

Name of HEI

An Chomhairle
Mhúinteoireachta



The Teaching Council

Subject Specification Form (SSF)

Mathematics

**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.**

Mathematics

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

- 1**
 - (a) Mathematics 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 Mathematics.
 - (c) The qualifying degree must carry at least 180 ECTS (European Credit Transfer System) credits (or equivalent) with the specific study of Mathematics comprising at least 60 ECTS credits (or equivalent).

- 2** The study of Mathematics during the qualification must show that the holder has acquired sufficient knowledge, skills and understanding to teach the Mathematics 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:

Essential areas of study

- a) Analysis (must include a module or modules in multi variable calculus)
- b) Algebra (must include a module or modules in linear Algebra)
- c) Geometry (must include a module or modules in Euclidean and Non-Euclidean Geometry)
- d) Probability
- e) Statistics (must include a module or modules in Statistical Inference)

The remaining credits (or equivalent) may be in any of the above essential areas, or be drawn from the following optional areas:

Optional areas of study

- f) Dynamical Systems and Chaos
- g) Calculus of Variations
- h) Numerical Analysis or Computational Mathematics
- i) Mathematical Modelling
- j) Discrete Mathematics
- k) History or Philosophy of Mathematics
- l) Mathematical Logic
- m) Set Theory and Cardinality

Mathematics

Please answer the questions below and insert module code(s), module title(s) and ECTS credit values as required.

<p>1 Is the degree equivalent to a least a Level 8 on the Irish National Framework of Qualifications (NFQ), with Mathematics studied up to and including third-year level or higher (or modular equivalent)?</p>	<p>Yes</p>	<p>No</p>
<p>2 Does the degree carry a minimum of 180 ECTS credits (or equivalent)?</p>	<p>Yes</p>	<p>No</p>
<p>3 Do the studies in Mathematics carry a minimum of 60 ECTS credits (or equivalent)?</p>	<p>Yes</p>	<p>No</p>
<p>4 Does the study of Mathematics show that the graduate has acquired sufficient knowledge, skills and understanding to teach the Mathematics syllabus/ specification to the highest level in post-primary education (see www.curriculumonline.ie)?</p>	<p>Yes</p>	<p>No</p>
<p>5 Does the study of Mathematics include the study of all of the following essential areas?</p> <p>Essential areas of study</p> <p>a) Analysis (must include a module or modules in multi variable calculus)</p> <p>b) Algebra (must include a module or modules in linear Algebra)</p> <p>c) Geometry (must include a module or modules in Euclidean and Non-Euclidean Geometry)</p> <p>d) Probability</p> <p>e) Statistics (must include a module or modules in Statistical Inference)</p> <p>The remaining credits (or equivalent) may be in any of the above essential areas, or be drawn from the below optional areas.</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>	<p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p>
<p>5 Does the study of Mathematics include study in any of the following optional areas?</p> <p>Optional areas of study</p> <p>f) Dynamical Systems and Chaos</p> <p>g) Calculus of Variations</p> <p>h) Numerical Analysis or Computational Mathematics</p> <p>i) Mathematical Modelling</p> <p>j) Discrete Mathematics</p> <p>k) History or Philosophy of Mathematics</p> <p>l) Mathematical Logic</p> <p>m) Set Theory and Cardinality</p>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>	<p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p>

Mathematics

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

Area of Study:

Analysis (must include a module or modules in multi variable calculus)

Module Code	Module Title	ECTS Credit Value

Area of Study:

Algebra (must include a module or modules in linear Algebra)

Module Code	Module Title	ECTS Credit Value

Area of Study:**Geometry** *(must include a module or modules in Euclidean and Non-Euclidean Geometry)*

Module Code	Module Title	ECTS Credit Value

Area of Study:**Probability**

Module Code	Module Title	ECTS Credit Value

Area of Study:**Statistics** *(must include a module or modules in Statistical Inference)*

Module Code	Module Title	ECTS Credit Value

Optional Areas of Study

The remaining credits (or equivalent) may be in any of the above essential areas, or be drawn from the following optional areas:

Area of Study:

Dynamical Systems and Chaos

Module Code	Module Title	ECTS Credit Value

Area of Study:

Calculus of Variations

Module Code	Module Title	ECTS Credit Value

Area of Study:

Numerical Analysis or Computational Mathematics

Module Code	Module Title	ECTS Credit Value

Area of Study:**Mathematical Modelling**

Module Code	Module Title	ECTS Credit Value

Area of Study:**Discrete Mathematics**

Module Code	Module Title	ECTS Credit Value

Area of Study:**History or Philosophy of Mathematics**

Module Code	Module Title	ECTS Credit Value

Area of Study:
Mathematical Logic

Module Code	Module Title	ECTS Credit Value

Area of Study:
Set Theory and Cardinality

Module Code	Module Title	ECTS Credit Value

Area of Study:
Other

Module Code	Module Title	ECTS Credit Value

Total ECTS Credits in Mathematics