

Subject Specification Form (SSF)

Engineering

For the submission of programmes for review and professional accreditation by the Teaching Council (concurrent post-primary programmes only)

A Subject Specification Form must be submitted for each post-primary curricular subject included in the accreditation application.

Engineering

In order to meet the registration requirements set down in the Teaching Council [Registration]
Regulations in respect of the curricular subject of Engineering, **all** of the following criteria must be met:

- (a) Engineering must be studied in the degree up to and including third-year level or higher (or modular equivalent).
 - (b) The qualifying degree must be equivalent to at least Level 8 on the National Framework of Qualifications (NFQ) and with a minimum pass result in all examinations pertinent to the subject of Engineering.
 - (c) The qualifying degree must carry at least 180 ECTS (European Credit Transfer System) credits (or equivalent) with the specific study of Engineering comprising at least 60 ECTS credits (or equivalent).
- The study of Engineering during the qualification must show that the holder has acquired sufficient knowledge, skills and understanding to teach the Engineering syllabus/specification to the highest level in post-primary education (see www.curriculumonline.ie).

To meet this requirement the degree must include the study of all of the following:

- a) Health & Safety1
- b) Product Design and Realisation²
- c) Materials Technology and Processing³
- d) Power, Energy and Control⁴
- e) Information and Communications Technology (as applicable to Engineering)
- f) Structural & Mechanical Systems.

¹ This must include the development of knowledge and skills in relation to identification of hazards, assessment of risk and the safe management of a classroom/work environment.

² This must include engagement with the design and realisation of artefacts to include the integration of mixed technologies, and the use of associated graphic communication techniques and Computer Aided Design.

This must include the development of skills and best practice in the safe processing of a variety of materials. Particular focus should be placed on material properties, performance, and processing requirements. The study of Computer-Aided Manufacture should be included.

⁴ This must include engagement with control systems which incorporates electronic, pneumatic and computer control.

Engineering

Please answer the questions below and insert module code(s), module title(s) and ECTS credit values as required. Is the degree equivalent to a least a Level 8 on the Irish National Framework of Yes No Qualifications (NFQ) with Engineering studied up to and including third-year level or higher (or modular equivalent)? 2 Does the degree carry a minimum of 180 ECTS credits (or equivalent)? Yes No 3 Does the study of Engineering carry a minimum of 60 ECTS credits (or Yes No equivalent)? Does the study of Engineering show that the graduate has acquired sufficient Yes No knowledge, skills and understanding to teach the Engineering syllabus/ specification to the highest level in post-primary education (see www.curriculumonline.ie)? Does the study of Engineering include the study of ALL of the following? **Health and Safety** Yes No b) **Product Design and Realisation** Yes No c) **Materials Technology and Processing** Yes No d) **Power, Energy and Control** No Yes Information and Communications Technology (as applicable to Engineering) e) Yes No f) Structural & Mechanical Systems Yes No

Engineering

In relation to the questions above, please list below the module code(s), title(s) and ECTS credit values for each module studied.

Essential Areas of Study

Health & S		
Module Code	Module Title	ECTS Credit Value

Area of Study: Product Design and Realisation			
Module Code	Module Title		ECTS Credit Value

Area of Study: Materials Technology and Processing				
Module Code	Module Title	ECTS Credit Value		

Area of Study: Power, Energ	gy and Control	
Module Code	Module Title	ECTS Credit Value
Area of Study: Information	and Communications Technology (as applicable in Enginee	ering)
Module Code	Module Title	ECTS Credit Value
Area of Study: Structural &	Mechanical Systems	
Module Code	Module Title	ECTS Credit Value

Module Code	Module Title	ECTS Credit Value