and life drawing. The students create a well-balanced and individual portfolio with their personal career path in mind.

Early application is advisable as places are limited.
SUMMER ART COURSE
LOCATION: SHARMAN CRAWFORD STREET

Summer Portfolio Preparation Course
16th – 25th June 10am – 4pm
Price: €320

This course is designed to assist individuals to prepare & develop a portfolio of creative work for entry into third level art and design colleges. This preparatory programme is suitable for both mature and Leaving Certificate Students and provides a platform for creative ideas and skills to produce a diverse body of work.

Specialist lecturers will guide students through a number of artistic media such as: drawing, painting, printmaking, photography and 3D construction. Emphasis will be placed on the development of core drawing and observational skills through visual journals, sketchbooks and building evolving ideas through making.

Due to current public health regulations, please check our website for the most up to date information, visit http://crawford.mtu.ie
MTU Crawford College of Art & Design offers an exciting range of evening classes, beginning in September and January, in the following subjects:

- Ceramics: Processes and Techniques (Level 6)
- Ceramics: Bringing Your Ideas to Life (Level 7)
- Ceramics: Decorating Surfaces (Level 7)
- Ceramics: The Potter’s Wheel (Level 7)
- Drawing and Painting Processes (An Introduction) (Level 6)
- Drawing and Painting - Developing Visual Language (Level 7)
- Life Drawing: Media and Approaches (Level 7)
- Life Drawing: Advanced (Level 8)
- Darkroom Photography: Mastering the Basics (Level 6)
- Darkroom Photography Now (Level 7)
- Digital Photography: Beginning Image Making (Level 6)
- Digital Photography and Storytelling (Level 7)
- Introduction to Digital Video Techniques (Level 6)
- Digital Video and Storytelling (Level 7)
- Textiles: Techniques and Materials (Level 6)
- Creating 2D and 3D Textile Art (Level 7)

All of these are based in our Sharman Crawford Street Campus. Visit http://crawford.mtu.ie for up-to-date information on evening classes beginning in September 2022 and details of how to apply.
Module Title: Ceramics (Introduction)
Tuesdays: 6.30pm - 9.00pm (Semester 1)

Admission Requirements
Students are not required to have any previous experience.

Overview
Lecturer: Luke Sisk

This course offers an introduction to ceramics and the ceramic facilities at the College. Students are introduced to different types of clay, their properties and uses, relevant terminology and functions. Students learn the techniques involved in the preparation of clay such as wedging and kneading along with procedures for forming, building and firing clay. Students learn how to build pots and sculptural work using pinching, coiling, slab building, mold work and extrusion. They also explore various decoration and glazing techniques to produce a series of finished pieces. Health and safety and environmental considerations as they apply to ceramics are also explored in detail i.e. use of appropriate equipment and tools, storage and disposal of materials. Employing a range of processes, students use clay as a material for creative exploration and development of ideas.

Students have an opportunity to submit their work for assessment (80% attendance is required to be eligible for assessment) should they wish to gain the MTU: Single Module Certification for this course.

Award
MTU: Single Module Certification, 5 ECTS credits at Level 6 on the National Framework of Qualifications.
Module title: Ceramics (Intermediate)
Tuesdays: 6.30pm - 9.00pm (Semester 2)

Admission Requirements
Students are not required to have any previous experience.

Overview
Lecturer: Luke Sisk
This course offers the student the opportunity to realise his/her ideas through the medium of clay. The student engages in the process of creative idea development and the production of selected pieces using handbuilding techniques. Students set their own project and develop their ideas using both their visual notebooks and practical handbuilding skills. Students are encouraged to engage with more self-generated projects that reflect their individual interests. The course explores the application of basic decoration using slips, underglazes and glazing. There will be a number of group analysis and discussion sessions to review progress throughout the year. The course explores the appropriate criteria and visual grammar for reading and interpreting ceramic artefacts and students are encouraged to apply these to their own work also.

Students have an opportunity to submit their work for assessment (80% attendance is required to be eligible for assessment) should they wish to gain the MTU: Single Module Certification for this course.

Award
MTU: Single Module Certification, 5 ECTS credits at Level 7 on the National Framework of Qualifications.
CERAMICS: DECORATING SURFACES

Module Title: Ceramics Surface Treatment
Wednesday: 6.30pm - 9.00pm (Semester 1)

Admission Requirements
Students are not required to have any previous experience.

