

## FACULTY OF SCIENCE AND HEALTH

# Programme Regulations 2019-2020

Programme Title BSc in Science Education

Programme Code SE

Offered on a full-time or part-time Full-time basis

<u>Note</u>: Programme Regulations should be read in conjunction with Marks and Standards which can be found at <u>http://www.dcu.ie/registry/examinations/index.shtml</u>

#### 1. Programme Specific Rules and Requirements

1.1 Calculation for the Award Classification

The calculation of the final year award classification includes contributions from previous

years' results as follows:

Year/Subject contribution	Contribution to the award classification
Year 1	5%
Year 2	10%
Year 3	40%
Year 4	45% (comprising of 20% from ES478, and 25% from 4 <sup>th</sup> year precision mark excluding ES478)

Students who transfer into the programme in 2<sup>nd</sup> or 3<sup>rd</sup> year will have their degree classification based on the contribution precision marks that were achieved at DCU as per the weightings outlined above in the relevant years.

#### 1.2 Monitored Attendance

Attendance is compulsory and monitored on the following modules:

Module Code	Module Title
CS151	Chemistry Laboratory
PS153	Physics Laboratory for General Science

ES123Foundation Teaching and Placement PreparationES143Microteaching and Teaching PreparationCS257Chemistry Laboratory and Spectroscopy WorkshopPS255Physics Laboratory II (Science Education)ES228Microteaching and School PlacementMS220Teaching and Assessing Junior Cycle MathsFSH201Teaching and Assessing Junior Cycle ScienceES338School Placement and ReflectionCS345Chemistry Topics and LaboratoryFSH351STEM Education Project 1 (CS&PS)FSH352STEM Education Project 2 (MS&PS, MS&CS)ES478School Placement Preparation and Professional DevelopmentCS422Teaching and Assessing Senior Cycle Maths		
CS257Chemistry Laboratory and Spectroscopy WorkshopPS255Physics Laboratory II (Science Education)ES228Microteaching and School PlacementMS220Teaching and Assessing Junior Cycle MathsFSH201Teaching and Assessing Junior Cycle ScienceES338School Placement and ReflectionCS345Chemistry Topics and LaboratoryFSH351STEM Education Project 1 (CS&PS)FSH352STEM Education Project 2 (MS&PS, MS&CS)ES478School Placement Preparation and Professional DevelopmentCS422Teaching and Assessing Senior Cycle Chemistry	ES123	Foundation Teaching and Placement Preparation
PS255Physics Laboratory II (Science Education)ES228Microteaching and School PlacementMS220Teaching and Assessing Junior Cycle MathsFSH201Teaching and Assessing Junior Cycle ScienceES338School Placement and ReflectionCS345Chemistry Topics and LaboratoryFSH351STEM Education Project 1 (CS&PS)FSH352STEM Education Project 2 (MS&PS, MS&CS)ES478School PlacementES479School Placement Preparation and Professional DevelopmentCS422Teaching and Assessing Senior Cycle Chemistry	ES143	Microteaching and Teaching Preparation
ES228Microteaching and School PlacementMS220Teaching and Assessing Junior Cycle MathsFSH201Teaching and Assessing Junior Cycle ScienceES338School Placement and ReflectionCS345Chemistry Topics and LaboratoryFSH351STEM Education Project 1 (CS&PS)FSH352STEM Education Project 2 (MS&PS, MS&CS)ES478School PlacementES479School Placement Preparation and Professional DevelopmentCS422Teaching and Assessing Senior Cycle Chemistry	CS257	Chemistry Laboratory and Spectroscopy Workshop
MS220Teaching and Assessing Junior Cycle MathsFSH201Teaching and Assessing Junior Cycle ScienceES338School Placement and ReflectionCS345Chemistry Topics and LaboratoryFSH351STEM Education Project 1 (CS&PS)FSH352STEM Education Project 2 (MS&PS, MS&CS)ES478School PlacementES479School Placement Preparation and Professional DevelopmentCS422Teaching and Assessing Senior Cycle Chemistry	PS255	Physics Laboratory II (Science Education)
FSH201Teaching and Assessing Junior Cycle ScienceES338School Placement and ReflectionCS345Chemistry Topics and LaboratoryFSH351STEM Education Project 1 (CS&PS)FSH352STEM Education Project 2 (MS&PS, MS&CS)ES478School PlacementES479School Placement Preparation and Professional DevelopmentCS422Teaching and Assessing Senior Cycle Chemistry	ES228	Microteaching and School Placement
ES338School Placement and ReflectionCS345Chemistry Topics and LaboratoryFSH351STEM Education Project 1 (CS&PS)FSH352STEM Education Project 2 (MS&PS, MS&CS)ES478School PlacementES479School Placement Preparation and Professional DevelopmentCS422Teaching and Assessing Senior Cycle Chemistry	MS220	Teaching and Assessing Junior Cycle Maths
CS345Chemistry Topics and LaboratoryFSH351STEM Education Project 1 (CS&PS)FSH352STEM Education Project 2 (MS&PS, MS&CS)ES478School PlacementES479School Placement Preparation and Professional DevelopmentCS422Teaching and Assessing Senior Cycle Chemistry	FSH201	Teaching and Assessing Junior Cycle Science
FSH351STEM Education Project 1 (CS&PS)FSH352STEM Education Project 2 (MS&PS, MS&CS)ES478School PlacementES479School Placement Preparation and Professional DevelopmentCS422Teaching and Assessing Senior Cycle Chemistry	ES338	School Placement and Reflection
FSH352STEM Education Project 2 (MS&PS, MS&CS)ES478School PlacementES479School Placement Preparation and Professional DevelopmentCS422Teaching and Assessing Senior Cycle Chemistry	CS345	Chemistry Topics and Laboratory
ES478School PlacementES479School Placement Preparation and Professional DevelopmentCS422Teaching and Assessing Senior Cycle Chemistry	FSH351	STEM Education Project 1 (CS&PS)
ES479School Placement Preparation and Professional DevelopmentCS422Teaching and Assessing Senior Cycle Chemistry	FSH352	STEM Education Project 2 (MS&PS, MS&CS)
CS422 Teaching and Assessing Senior Cycle Chemistry	ES478	School Placement
	ES479	School Placement Preparation and Professional Development
MS410 Teaching and Assessing Senior Cycle Maths	CS422	Teaching and Assessing Senior Cycle Chemistry
	MS410	Teaching and Assessing Senior Cycle Maths
PS430 Teaching and Assessing Senior Cycle Physics	PS430	Teaching and Assessing Senior Cycle Physics
CS458 Analytical Techniques for Science Education	CS458	Analytical Techniques for Science Education
PS433 Electronics for Science Teachers	PS433	Electronics for Science Teachers

