

Module Title:	Industrial Studies
Language of Instruction:	English
Credits:	5
NFQ Level:	7
Module Delivered In	No Programmes
Teaching & Learning Strategies:	Teaching will be conducted using lectures, tutorials and group debates/discussions. At various stages of the module students will be requested to research certain topics (given exact research criteria). These topics will form the basis of discussion in a tutorial session. Visiting lecturers will be invited to present lectures on various aspects of the aviation industry in Ireland.
Module Aim:	To introduce the students to the industrial environment with particular reference to the aviation industry, and to the role and responsibilities of technologists.
Learning Outcomes	
<i>On successful completion of this module the learner should be able to:</i>	
LO1	Demonstrate an in depth knowledge of the various sectors of the Irish and European aviation industry and common industry practices
LO2	Outline and assess the regulatory and standards organisations within the Irish and European aviation industry and the relevant regulations and standards
LO3	Identify common careers and career paths within the Irish and European aviation industry
LO4	Evaluate the broader context in which aeronautical engineering operates and critique the responsibilities of the engineering profession towards the social and natural environments
LO5	Work effectively as an individual and in a team and communicate effectively through the preparation and delivery of reports and presentations
Pre-requisite learning	
Module Recommendations <i>This is prior learning (or a practical skill) that is recommended before enrolment in this module.</i>	
No recommendations listed	
Incompatible Modules <i>These are modules which have learning outcomes that are too similar to the learning outcomes of this module.</i>	
No incompatible modules listed	
Co-requisite Modules	
No Co-requisite modules listed	
Requirements <i>This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.</i>	
No requirements listed	

Module Content & Assessment

Indicative Content

The Aviation Industry

The historical development of the industry; the current trends within that aviation industry, particularly within an Irish context; the various sectors within the aviation industry and their characteristics; the regulatory framework (EASA Module 10-1) e.g.: IAA, EASA, ETSO, ISO, etc., and the relevant standards

Role of the Aviation Technologist

Maintenance planning; (EASA Module 7-20) PERT Charts, GANT Charts, NPV Stores procedures (EASA Module 7-20) Maintenance Inspection/Quality Control/Quality Assurance (EASA Module 7-20) Statistical Process Control, Failure rates, MTBF, Bath Tub Curve, Availability, FMEA Additional maintenance procedures; (EASA Module 7-20) Lean Maintenance, responsibilities of Part M / 145 post holders The role of aviation technologist in the aircraft leasing industry Maintenance Reserve Calculations Airline Economics - Review and Calculation of Metrics

Personal Development

Keeping up to date, currency (EASA Module 9-7) Personal goals and sources of learning to achieve those goals; Professional institutions relevant to the aviation industry and the criteria for membership; Social psychology (EASA Module 9-3) Engineering Ethics Dissemination of Information (EASA Module 9-7) Writing reports and referencing the research using the Harvard Referencing Style. Presenting Entrepreneurship Interview skills

Assessment Breakdown	%
Continuous Assessment	50.00%
End of Module Formal Examination	50.00%

Continuous Assessment

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Presentation	Each student will be required to research three topics, present the results of the research in written form and make an oral presentation to the class.	1,2,3,4,5	50.00	n/a

No Project

No Practical

End of Module Formal Examination

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Formal Exam	Each student will sit a formal written exam at the end of the module for which 50% of the marks will be awarded.	1,2,3,4	50.00	End-of-Semester

SETU Carlow Campus reserves the right to alter the nature and timings of assessment

Module Workload

Workload: Full Time		
<i>Workload Type</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>
Lecture	Every Week	1.00
Total Hours		1.00