Overview
Lecturer: Luke Sisk

This course familiarises the learner with surface treatment techniques and allows the learner to creatively develop and produce ideas with an emphasis on surface treatment and surface decoration. Throughout the course, students develop and experiment with various decoration and glazing techniques and processes most suited to their individual work. These include burnishing, scrafitto, plaster carving and lazertran. The course explores how different firing temperatures and processes impact on colouration and surface qualities.

Students have an opportunity to submit their work for assessment (80% attendance is required to be eligible for assessment) should they wish to gain the MTU: Single Module Certification for this course.

Award
MTU: Single Module Certification, 5 ECTS credits at Level 7 on the National Framework of Qualifications.
Module Title: Ceramics Throwing (Intermediate)  
Wednesday: 6.30pm - 9.00pm (Semester 2)

**Admission Requirements**  
Students are not required to have any previous experience.

**Overview**  
Lecturer: Luke Sisk

This course introduces students to the experience of throwing as a means of creating ceramic forms and as a means of expression of ideas. Using earthenware students learn how to produce ceramic forms on the wheel and explore and gain skills in the areas of clay preparation, throwing, turning and firing. Students gain a comprehensive understanding of the various stages of drying clay and learn how to monitor and control the drying process. Students work with the shapes in leather hard stage, add applications where appropriate and finish shapes.

Students have an opportunity to submit their work for assessment (80% attendance is required to be eligible for assessment) should they wish to gain the MTU: Single Module Certification for this course.

**Award**  
MTU: Single Module Certification, 5 ECTS credits at Level 7 on the National Framework of Qualifications.
Module Title: Drawing, Painting Introduction
Tuesdays and Thursdays 6.30pm – 9.00pm (Semester 1)
Applicants may choose which evening they prefer.

Admission Requirements
Students are not required to have any previous experience.

Overview
Lecturer: Eileen Healy

This course introduces the student to a range of drawing and painting techniques in portraiture and the full figure. The course begins with the essential practice of drawing and gradually leads to painting in acrylic or oil. Using a variety of mediums, students explore drawing and painting techniques with a life model as the subject. This course deals with improving visual concentration and students observe, perceive and express the visual characteristics of the subject. The course explores a wide range of experimental life drawing and painting processes as a means of creative investigation along with observation skills and form, line, tone, texture and composition. Students will be encouraged to explore a personal visual language through their chosen medium.

Students have an opportunity to submit their work for assessment (80% attendance is required to be eligible for assessment) should they wish to gain the MTU: Single Module Certification for this course.

Award
MTU: Single Module Certification, 5 ECTS credits at Level 6 on the National Framework of Qualifications.
Module Title: Drawing, Painting Intermediate
Tuesdays and Thursdays: 6.30pm – 9.00pm (Semester 2)
Applicants may choose which evening they prefer.

**Admission Requirements**
Students are not required to have any previous experience.

**Overview**
Lecturer: Eileen Healy

The module deals with the creative relationships between drawing and painting and how both are used within the context of studying the human figure. This course further advances visual concentration along with creative investigation. Students expand their ability to observe, perceive and express the visual characteristics of the subject. Through their chosen medium, students are encouraged to explore and develop a personal visual language (i.e. communication using visual elements). Students will produce a portfolio of completed studies of the human figure displaying their emerging individual style.

Students have an opportunity to submit their work for assessment (80% attendance is required to be eligible for assessment) should they wish to gain the MTU: Single Module Certification for this course.

**Award**
MTU: Single Module Certification, 5 ECTS credits at Level 7 on the National Framework of Qualifications.
LIFE DRAWING: MEDIA AND APPROACHES

Module Title: Life Drawing: Media and Approaches (Intermediate)
Wednesdays: 6.30pm - 9.00pm (Semester 1)

Admission Requirements
Students are not required to have any previous experience.

Overview
Lecturer: Holly Walsh

This course is suitable for a mix of beginners and for those who are more experienced with drawing. The course explores traditional and contemporary drawing. It aims to expand the students’ knowledge of drawing using the life model as subject along with other observational drawing exercises.

The course involves drawing with various media, including pencil, pastels, ink, and charcoal as well as basic techniques such as perspective, anatomy, proportion, tonal understanding and mark making. By a dual approach of improving one’s traditional and contemporary skills students can learn to create better likenesses as well as work towards their own processes. It also introduces the participant to visual research and to sketchbook practice. Life drawing is an opportunity to really connect with the world around you, and work with and respond to a live model, as well as take part in personalised as well as group feedback.

