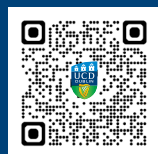




# UCD SCIENCE Stage 1 Guide & Core Module Tables

2025/26

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# Science

UCD offers one of the widest choices of science subjects in Ireland, providing access to 26-degree subjects in Biological, Biomedical, Biomolecular Sciences, Chemistry, Earth & Environmental Sciences, Mathematics, Physics, including fully accredited Science, Mathematics & Education degrees.

**Table 1** Streams and Degree Subjects within Science

Stream	Degree Subjects
<b>Biological, Biomedical &amp; Biomolecular Sciences Stream</b>	Biochemistry & Molecular Biology
	Cell & Molecular Biology
	Environmental Biology
	Genetics
	Microbiology
	Neuroscience
	Pharmacology
	Physiology
	Plant Biology
	Zoology
<b>Earth &amp; Environmental Sciences Stream</b>	Earth Sciences
	Environmental Biology
<b>Chemistry (includes Medicinal/ Sustainable) Stream</b>	Chemistry
	Chemistry with Environmental & Sustainable Chemistry
	Medicinal Chemistry & Chemical Biology
<b>Mathematics (includes Applied/ Financial/Statistics) Stream</b>	Applied & Computational Mathematics
	Financial Mathematics
	Mathematics
	Statistics
<b>Physics (includes Theoretical/ Astronomy &amp; Space Science) Stream</b>	Physics
	Physics with Astronomy & Space Science
	Theoretical Physics
<b>Science, Mathematics &amp; Education Stream</b>	Applied Mathematics, Mathematics & Education
	Biology, Mathematics & Education
	Chemistry, Mathematics & Education
	Computer Science, Maths. & Education
	Physics, Mathematics & Education
<b>Explore Multiple Streams</b>	<p>Students can select a number of streams in the Explore Multiple Streams option. As with all streams in Stage 1, careful selection of modules will ensure that you keep your options open for Stage 2.</p> <p>The information in Table 2 will guide you when you come to choose your modules for Stage 1.</p>



The course in Stage 1 is divided into 12 modules. Students choose their modules in order to fulfil the requirements of the subjects that they wish to keep open in the degree programme.

Students can either focus on a particular area, while fulfilling the requirements for at least 2 subjects, or choose to cover the core requirements for a wide range of subjects.

