



Title:	Engineering Work Placement APPROVED
Long Title:	Engineering Work Placement
Module Code:	INTR7032
Duration:	1 Semester
Credits:	15
NFQ Level:	Intermediate
Field of Study:	Interdisciplinary Engineering
Valid From:	Semester 1 - 2020/21 (September 2020)
Module Delivered in	4 programme(s)
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Module Description:	The aim of this work-placement module is to introduce the learner to the types of work practices, procedures and environments that they are likely to encounter as professional engineers. The module will provide learners with structured opportunities to participate in the practical application of theoretical knowledge gained during the programme as well as develop key graduate competencies. In this module, learners will undertake a relevant work-placement of no less than 7 weeks between April and September of third year. The placement is supported by a member of lecturing staff in CIT together with a workplace mentor.
Learning Outcomes	
<i>On successful completion of this module the learner will be able to:</i>	
LO1	Apply technical knowledge to analyse and solve complex, real-world engineering problems.
LO2	Analyse the workplace enterprise, with due regard to its organisation and how value is added to the enterprise and its customers
LO3	Discuss the ethical standards relevant to the workplace including Health, Safety and Environmental management policy and the enterprises responsibilities towards the community and the environment.
LO4	Explain how projects are managed and how work is planned and organised within the placement company
LO5	Demonstrate initiative and interpersonal skills and contribute effectively to a workplace team.
LO6	Communicate in a professional manner within the workplace developing a range of written/oral skills
Pre-requisite learning	
Module Recommendations	
<i>This is prior learning (or a practical skill) that is strongly recommended before enrolment in this module. You may enrol in this module if you have not acquired the recommended learning but you will have considerable difficulty in passing (i.e. achieving the learning outcomes of) the module. While the prior learning is expressed as named MTU module(s) it also allows for learning (in another module or modules) which is equivalent to the learning specified in the named module(s).</i>	
Incompatible Modules	
<i>These are modules which have learning outcomes that are too similar to the learning outcomes of this module. You may not earn additional credit for the same learning and therefore you may not enrol in this module if you have successfully completed any modules in the incompatible list.</i>	
No incompatible modules listed	
Co-requisite Modules	
No Co-requisite modules listed	

Requirements

This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed. You may not enrol on this module if you have not acquired the learning specified in this section.

No requirements listed

Module Content & Assessment

Indicative Content

Technical Knowledge

Revise technical knowledge and skills that as appropriate for the specific-work placement setting. Define work-related technical problems and apply knowledge and skills to analyse and solve such problems.

Business Enterprise

Business idea, business model, customers, mission statement and strategy, management and organisational structure, management style, the role of entrepreneurship within the enterprise, the project life cycle. Confidentiality, Conflict of Interest, Engineers Ireland Code of Ethics and the individuals responsibility towards their employer.

People and the Environment

Health and safety policy and practice within the workplace setting. Specific environmental policies and requirements of the workplace. Privacy and data protection requirements. Equality and diversity policies and practices. Enterprises role and responsibilities towards the local community. Electrical & Electronic waste, waste export and its impact on people and the environment. Life-cycle of electrical/electronic products, "right-to-repair" v's "make-use-discard" model, sustainable development and eco-design. Social impact of technology.

Communication

Preparing your CV, interviewing skills, business English, writing emails, memos and formal reports, communicating with colleagues, supervisors and clients, business meetings, minutes of meetings, dealing with difficulties in the workplace environment

Effective teamwork

types of teams and roles and functions of teams within the specific workplace setting. Typical roles and responsibilities within teams. Team leadership styles experienced. Group stages, group dynamics, communicating in small groups, dealing with disruptive behaviours

Assessment Breakdown

	%
Course Work	100.00%

Course Work

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Reflective Journal	Learners are to maintain a learning log that documents, analyses and catalogs learning gained during the work-placement period against the module learning outcomes. This is to be periodically reviewed by both the work-place mentor and academic supervisor to verify achievement of learning outcomes and agree targets for the future.	1,2,3,4,5,6	50.0	Every Second Week
Oral Examination/Interview	An oral interview with academic supervisory panel to explore learning as documented in the learning log and achievement of learning outcomes	1,2,3,4,5,6	20.0	Sem End
Performance Evaluation	Performance evaluation of the work placement candidate by the work placement mentor/supervisor	1,2,3,4,5,6	30.0	Sem End

No End of Module Formal Examination

Reassessment Requirement

Coursework Only

This module is reassessed solely on the basis of re-submitted coursework. There is no repeat written examination.

The institute reserves the right to alter the nature and timings of assessment

Module Workload

Workload: Full Time				
<i>Workload Type</i>	<i>Workload Description</i>	<i>Hours</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>
Lecturer-Supervised Learning (Contact)	Supervise and mentor learner in work-placement setting. Provide feedback on assessment materials.	0.5	Every Week	0.50
Independent & Directed Learning (Non-contact)	Perform work placement duties and responsibilities as required. Fulfill assessment requirements.	20.5	Every Week	20.50
Total Hours				21.00
Total Weekly Learner Workload				21.00
Total Weekly Contact Hours				0.50

Workload: Part Time				
<i>Workload Type</i>	<i>Workload Description</i>	<i>Hours</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>
Lecturer-Supervised Learning (Contact)	Supervise and mentor learner in work-placement setting. Provide feedback on assessment materials.	0.5	Every Week	0.50
Independent & Directed Learning (Non-contact)	Perform work placement duties and responsibilities as required. Fulfill assessment requirements.	20.5	Every Week	20.50
Total Hours				21.00
Total Weekly Learner Workload				21.00
Total Weekly Contact Hours				0.50

Module Resources

Recommended Book Resources

- **Rook 2015, *Work experience, Placements and Internships*, 1st Ed., Palgrave [ISBN: 9781137462015]**

Supplementary Book Resources

- **David Ingre and Robert Basil 2016, *Engineering Communication: A Practical Guide to Workplace Communications for Engineers*, 2nd Ed., Cengage Learning [ISBN: 978-130563510]**
- **Gren Gale 2015, *Project Management for SMEs*, 2nd Ed., Zannac Books [ISBN: 978-099280232]**
- **Scott Weighart 2013, *Find Your First Professional Job: A Guide for Co-ops, Interns and Full-Time Job Seekers*, 4th Ed., Mosaic Eye Publishing US [ISBN: 978-096212649]**
- **Brian W. Fitzpatrick and Ben Collins-Sussman 2015, *Debugging Teams: Better Productivity through Collaboration*, O'Reilly Media [ISBN: 978-149193205]**

This module does not have any article/paper resources

This module does not have any other resources

Module Delivered in

Programme Code	Programme	Semester	Delivery
CR_EEPSY_8	<u>Bachelor of Engineering (Honours) in Electrical Engineering</u>	6	Mandatory
CR_ESMPR_8	<u>Bachelor of Engineering (Honours) in Smart Product Engineering</u>	6	Mandatory
CR_EELEC_7	<u>Bachelor of Engineering in Electrical Engineering</u>	6	Mandatory
CR_EELXE_7	<u>Bachelor of Engineering in Electronic Engineering</u>	6	Mandatory