Students have an opportunity to submit their work for assessment (80% attendance is required to be eligible for assessment) should they wish to gain the MTU: Single Module Certification for this course. Some work outside of class-time is expected alongside classwork.

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

Course & Module Information, and to apply online, visit go.mtu.ie/CRACCXXF7

COURSE CODE
CR_ACCXXF_7
(LEVEL 7)
Module Title: Life Drawing (Advanced)
Wednesdays: 6.30pm - 9.00pm (Semester 2)

Admission Requirements
Students are not required to have any previous experience, however, experience is preferential.

Overview
Lecturer: Holly Walsh

This course is intended for artists and students who already have basic drawing skills and for those who wish to reconnect with their own studio practice. It is also suitable for anyone who is interested in transitioning from other art practices and professions.

The course will encourage participants to engage with the process of drawing and expand their drawing skills by experimenting with different drawing techniques and exploring various drawing media in a contemporary way. Concentrating on observational drawing, with a focus on the figure and life drawing, this course aims to encourage the development of the participant’s own visual language and drawing abilities, as well as challenging them to make improvements and experiments. Traditionally in European culture studying the figure was core to drawing education and it has been taught at the Crawford College for over 100 years.

Uniquely, it continues to be an integral part of the Drawing curriculum. Many life rooms at the turn of the century were “up cycled” into computer rooms but all of us who teach drawing at third level know-if a student wants to learn analytic observation skills: Life draw. Life drawing is an opportunity to really connect with the world around you, and work with and respond to a live model, as well as take part in personalised as well as group feedback.

Students have an opportunity to submit their work for assessment (80% attendance is required to be eligible for assessment) should they wish to gain the MTU: Single Module Certification for this course. Some work outside of class-time is expected alongside classwork.

Award
MTU: Single Module Certification, 5 ECTS credits at Level 8 on the National Framework of Qualifications.
Module Title: Darkroom Photography: Introduction
Wednesday: 6.30pm - 9.00pm (Semester 1)

Admission Requirements
Students are not required to have any previous experience.

Overview
Lecturer: Darran McCrann

This course offers a comprehensive introduction to the art and techniques of traditional black and white film photography and to the darkroom techniques involved in film processing and making photographic prints. It is suitable for both beginners and for those with experience of using an analogue camera and darkroom equipment. The course is grounded in practical instruction to enable the student to make informed artistic choices when creating photographic images. Students are introduced to the single-lens reflex (SLR) analogue camera and lenses and explore how the camera operates. Students are expected to develop effective and appropriate work practices through practical experience in the darkroom. The course also explores the principles of photography within its contemporary and historical contexts. Students will be expected to give time to taking photographs outside of class hours for group analysis and discussion within class time.

Please Note: There will be a local field trip during the early stage of the course for approximately the duration of a class, two and a half hours. Details will be confirmed during the first week of the course.

Students have an opportunity to submit their work for assessment (80% attendance is required to be eligible for assessment) should they wish to gain the MTU: Single Module Certification for this course.

Award
MTU: Single Module Certification, 5 ECTS credits at Level 6 on the National Framework of Qualifications.
Module Title: Advanced Darkroom Photography
Wednesday: 6.30pm - 9.00pm (Semester 2)

Admission Requirements
Students are not required to have any previous experience.

Overview
Lecturer: Darran Mc Crann

This course is aimed at students who wish to advance their technical and creative skills through traditional black and white film photography and further develop darkroom techniques involved in film processing and making photographic prints. Students are required to approach their analogue photography practice in a creative, explorative and analytical manner. Students explore and develop their ideas through a chosen project and are required to make informed artistic choices when using analogue cameras and studio lighting, developing film and making prints in the darkroom. The module explores the appropriate criteria, metalanguage and visual grammar for reading and interpreting photographic images. The course also explores the principles of photography within its contemporary and historical contexts. Students will be expected to give time to taking photographs outside of class hours for group analysis and discussion within class time.

Students have an opportunity to submit their work for assessment (80% attendance is required to be eligible for assessment) should they wish to gain the MTU: Single Module Certification for this course.

Award
MTU: Single Module Certification, 5 ECTS credits at Level 7 on the National Framework of Qualifications.
Module Title: Photography and Image Capture
Tuesday: 6.30pm - 9.00pm (Semester 1)

Admission Requirements
Students are not required to have any previous experience.