#### 1.2 Module Calculation

There are modules on this programme where the module mark will be calculated as the greater of (a) the weighted average of the continuous assessment percentage mark and the terminal examination percentage mark or (b) the terminal examination mark.

The modules are as follows:

Module	Title
MS116	Calculus for Teachers
BE101	How life works 1
CS101	Introductory Chemistry 1
PS122	Physics For General Science I
BE102	How life works 2
CS102	Introductory Chemistry 2
PS123	Physics For General Science II
CS215 /	Kinetics and Thermodynamics
CS215S	
MS200	Linear Algebra
MS223	Probability and Statistics
PS108	The Universe
MS221	Calculus of Several Variables
MS225	Modelling with Differential Equations
PS201	Quantum Physics I
PS207	Nuclear Physics and Relativity
PS223	Introduction to Methods of Classical Mechanics
MS323	Introduction to Analysis
PS202	Electromagnetism
PS204	Solid State Physics I
CS302	Separation Techniques

MS321	Introduction to Abstract Algebra
MS342	Discrete Mathematics II
PS305	Semiconductor Physics I

#### 2. Derogations from Marks and Standards

Professional/External Body: The Teaching Council

A total of 280 ECTS credits are attached to the workload of the BSc in Science Education (M&S 1.1.3, Table 1: Award Credit Accumulation Structure Honours Bachelor Degree: 180 – 240 ECTS credits). This stipulation does not apply to the deferred/repeat/ legacy students.

#### 3. Progression

#### 3.1 Credits for progression

Students must have successfully completed an indicated below minimum number of credits in a study period in order to progress to the next study period.

Year 1 - 60 credits Year 2 - 70 credits Year 3 - 75 credits Year 4 - 75 credits

This stipulation does not apply to the deferred/ repeat/ legacy students.

#### 3.2 Carrying of modules

Students will not be permitted to 'carry' modules except in exceptional circumstances and subject to the approval of the Progression and Award Board and mode of delivery permitting.

#### 4. Compensation

Compensation may apply, within the regulations specified in Marks and Standards, to all modules except the following:

Module Code	Module Title
CS151	Chemistry Laboratory
PS153	Physics Laboratory for General Science
ES123	Foundation Teaching and Placement Preparation
ES143	Microteaching and Teaching Preparation
CS257	Chemistry Laboratory and Spectroscopy Workshop
PS255	Physics Laboratory II (Science Education)
ES228	Microteaching and School Placement
MS220	Teaching and Assessing Junior Cycle Maths
FSH201	Teaching and Assessing Junior Cycle Science
MS110	The Mathematical Experience
ES215	Irish Education: History, Structure and Development
ES336	Developmental Psychology and Individual Differences

ES338	School Placement and Reflection
CS345	Chemistry Topics and Laboratory
ES341	Philosophical Perspectives on Education
FSH351	STEM Education Project 1 (CS&PS)
FSH352	STEM Education Project 2 (MS&PS, MS&CS)
ES330	ICT, Teaching Strategies and Professional Preparation
ES476	Curriculum Development and Evaluation
ES477	Access, Disadvantage, Equality in Education
ES478	School Placement
ES479	School Placement Preparation and Professional Development
CS458	Analytical Techniques for Science Education
CS422	Teaching and Assessing Senior Cycle Chemistry
MS410	Teaching and Assessing Senior Cycle Maths
PS430	Teaching and Assessing Senior Cycle Physics
PS433	Electronics for Science Teachers

### 5. Resit Categories

The resit categories of modules on this programme and an explanation of those categories can be found at:

https://www101.dcu.ie/registry/module\_contents.php?function=4&programme=SE