## Modules required for BSc Degrees within Science

### CORE modules

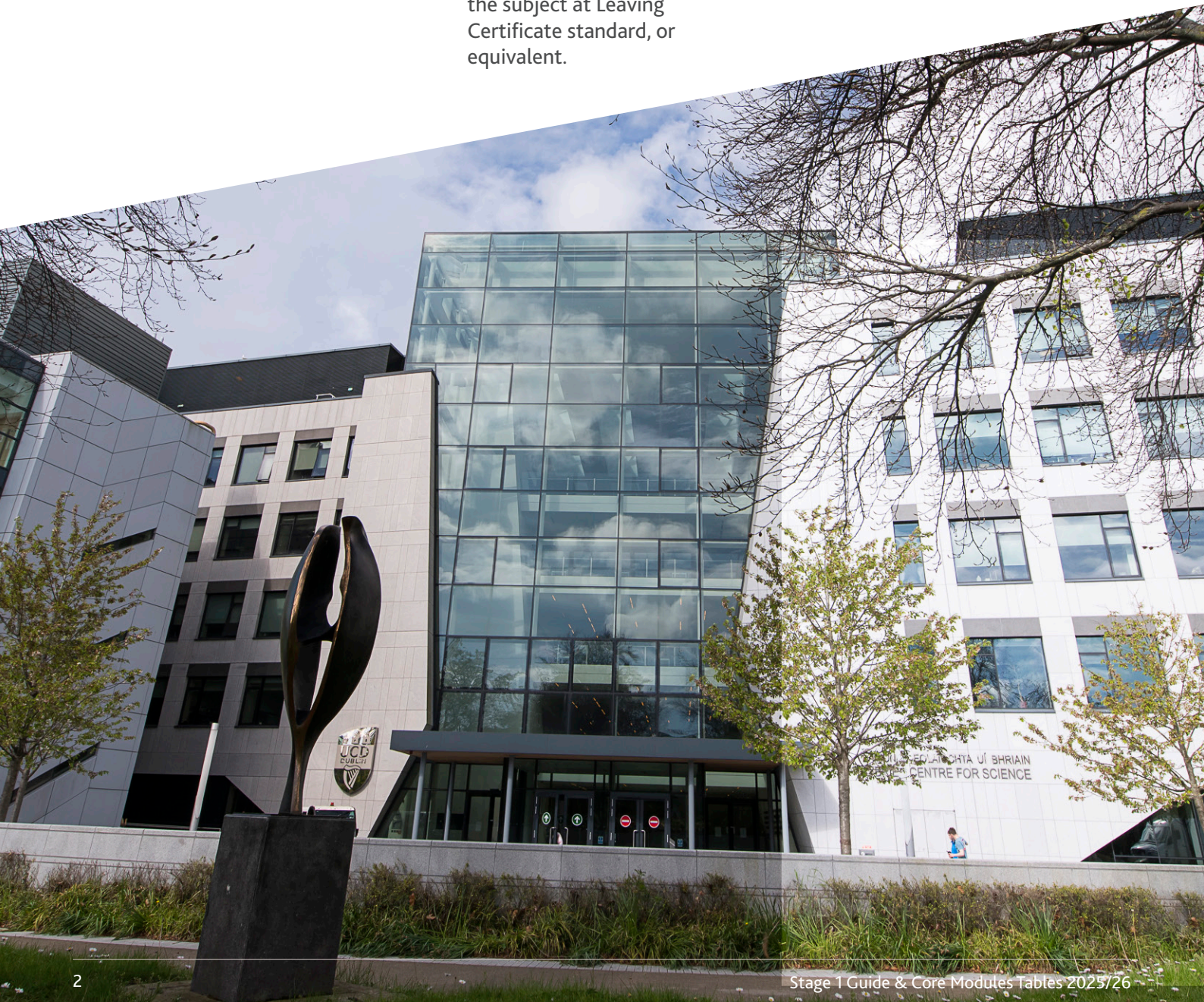
A module that students must do as part of their programme.

### Conditional CORE modules

Students must take these modules in Stage 1 of the Science programme if they have not achieved the specified grade (see Table 3) or completed the subject at Leaving Certificate standard, or equivalent.

### Programme CORE modules

Are also compulsory, but students can choose to take them in Stage 1 or Stage 2.





**Table 2** Modules required for Science Degree subjects in Stage 1

Key: For modules marked with a plus symbol (+) Please refer to Table 4 Mathematics requirements table for further required criteria.