Overview
Lecturer: Pádraig Spillane

This is an introductory course to fine art digital photography. Students explore the principles of photography within its contemporary contexts as well as its associated technologies. The course starts with an introduction to operating a DSLR camera and students learn to use image processing software. Presentations are given by tutors on the various fields of photography including; landscape, portraiture, abstraction, still life, contemporary and historical image-makers. Students will make images in response to set briefs outside of class time for group analysis and discussion within class time.

Students have an opportunity to submit their work for assessment (80% attendance is required to be eligible for assessment) should they wish to gain the MTU: Single Module Certification for this course.

Award
MTU: Single Module Certification, 5 ECTS credits at Level 6 on the National Framework of Qualifications.
Module title: Photographic Narrative
Tuesday: 6.30pm - 9.00pm (Semester 2)

Admission Requirements
Students are not required to have any previous experience.

Overview
Lecturer: Pádraig Spillane

This course explores the concepts, practices and resources used in fine art digital photography with particular reference to narrative. It develops the student’s knowledge and practice of visual storytelling through photography. Emphasis is on project work where students develop a topic or theme and apply a narrative approach to create a sequential series of photographic images.

Students are expected to develop their projects outside of class-time for group analysis and discussion within class time.

Students have an opportunity to submit their work for assessment (80% attendance is required to be eligible for assessment) should they wish to gain the MTU: Single Module Certification for this course.

Award
MTU: Single Module Certification, 5 ECTS credits at Level 7 on the National Framework of Qualifications.
Module title: The Moving Image
Tuesday 6.30pm - 9.00pm (Semester 1)

Admission Requirements
Students are not required to have any previous experience.

Overview
Lecturer: Colette Lewis

This course is an introduction to the art of digital video production across a range of moving image practices. The course is designed to facilitate a hands-on approach in mastering the basic skills and techniques required to proficiently shoot, edit, and share video content. Students are introduced to the use of camcorders and DSLR cameras for shooting video, smartphone apps and portable audio recorders for recording sound, and video editing techniques and software. Principles of the moving image language will be explored through storyboarding and camerawork. It is expected that students will work outside of class hours to create video content to develop a short video project for group discussion and analysis.

Students are required to have their own digital camera for this course.

Students have an opportunity to submit their work for assessment (80% attendance is required to be eligible for assessment) should they wish to gain the MTU: Single Module Certification for this course.

Award
MTU: Single Module Certification, 5 ECTS credits at Level 6 on the National Framework of Qualifications.
Module title: Video and Compositing
Tuesday: 6.30pm - 9.00pm (Semester 2)

Admission Requirements
Students are not required to have any previous experience.

Overview
Lecturer: Colette Lewis

This course offers students the opportunity to advance their skills in the creative and technical application of digital video production processes. It focuses on developing the students’ knowledge and practice of visual literacy principles in storytelling approaches used in documentary, fiction, and artists’ moving image practices. Students will research and develop their own video project and learn to critically reflect and evaluate their own work within the dynamic and expanded field of moving image culture. It is expected that students will work outside of class hours to create video content to develop a video project for group discussion and analysis.

Students are required to have their own digital camera for this course.

Students have an opportunity to submit their work for assessment (80% attendance is required to be eligible for assessment) should they wish to gain the MTU: Single Module Certification for this course.

Award
MTU: Single Module Certification, 5 ECTS credits at Level 7 on the National Framework of Qualifications.
Module Title: Textiles (An Introduction)
Tuesday: 6.30pm - 9.00pm (Semester 1)

Admission Requirements
Students are not required to have any previous experience.

Overview
Lecturer: Caroline Smith

This course introduces students to a range of materials, techniques and equipment involved in textiles art making. Students study the art, techniques and processes involved in fibre manipulation. The fibres used are wool, flax, silk, and soya bean fibre amongst others. Students learn how to manipulate the fibre to make various types of felt including nuno felting (felting on fabric), needle felting and 3d manipulation. The course also introduces students to fundamental stitching techniques (both manual and machine stitching), basketry, fibre sculpture, vessels, wire and reed 3D construction techniques. Employing a range of textile processes, the student creatively explores and develops their ideas. Students also learn the art of papermaking with paper and silk fibres.

Students have an opportunity to submit their work for assessment (80% attendance is required to be eligible for assessment) should they wish to gain the MTU: Single Module Certification for this course.

