

FACULTY OF SCIENCE AND HEALTH

Programme Regulations 2022-2023

Programme Title BSc in Science Education

Programme Code SE

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

Note: Programme Regulations should be read in conjunction with Marks and Standards which can be found at

<https://www.dcu.ie/ovpaa/Policies-and-Regulations.shtml>

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:

<i>Year/Subject Contribution</i>	<i>Contribution to the Award Classification</i>
Year 1	5%
Year 2	10%
Year 3	40%
Year 4	45% (comprising of 20% from PR410 , and 25% from 4 th year precision mark excluding PR410)

Students who transfer into the programme in 2nd or 3rd 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:

<i>Module Code</i>	<i>Module Title</i>
CS151	Chemistry Laboratory
ES123	Foundation Teaching and Placement Preparation
ES143	Microteaching and Teaching Preparation
*PS132	Physics for General Science 1 (laboratory component)
*PS133	Physics for General Science 2 (laboratory component)

PS159	Physics Laboratory I (Science Education)
CS257	Chemistry Laboratory and Spectroscopy Workshop
PS255	Physics Laboratory II (Science Education)
SG230	Microteaching and Teaching Preparation 2
PR311	Professional Placement
FSH202	Teaching and Assessing Junior Cycle Science
MS220	Teaching and Assessing Junior Cycle Maths
FSH351	STEM Education Project 1 (CS&PS)
FSH353	STEM Education Project 2 (MS&PS, MS&CS)
PR410	Professional Placement
CS422	Teaching and Assessing Senior Cycle Chemistry
MS410	Teaching and Assessing Senior Cycle Maths
PS430	Teaching and Assessing Senior Cycle Physics
CS458	Analytical Techniques for Science Education
PS433	Electronics for Science Teachers
SG415	Teaching in online and blended environments

*Relevant to repeat SE1 students in 2022-2023 only

1.3 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 Code	Module Title
MS116	Calculus for Teachers
CS204	Organic Chemistry
CS102	Introductory Chemistry 2
CS215	Kinetics and Thermodynamics
MS200	Linear Algebra
PS114 & PS114A	Life, the Universe and Everything
PS201	Quantum Physics I
PS207	Nuclear Physics and Relativity
MS323	Introduction to Analysis
PS202	Electromagnetism
PS204	Solid State Physics I
MS321	Introduction to Abstract Algebra
PS305	Semiconductor Physics I
MS223	Probability and Statistics
CS204	Organic Chemistry
PS201	Quantum Physics I
PS207	Nuclear Physics and Relativity
PS204	Solid State Physics

2. Derogations from Marks and Standards

Professional/External Body: The Teaching Council

A total of 270-275 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 the 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 - the number of credits vary depending on the chosen pathway:

Chemistry & Physics - 70 credits

Maths & Chemistry - 67.5 credits

Maths & Physics - 67.5 credits

Year 3 - the number of credits vary depending on the chosen pathway:

Chemistry & Physics - 60 credits

Maths & Chemistry - 67.5 credits

Maths & Physics - 67.5 credits

Year 4 - 70 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:

<i>Module Code</i>	<i>Module Title</i>
CS151	Chemistry Laboratory
ES123	Foundation Teaching and Placement Preparation
CS121	Fundamental Concepts in Chemistry Education
CS150	Interdisciplinary Science
PS159	Physics Lab 1 (Science Education)
PR109	Irish Education History, Structure & Development
ES143	Microteaching and Teaching Preparation
CS257	Chemistry Laboratory and Spectroscopy Workshop
PS255	Physics Laboratory II (Science Education)
CS458B	Analytical Techniques for Science Education
SG230	Microteaching and School Placement 2
MS147 & MS147A	Mathematical Thinking

MS220	Teaching & Assessing Junior Cycle Maths
ES215	Irish Education: History, Structure and Development
HD230	Development Psych & Individual Differences
ES336	Developmental Psychology and Individual Differences
PR311	Professional Placement
PS322	Electronics for Science Teachers
ES330	ICT Teaching Strategies & Professional Preparation
ES341	Philosophical Perspectives on Education
FSH202	Teaching & Assessing Junior Cycle Science
FSH351	STEM Education Project 1 (CS&PS)
FSH353	STEM Education Project 2 (MS&PS, MS&CS)
ES476	Curriculum Development and Evaluation
ES477	Access, Disadvantage, Equality in Education
SG415	Teaching in online and blended learning environments
SG412	Chemistry topics through Laboratory Practicals
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
PR410	Professional Placement

5. Resit Categories

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

www101.dcu.ie/registry/module_contents.php?function=4&programme=SE&yr=2023

6. Repeat Arrangements

Due to the restructuring of the programme and changes to Teaching Council requirements, if students have failed a module that is no longer on the programme they may be required to substitute another module rather than repeating the failed module.

SE1: a) All students repeating SE1 modules in 2022/23 must also take the additional modules **PR109 (Irish Education: History, Structure & Development)** and **MS147 (Mathematical Thinking)**.

b) Students repeating SE1 in 2022/23 who wish to continue with the Maths & Physics pathway must also take the two additional Physics modules: PS102 (Light & Optics) in semester 1 and PS114A (Life, the Universe and Everything) in semester 2.

c) Students repeating SE1 in 2022/23 who wish to continue with the Maths & Chemistry pathway must also take the two additional Chemistry modules: **CS151 (Fundamental Concepts for Chemistry Education)** throughout both semesters and **CS150 (Interdisciplinary Science)** in semester 2.

SE2: Students repeating SE2 in 2022/23 must also take **MS221 (Calculus of Several Variables)** if they are continuing on either the Maths & Chemistry or the Maths & Physics pathways.

SE3: a) Students repeating SE3 in 2022/23 must also take **CS458 (Analytical Techniques for Science Education)** if they are continuing on either the Maths & Chemistry or Chemistry & Physics pathways.

b) Students repeating SE3 in 2022/23 must also take **PS322 (Electronics for Science Teachers)** if they are continuing on either the Maths & Physics or Chemistry & Physics pathways.

These additional modules must be taken to ensure students have amassed the regulatory 60 credits of Mathematics, Physics/Chemistry and Foundation and Professional Studies in Education by graduation.