Biological, Biomedical & Biomolecular Sciences Stream			
Degree Subjects	Conditional Core Modules	Core Modules	Programme Core Modules
<b>Biochemistry &amp; Molecular Biology</b> <b>Cell &amp; Molecular Biology</b> <b>Environmental Biology</b> <b>Genetics</b> <b>Microbiology</b> <b>Neuroscience</b> <b>Pharmacology</b> <b>Physiology</b> <b>Plant Biology</b> <b>Zoology</b>	<i>Refer to table 3 on page 7 for further details on these modules</i> <b>BIOL00010</b> Fundamentals of Biology <b>CHEM00010</b> Introductory Chemistry <b>MATH00010</b> Introduction to Mathematics <b>PHYC10070</b> Foundations of Physics <i>(this is a conditional core for Neuroscience and Physiology)</i>	<b>SCI10010</b> Scientific Enquiry <b>BIOL10110</b> Cell Biology & Genetics <b>CHEM10050</b> Basis of Organic & Biological Chemistry <b>MATH10290</b> Linear Algebra for Science <sup>+</sup> <b>MATH10310</b> Calculus for Science <sup>+</sup>	At least two of: <b>BIOL10130</b> Biology in Action <b>BIOL10140</b> Life on Earth <b>BMOL10030</b> Biomedical Sciences  <sup>+</sup> <i>Please refer to table 4 on page 8 for modules</i>
Earth & Environmental Sciences Stream			
Degree Subjects	Conditional Core Modules	Core Modules	Programme Core Modules
<b>Environmental Biology</b> <i>Students who complete the modules for this subject will also be eligible for subjects listed under the Biological, Biomedical &amp; Biomolecular Stream in Stage 2.</i>	<i>Refer to table 3 on page 7 for further details on these modules</i> <b>BIOL00010</b> Fundamentals of Biology <b>CHEM00010</b> Introductory Chemistry <b>MATH00010</b> Introduction to Mathematics <b>PHYC10070</b> Foundations of Physics <i>(this is a conditional core for Neuroscience and Physiology)</i>	<b>SCI10010</b> Principles of Scientific Enquiry <b>BIOL10110</b> Cell Biology & Genetics <b>CHEM10050</b> Basis of Organic & Biological Chemistry <b>MATH10290</b> Linear Algebra for Science <sup>+</sup> <b>MATH10310</b> Calculus for Science <sup>+</sup>	At least two of: <b>BIOL10130</b> Biology in Action <b>BIOL10140</b> Life on Earth <b>BMOL10030</b> Biomedical Sciences  <sup>+</sup> <i>Please refer to table 4 on page 8 for modules</i>
<b>Earth Sciences</b>	<i>Refer to table 3 on page 7 for further details on these modules</i> <b>MATH00010</b> Introduction to Mathematics	<b>SCI10010</b> Principles of Scientific Enquiry <b>GEOL10060</b> Introduction to Earth Sciences <b>MATH10290</b> Linear Algebra for Science <sup>+</sup> <b>MATH10310</b> Calculus for Science <sup>+</sup>	<b>GEOL10070</b> Understanding Earth Systems  <sup>+</sup> <i>Please refer to table 4 on page 8 for modules</i>

Chemistry (includes Medicinal/Sustainable) Stream			
Degree Subjects	Conditional Core Modules	Core Modules	Programme Core Modules
Chemistry	<i>Refer to table 3 on page 7 for further details on these modules</i> <b>CHEM00010</b> Introductory Chemistry	<b>SCI10010</b> Principles of Scientific Enquiry	<b>CHEM20100</b> Basis of Inorganic Chemistry
Chemistry with Environmental & Sustainable Chemistry		<b>CHEM10050</b> Basis of Organic & Biological Chemistry	
Medicinal Chemistry & Chemical Biology		<b>MATH10290</b> Linear Algebra for Science <sup>+</sup>	
		<b>MATH10310</b> Calculus for Science <sup>+</sup>	
	<b>BIOL00010</b> Fundamentals of Biology ( <i>Conditional core for Medicinal Chemistry</i> )	<b>BIOL10110</b> Cell Biology & Genetics ( <i>Core module for Medicinal Chemistry</i> )	<sup>+</sup> Please refer to Table 4 on page 8 for modules

Mathematics (includes Applied/Financial/Statistics) Stream			
Degree Subjects	Conditional Core Modules	Core Modules	Programme Core Modules
Applied & Computational Mathematics	<i>Refer to Table 3 on page 7 for further details on these modules</i> <b>ACM10080</b> Introduction to Applied & Computational Mathematics ( <i>Conditional core for Applied &amp; Computational Mathematics only</i> ) <b>COMP10290</b> Computation for Scientists	<b>SCI10010</b> Principles of Scientific Enquiry	<b>MATH10040</b> Numbers & Functions ( <i>required for Mathematics &amp; Financial Maths</i> )
Mathematics		<b>ACM10060</b> Applications of Differential Equations	<b>MATH10320</b> Mathematical Analysis ( <i>required for Applied &amp; Computational Mathematics; Financial Math., Mathematics &amp; Statistics</i> )
Financial Mathematics		<b>MATH10340</b> Linear Algebra (MPS)	<b>ECON10720</b> Microeconomics for Business ( <i>Required for Financial Maths. Students who wish to progress with both Applied &amp; Computational Math and Financial Maths in Stage 2 must take ECON10720 in Stage 1.</i> )
Statistics		<b>MATH10350</b> Calculus (MPS) <b>STAT10060</b> Statistical Modelling	