Award
MTU: Single Module Certification, 5 ECTS credits at Level 6 on the National Framework of Qualifications.
Module Title: detailed information Textiles: Process/Research
Tuesday: 6.30pm - 9.00pm (Semester 2)

Admission Requirements
Students are not required to have any previous experience.

Overview
Lecturer: Caroline Smith

This course explores the creative and expressive qualities of textiles materials and methods within 2D & 3D applications in art practices. Students utilise visual source material imaginatively to direct textile experimentation. The course explores the formal qualities of line, shape, colour, texture, pattern, as an expressive language through a range of textile processes. Students learn how to use dyes and paints and study various forms of printing including monoprinting, transfer printing, jelly printing and silk screen printing. Students also learn about dye techniques batik and shibori. The course emphasises machine stitching and hand stitching used to embellish the textile artwork. Construction techniques, including fabric construction, cast paper making, 3D felt making, heat forming with synthetics, weaving, basketry, off-loom construction, knitting, crochet, and lace are also explored.

Students have an opportunity to submit their work for assessment (80% attendance is required to be eligible for assessment) should they wish to gain the MTU: Single Module Certification for this course.

Award
MTU: Single Module Certification, 5 ECTS credits at Level 7 on the National Framework of Qualifications.
DEPARTMENT OF MEDIA COMMUNICATIONS

Courses

- Master of Arts in Journalism and Digital Content Creation (Level 9)
- Master of Arts in Public Relations with New Media (Level 9)
- Master of Arts in E-Learning Design and Development (Level 9)
- Certificate in Digital Media Design and Development (Level 8)
- Certificate in TV Production (Level 8)

Location

MTU Bishopstown Campus, Cork

HEAD OF DEPARTMENT
Valerie Renehan
E: Valerie.Renehan@mtu.ie

DEPARTMENT SECRETARY
Veronique O’Sullivan
T: 021 433 5810
E: veronique.osullivan@mtu.ie

If you have any queries, please contact the Department Secretary, details above.

All programmes offered are subject to demand and places may be limited. All online applicants will receive an email confirmation. Details about eligibility, programme orientation and timetable arrangements will be sent to all applicants in advance of programme commencement.

Please Note: all programmes run by the Department of Media Communications take place at MTU Bishopstown Campus.
MASTER OF ARTS IN JOURNALISM AND DIGITAL CONTENT CREATION

COURSE CODE
CR_HJWNM_9 (LEVEL 9)

COURSE FEE
Part-time: €4,550

ENQUIRIES
Frank O’Donovan
T: 021 432 6117
E: frank.odonovan@mtu.ie

Course & Module Information, and to apply online, visit go.mtu.ie/CRHJWNM9

Duration
This is a full-time programme which can be studied part-time, over two years.

Admission Requirements
Entry requirements for this course will be in accordance with standard Institute admissions procedures. Entrants will be expected to hold minimum of a 2.2 honours degree.

Admission to the course will be on the basis of interview. Recognition of Prior Learning will be applicable for candidates entering from the workplace or applying for admission from other institutes.

Overview
This innovative MA programme produces graduates who can demonstrate essential skills in the fast-moving environment that is modern Journalism and Digital Content Creation. Graduates will acquire the knowledge, skills and competencies that will equip them to work as professionals in the communications industry with a solid grounding in the tools and practices of journalism and digital content creation.

The programme is a well-rounded, professional programme that prepares graduates for entry-level positions in the media/communications industry. It stresses a balance of academic and practical modules in print, broadcast, and digital content creation.

The programme has been modified to include a focus on marketing, advertising and general communications, and students will complete a mentorship programme in semester 3. Each student will work with a mentor who is highly experienced in the communications industry. This can also involve short placements in media/communications organisations.

This will enhance the skill set of students and open the door to a wider range of jobs and careers for them. The lecturing staff also plans to enhance the programme even further by adding data analytics and focusing more on live content creation, which will include desktop publishing skills and involve the department’s international student documentary film festival, ‘Story?’

There is a strong connection with industry, even as they learn, our students are producing work that is published in the national media. We’re equipping our students with all the skills that are requirements for today’s digital journalists and content creators: shooting and editing video, creating audio and podcasts, using social media, developing an online presence, and strong connections with industry.

