

Title:	Electrical Installation Project	APPROVED
Long Title:	Electrical Installation Project	
Module Code:	ELEC7026	
Credits:	5	
NFQ Level:	Intermediate	
Field of Study:	Electrical Engineering	
Valid From:	Semester 1 - 2015/16 (September 2015)	
Module Delivered in	1 programme(s)	
Module Coordinator:	JOSEPH CONNELL	
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Module Description:	This module develops the skills required to research, develop, manage and design a solution for an electrical installation project. It develops the student's ability to search for information, communicate with peers/supervisor, develop a solution which meets the required technical, environmental, ethical and safety standards and prepare for a career in an engineering environment.	
Learning Outcomes		
On successful completion of this module the learner will be able to:		
LO1	Interpret technical reports and memos in the development of a proposal for an Electrical Services Installation specification.	
LO2	Exercise a structured approach to planning and organising an Electrical Services Installation project proposal with due regard for ethical, environmental and safety considerations.	
LO3	Specify electrical distribution equipment, lighting, metering, data and voice networks and identify possible renewable energy sources	
LO4	Use appropriate design tools and techniques to analyse, revise and test the project solution	
LO5	Maintain a logbook during project development and communicate project plans and project outputs to peers and engineering staff using standard aids	
Pre-requisite learning		
Module Recommendations		
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 CIT module(s) it also allows for learning (in another module or modules) which is equivalent to the learning specified in the named module(s).		
9749	ELEC6017	Electrical Planning
Incompatible Modules		
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.		
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		
Co-requisites		

No Co Requisites listed

Module Content & Assessment

Indicative Content

Electrical Installation Project

Project selection, i.e. building type and load, preliminary work on CAD layout, lighting, life safety systems, rooms/route/risers, LV distribution, metering, PF correction, cabling, BoQ, renewables, load analysis. Information search, minutes of meetings with supervisor, production of plan, revision of plan as required, application of programme packages as required.

Management

Application of project management processes, e.g. creating project plans, effective meetings, work break-down structure, deliverables, estimating techniques and costs, H&S in construction environments

Skills

Effective information searches using the internet, maintaining logbooks, report writing, plagiarism detection software, effective presentations, managing time

Assessment Breakdown

%

Course Work

100.00%

Course Work

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Other	Project management performance (project plan, minutes of meetings, independent work) and ongoing evaluation of progress	1,2,3,4,5	30.0	Every Second Week
Presentation	Formal presentation of project plan and solution to engineering staff	3,4,5	20.0	Sem End
Written Report	A written report summarising the project implementation. The log book is to be included as an appendix.	1,2,3,4,5	50.0	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>
Lab	Practical Project related demonstrations and exercises	2.0	Every Week	2.00
Lecture	Electrical Installation Theory	2.0	Every Week	2.00
Independent & Directed Learning (Non-contact)	Further study of class notes and recommended resources	2.67	Every Week	2.67
Lecturer-Supervised Learning (Contact)	Individual Mentoring by project supervisor	0.33	Every Week	0.33
Total Hours				7.00
Total Weekly Learner Workload				7.00
Total Weekly Contact Hours				4.33

This module has no Part Time workload.

Module Resources
<i>Recommended Book Resources</i>
<ul style="list-style-type: none"> • Electro Technical Council of Ireland 2008, <i>National Rules for Electrical Installations, ET101</i>, fourth Ed., Electro Technical Council of Ireland Dublin, Eire • The Society of Light and Lighting 2012, <i>Code for Lighting</i> [ISBN: 978-1-906846-21-3] • Geoffrey Stokes 2003, <i>Handbook of Electrical Installation Practice</i>, 4th Ed., Blackwell Science UK [ISBN: 9780632060023]
<i>Supplementary Book Resources</i>
<ul style="list-style-type: none"> • David V Chadderton 2013, <i>Building Services Engineering</i>, sixth Ed., Routledge U.K. [ISBN: 978-0-415-69931-0] • CIBSE 2008, <i>Guide K: Electricity in Buildings</i>, Energy Institute UK [ISBN: 9781903287262]
<i>This module does not have any article/paper resources</i>
<i>Other Resources</i>
<ul style="list-style-type: none"> • Website: Cooper Lighting and Safety (UK) <i>Lighting</i>, www.cooper-safety.com • website: Schneider Electric <i>Electrical Equipment</i>, www.schneider-electric.co.uk

Module Delivered in			
Programme Code	Programme	Semester	Delivery
CR_EELEC_7	Bachelor of Engineering in Electrical Engineering	6	Mandatory