Physics (includes Theoretical/Astronomy & Space Science) Stream			
Degree Subjects	Conditional Core Modules	Core Modules	Programme Core Modules
Physics	<i>Refer to Table 3, page 7 for further details on these modules</i> <b>ACM10080</b> Introduction to Applied & Computational Mathematics <b>MATH00010</b> Introduction to Mathematics <b>PHYC10070</b> Foundations of Physics <b>COMP10290</b> Computation for Scientists	<b>SCI10010</b> Principles of Scientific Enquiry	<b>ACM10060</b> Application of Differential Equations ( <i>Must be taken in Stage 1 for Theoretical Physics</i> )
Physics with Astronomy & Space Science		<b>PHYC10080</b> Frontiers of Physics	<b>PHYC10050</b> Astronomy & Space Science ( <i>Can be taken in Stage 1 or Stage 2 for Physics with Astronomy &amp; Space Science</i> )
Theoretical Physics		<b>MATH10340</b> Linear Algebra (MPS)	<b>PHYC10250</b> Thermal Physics & Materials ( <i>Taken in Stage 1 or Stage 2 for all Physics degree subjects</i> )
		<b>MATH10350</b> Calculus (MPS) or <b>MATH10400</b> Calculus (Online)	<b>PHYC20080</b> Fields, Waves & Light ( <i>Taken in Stage 1 or Stage 2 for all Physics degree subjects. Can only be taken in Stage 1 if students have achieved H3 in Mathematics at Leaving Cert or equivalent.</i> )



Science, Mathematics & Education Stream			
Degree Subjects	Conditional Core Modules	Core Modules	Programme Core Modules
<b>Biology, Mathematics &amp; Education</b>	<p><i>Refer to table 3 on page 7 for further details on these modules</i></p> <p><b>BIOL00010</b> Fundamentals of Biology</p>	<p><b>SCI10010</b> Principles of Scientific Enquiry</p> <p><b>BIOL10110</b> Cell Biology &amp; Genetics</p> <p><b>CHEM10050</b> Basis of Organic &amp; Biological Chemistry</p> <p><b>MATH10290</b> Linear Algebra for Science<sup>+</sup> or <b>MATH10340</b> Linear Algebra (MPS)<sup>+</sup></p> <p><b>MATH10410</b> Maths &amp; Science Education</p> <p><b>MATH10350</b> Calculus (MPS)</p> <p><b>STAT10060</b> Statistical Modelling</p>	<p>At least two of the following three modules must be taken in Stage 1 or Stage 2:</p> <p><b>BIOL10130</b> Biology in Action</p> <p><b>BIOL10140</b> Life on Earth</p> <p><b>BMOL10030</b> Biomedical Sciences</p> <p><b>ACM10060</b> Appl of Differential Equations <i>(If ACM10060 is not taken in Stage 1, students will instead take ACM10100 in Stage 2)</i></p> <p><sup>+</sup> Please refer to table 4 on page 8 for modules</p>
<b>Applied Mathematics, Mathematics &amp; Education</b>	<p><i>Refer to table 3 on page 7 for further details on these modules</i></p> <p><b>ACM10080</b> Introduction to Applied &amp; Computational Mathematics</p> <p><b>COMP10290</b> Computation for Scientists</p>	<p><b>SCI10010</b> Principles of Scientific Enquiry</p> <p><b>ACM10060</b> Application of Differential Equations</p> <p><b>MATH10350</b> Calculus (MPS)</p> <p><b>MATH10410</b> Maths &amp; Science Education</p> <p><b>MATH10340</b> Linear Algebra (MPS)</p> <p><b>STAT10060</b> Statistical Modelling</p>	<p><b>MATH10040</b> Numbers &amp; Functions</p> <p><b>MATH10320</b> Mathematical Analysis</p>
<b>Computer Science, Mathematics &amp; Education</b>	<p><i>Refer to table 3 on page 7 for further details on these modules</i></p> <p><b>COMP10290</b> Computation for Scientists</p>	<p><b>SCI10010</b> Principles of Scientific Enquiry</p> <p><b>ACM10060</b> Applications of Differential Equations</p> <p><b>MATH10350</b> Calculus (MPS)</p> <p><b>MATH10410</b> Maths &amp; Science Education</p> <p><b>MATH10340</b> Linear Algebra (MPS)</p> <p><b>STAT10060</b> Statistical Modelling</p> <p><b>COMP10020</b> Introduction to Programming II</p>	<p><b>MATH10040</b> Numbers &amp; Functions</p> <p><b>MATH10320</b> Mathematical Analysis</p>