Stage 1/Semester 1
Audio Broadcasting
Writing for Media
Media History & Society
Research Methods and Practice
Multimedia Production
New Media Workplace

Stage 1/Semester 2
Visual Broadcasting
Features and Web Writing
Media and Communications Law
Cybercultures
New Media Production
Elective
Studio Technology
Free Choice Module
Creative Thinking and Design
Event and Project Management

Stage 1/Semester 3
Journalism MA Project

Award
Master of Arts in Journalism and Digital Content Creation (Level 9 on the National Framework of Qualifications).

Please note this course takes place at MTU Bishopstown Campus.

http://crawford.mtu.ie
MASTER OF ARTS IN PUBLIC RELATIONS WITH NEW MEDIA

Duration
This is a full-time programme which can be studied part-time. Part-time students take modules on a phased basis and achieve the programme qualification over a number of academic years.

Admission Requirements
Entrants will be expected to hold minimum of a 2.2 honours degree. Admission to the course will be on the basis of interview. Recognition of Prior Learning (RPL) will be applicable for candidates entering from the workplace or applying for admission from other institutes.

Overview
This innovative MA programme offers the opportunity to gain a comprehensive understanding of public relations as a form of communication and pays particular attention to the growing importance of digital and interactive media on the practice of public relations and professional communications.

By developing student’s research, planning, managerial and multimedia skills the course aims to produce graduates who can display leadership and show the capacity for innovation within the dynamic and fast evolving professional communications industry. Course content focuses strongly on PR tools and techniques, particularly within the growing new media environment, and on the increasing globalisation and convergence of the media industries.

Through liaison with PR professionals and by working on ‘live’ industry projects, the course aims to equip graduates with the knowledge, skills and competencies required to effectively function as a public relations professional in an era of high-speed and interactive digital communications.

Mentorship Programme
Students will participate in the Public Relations Mentorship Programme which aims to prepare students for a career in the communications industry through a series of presentations and one-to-one contact with industry professionals. Students will prepare a career development plan, liaise with the MTU Careers Service, participate in professional networking, both on and offline, and develop important career oriented skillsets aimed at enhancing employability and career prospects.

Module Information
The elective modules afford the learner the opportunity to broaden his/her skills set in other disciplines or to deepen his/her skills set in the wider professional communications environment. The elective modules offered in any given year are delivered subject to demand and resource availability.

Stage 1/Semester 1
PR Theory & Application
Ethics & Social Responsibility
Multimedia Production
Media Writing
Research Methods and Practice
Elective
Brand Management
Direct Marketing Environment
Strategy Analysis

Stage 1/Semester 2
PR and New Media
New Media Production
Cybercultures
Business Communication & Online Writing
Public Relations Campaigns
Elective
Media Law, Ethics & Professional Practice
Event & Project Management
The Business Environment
Enterprise and Innovation

Stage 2/Semester 1
Public Relations MA Project

Award
Master of Arts in Public Relations with New Media (Level 9 on the National Framework of Qualifications).

Please note this course takes place at MTU Bishopstown Campus.
Overview
E-learning as a field of study, as an approach to teaching and learning and as an industry, has evolved considerably over the last decade and a half. Governments and policy makers have made e-learning a central imperative of their political educational rhetoric and provide substantial funding initiatives to support its development and mainstreaming. Related policies, practices and requirements with regard to lifelong learning, and continuous education combine with the benefits and wider acceptance of e-learning as a delivery and support tool to make e-learning one of the most rapidly growing areas in both the worldwide education and training sector and the digital media sector today.

Programme Aim and Orientation
In the above context the programme seeks to produce developers of cutting edge, educationally effective e-learning solutions. Our graduates, subsequently, will go on to work as designers and developers either directly as part of the burgeoning e-learning sector or in support of in-house e-learning and learning technology departments which are becoming mainstream in a number of other areas and industries. The programme is a Master of Arts and, as such, reflects a special orientation towards, variously, creativity, culture and design, rather than technology per se.

Admission Requirements
Direct entrants to this 60 credit award would typically require a Level 8 qualification in fields such as multimedia, digital media, media applications or a relevant area of design. Applicants without such qualifications will also be considered if they can show an equivalent level of learning gained through practice or any other means (see MTU’s policy for Recognition of Prior Learning here.

Level 8 graduates with qualifications in other fields are invited to undertake an initial 30 credit Certificate in Digital Media Design and Development. Please see go.mtu.ie/CRHDMTE8 for more information.

In all cases, final admission to the course will be on the basis of interview.