Science, Mathematics & Education Stream			
Degree Subjects	Conditional Core Modules	Core Modules	Programme Core Modules
Chemistry, Mathematics & Education	<p><i>Refer to table 3 on page 7 for further details on these modules</i></p> <p><b>CHEM00010</b> Introductory Chemistry</p>	<p><b>SCI10010</b> Principles of Scientific Enquiry</p> <p><b>CHEM10050</b> Basis of Organic &amp; Biological Chemistry</p> <p><b>MATH10290</b> Linear Algebra for Science<sup>+</sup> or <b>MATH10340</b> Linear Algebra (MPS)<sup>+</sup></p> <p><b>MATH10350</b> Calculus (MPS)</p> <p><b>MATH10410</b> Maths &amp; Science Education</p> <p><b>STAT10060</b> Statistical Modelling</p>	<p><b>ACM10060</b> Application of Differential Equations</p> <p><b>CHEM20100</b> Basis of Inorganic Chemistry</p> <p><sup>+</sup><i>Please refer to table 4 on page 8 for modules</i></p>
Physics, Mathematics & Education	<p><i>Refer to table 3 on page 7 for further details on these modules</i></p> <p><b>ACM10080</b> Introduction to Applied &amp; Computational Mathematics</p> <p><b>PHYC10070</b> Foundations of Physics</p> <p><b>COMP10290</b> Computation for Scientists</p>	<p><b>SCI10010</b> Principles of Scientific Enquiry</p> <p><b>PHYC10080</b> Frontiers of Physics</p> <p><b>MATH10350</b> Calculus (MPS)</p> <p><b>MATH10340</b> Linear Algebra (MPS)</p> <p><b>MATH10410</b> Maths &amp; Science Education</p> <p><b>ACM10060</b> Application of Differential Equations</p> <p><b>STAT10060</b> Statistical Modelling</p>	<p><b>MATH10320</b> Mathematical Analysis</p> <p><b>PHYC10250</b> Thermal Physics &amp; Materials</p> <p><b>PHYC20080</b> Fields, Waves &amp; Light</p>

## Explore Multiple Streams

The “Explore Multiple Streams” option is designed for students with interests in degree subjects in more than one stream. For example, a student may be interested in Biochemistry and Molecular Biology and Chemistry. As Biochemistry and Molecular Biology is in the Biomomolecular\_Biomedical stream and Chemistry is in the Chemistry stream, students interested in these degree subjects can choose “Explore Multiple Streams”.

Scan the QR code and select the 'View All Modules' section of this webpage for further information on modules and streams.







## Conditional Core Modules

Some students may not have a sufficiently strong background in a subject and may be required to take an introductory module in the subject before they can take more advanced modules. Table 3 below outlines the specific prior learning requirements associated with these modules.

**Table 3:** Prior Learning requirements

Relevant Leaving Certificate Subject	Requirement (Conditional Core Module)	Rule
<b>Applied Mathematics</b>	<b>ACM10080</b> Introduction to Applied & Computational Mathematics	For the degrees where ACM10080 appears as a Conditional Core Module in Table 2, students must take ACM10080 or have attained a minimum grade H5 in Leaving Certificate Higher Applied Mathematics (A Level; Grade C).
<b>Biology</b>	<b>BIOL00010</b> Fundamentals of Biology	To take BIOL10110, BIOL10130 and BIOL10140 students must have taken BIOL00010 or have attained a minimum grade O2 or H6 in Leaving Certificate Biology (A Level; Grade D).
<b>Chemistry</b>	<b>CHEM00010</b> Introductory Chemistry	To take CHEM10050, students must have taken CHEM00010 or have attained a minimum grade O1 or H5 in Leaving Certificate Chemistry (A Level; Grade C).
<b>Mathematics</b>	<b>MATH00010</b> Introductory Mathematics	Students who did not achieve a minimum grade O1 or H5 in Leaving Certificate Mathematics (GCSE; Grade A*, A Level; Grade C) must take MATH00010 in addition to other required Mathematics modules.
<b>Physics</b>	<b>PHYC10070</b> Foundations of Physics  <b>ACM10080</b> Introduction to Applied & Computational Mathematics	Students who wish to take Physics subjects must have attained a minimum grade of H5 in Higher Leaving Certificate Physics (A Level; Grade C). Otherwise, they must take PHYC10070 in Stage 1. Students who wish to pursue Neuroscience, Physiology or Biology, Mathematics & Education must have undertaken Leaving Certificate Physics or must take PHYC10070 in Stage 1.  To take any Physics subjects, students must take ACM10080 or have attained a minimum grade of H5 in Leaving Certificate Higher Applied Mathematics.
<b>Computer Science</b>	<b>COMP10290</b> Computation for Scientists	Students who wish to remain eligible for Mathematics or Physics subjects in Stage 2 who did not achieve at least H5 or equivalent in Higher Leaving Certificate Computer Science must take COMP10290 in Stage 1.

## Mathematics

Students are required to take at least two modules in Mathematics (Linear Algebra and Calculus) during their degree in UCD. Mathematics teaching has been tailored to meet the requirements of different subjects. Mathematics is fundamental to many disciplines of Biology and Chemistry. You should consider studying Mathematics to the level of your ability. If you are unsure, you may sample the Mathematics modules required for the Mathematics or Physics degree subjects (i.e. MATH10340 Linear Algebra (MPS) and MATH10350 Calculus (MPS)). If you find those modules too challenging you may change to Mathematics for the Sciences (i.e. MATH10290 and MATH10310) in the first two weeks of the Autumn Trimester. **However, keep in mind that MATH10340 and MATH10350 are required core modules for the Mathematics, Physics and some of the Education based degree subjects.**

Students must take one Mathematics module in the Autumn Trimester. If a student is required to do MATH00010, then their Calculus module must be deferred until Stage 2. Students who wish to pursue Physics subjects but who have to take MATH00010 in Autumn, MATH10400 can be taken in the Summer Trimester to ensure they meet the prior learning requirements for Stage 2 Physics modules. If you are interested in pursuing your studies in Mathematics to a higher level, you should seek academic advice in relation to the mathematics modules you should study.