Delivery
The programme is delivered entirely online using many of the same e-learning tools and technologies which also form the course curriculum. This means the programme may appeal to those who, for whatever reasons, cannot commit to attending regular face-to face lectures and labs or who simply find the flexibility and convenience of studying at a distance attractive.

Semester 1
E-Learning Instructional Design
Education Research & Proposal
New Media Workplace
Narrative & Games for Learning
E-Learning Authoring

Semester 2
E-learning Thesis
E-learning Project

Award
Master of Arts in E-learning Design and Development (Level 9 on the National Framework of Qualifications).
CERTIFICATE IN DIGITAL MEDIA DESIGN AND DEVELOPMENT

COURSE CODE
CR_HDMTE_8
(LEVEL 8)

COURSE FEE
€1,800 (€300 per module)

ENQUIRIES
Dr Jessica Shine
T: 021 433 5933
E: jessica.shine@mtu.ie

Course & Module Information, and to apply online, visit go.mtu.ie/CRHDMTE8

Aim
The programme will provide students with a broad and practical introduction to the world of digital media design and development. Graduates will leave equipped with fundamental skills and knowledge with regard to a wide range of modern digital media technologies and design solutions and will have a systematic understanding of the design and development process and of related job roles and industries.

As such, this two semester online programme may appeal to those lacking a background in the above but with an interest in either:

a) enriching their own work practices with key digital media skills and a deeper understanding of this field.

b) taking the first steps in beginning an actual career in the broad digital media industry. In this latter context the award is accepted as a bridging route for applicants who are interested in undertaking the Department’s 60 credit Master of Arts in E-learning Design & Development but who do not possess the pre-requisite digital media experience or qualifications.

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.

Delivery
The programme is delivered entirely online using many of the same tools and technologies which also form the course curriculum. This means the programme may appeal to those who, for whatever reasons, cannot commit to attending regular face-to-face lectures and labs or who simply find the flexibility and convenience of studying at a distance attractive.

 Admission Requirements
Candidates are required to have already completed a Level 8 degree or equivalent. Basic computer, web and keyboard skills are essential. Familiarity with social media and media sharing platforms and services are desirable also, as well as an interest at the very least in video production, graphic design, and/or interactive media.

If there are high levels of interest, admission to the course may be on the basis of interview. Recognition of Prior Learning (RPL) will be applicable for candidates with existing skills or knowledge in any of the programme modules.

Content
Semester 1
MMED6011 Moving Image & Sound
MMED8006 Creative Strategies
Elective
MMED8007 Digital Culture
MMED6025 Interpreting Sound & Music

Semester 2
MMED8025 Multimedia Production
MMED7004 E-Learning
COMP6001 Web Design Basics

Award
Certificate in Digital Media Design and Development (Level 8 on the National Framework of Qualifications).

Further Studies
MA in E-learning Design & Development (Level 9 on the National Framework of Qualifications).
Aim
The Certificate in Television Production is aimed at those wanting to launch a career in TV programme making, as well as those already in the industry wanting to upskill. It combines study of the media market, both domestic and international, with specialised training in craft and production. Lectures will introduce students to the current industry environment with in-depth knowledge of media ownership, funding models and programme formats. Students will develop the professional skills required to launch a career within the television production sector.

What will you be doing?
TV Production, audio visual production, researching, directing, camera operating, sound recording and video editing, live programming and documentary making.

Why do this course?
• All participants will get work experience in RTE and TVM.
• Students will be introduced to experienced and senior speakers working in TV production both in Ireland and internationally.
• Annual seminar organised by students on current and emerging trends within programme production will provide further networking opportunities.
• The programme is delivered in a blended format, combining both online delivery and face-to-face placement activities. Blended learning will offer you the opportunity to study part of the programme within your own schedule and at your own location.

Recognition of Prior Learning (RPL)/advanced entry will be applicable for candidates with existing prior experiential learning.

Shortlisted candidates will be invited for interview.

Duration & Content
1 Year part-time

Semester 1
TV Production Careers
TV Industry Environment

Semester 2
TV Industry Placement*

*The TV Industry Placement module provides students with valuable experience of both initial on site industry practice as well as specialised training. Participants will have an opportunity to work in a wide range of television production areas including live studio programming, outside broadcasting, research and concept development, camera and sound. Industry partners will collaborate in identifying appropriate skillsets that students can develop and in which they will receive hands-on experience.

Award
Certificate in TV Production (Level 8 on the National Framework of Qualifications).