**Table 4:** Mathematics Requirements

Subjects/Areas	Mathematics Topics		Comment (to substitute Mathematics modules, you must contact the Science Office <a href="http://www.ucd.ie/askscience">www.ucd.ie/askscience</a> )
	Linear Algebra	Calculus	
<b>1</b> Biological Biomedical and Biomolecular Sciences Chemistry; Medicinal Chemistry; Environmental & Sustainable Chemistry	MATH10290	MATH10310	MATH10340 should be taken instead of MATH10290 if students want to keep Mathematics or Physics degree subjects open.  MATH10350 should be taken instead of MATH10310 if students want to keep the Education degrees or Mathematics or Physics degree subjects open.
<b>2</b> Earth & Environmental Science	MATH10290	MATH10310	MATH10340 should be taken instead of MATH10290 if students want to keep Mathematics or Physics degree subjects open.  MATH10350 should be taken instead of MATH10310 if students want to keep the Education, Mathematics or Physics degree subjects open.
<b>3</b> Mathematics; Financial Mathematics; Applied & Computational Mathematics; Statistics	MATH10340	MATH10350	Students who have not attained at least a H3 in Leaving Certificate Mathematics (or equivalent) are strongly advised to consult with the College of Science Office for further advice.
<b>4</b> Mathematics, Physics & Education; Applied Mathematics & Education Computer Science, Mathematics & Education	MATH10340	MATH10350	Students who have not attained at least a H3 in Leaving Certificate Mathematics (or equivalent) are strongly advised to consult with the College of Science Office for further advice.
<b>5</b> Physics; Theoretical Physics; Physics with Astronomy & Space Science	MATH10340	MATH10350	For students who wish to pursue Physics subjects, MATH10400 can be taken in the Summer Trimester instead of MATH10350 if a student must take MATH00010 in Trimester 1 (Autumn Trimester).
<b>6</b> Biology, Mathematics & Education Chemistry, Mathematics & Education	MATH10290	MATH10350	MATH10340 can be taken instead of MATH10290 if students want to keep Mathematics or Physics degree subjects open.  MATH10350 also fulfils the requirements for all Biological, Biomedical, Biomolecular Chemistry, Earth and Environmental Sciences degree subjects.



## Core Modules required for Stage 1

### Core Modules required for Stage 1 Biological, Biomedical & Biomolecular Sciences Stream Earth & Environmental Sciences Stream and Chemistry Stream in DN200

- Conditional core (may need to be taken in Stage 1 depending on Leaving Certificate results)
- Programme core (taken in Stage 1 or 2)
- Core (taken in Stage 1)

Earth & Environmental  
Sciences Stream (EES)

Biological, Biomedical & Biomolecular  
Sciences (BBB) Stream

Chemistry  
Stream

**Table 5: Core Module Summary by Streams**

Module Code	Title	Trimester	Biochemistry & Molecular Biology	Genetics	Microbiology	Neuroscience	Pharmacology	Physiology	Cell and Molecular Biology	Plant Biology	Zoology	Environmental Biology (BBB and EES Streams)	Earth Sciences	Chemistry	Chem. Envl & Chem	Med Chem & Chem
SCI10010	Scientific Enquiry	Aut	●	●	●	●	●	●	●	●	●	●	●	●	●	●
BIOL10110	Biology-Cell Biology & Genetics	Spr	●	●	●	●	●	●	●	●	●	●				●
CHEM10050	Basis of Organic & Biol Chem	Spr	●	●	●	●	●	●	●	●	●	●		●	●	●
BIOL00010	Fundamentals of Biology	Aut	●	●	●	●	●	●	●	●	●	●				●
CHEM00010	Introductory Chemistry	Aut	●	●	●	●	●	●	●	●	●	●		●	●	●
PHYC10070	Foundations of Physics	Aut				●		●								
BIOL10130	Biology in Action	Aut	●	●	●	●	●	●	●	●	●	●				
BIOL10140	Life on Earth	Aut	●	●	●	●	●	●	●	●	●	●				
BMOL10030	Biomedical Sciences	Spr	●	●	●	●	●	●	●	●	●	●				
GEOL10060	Introduction to Earth Sciences	Aut or Spr											●			
GEOL10070	Understanding Earth Systems	Spr											●			
MATH00010	Introduction to Mathematics	Aut	●	●	●	●	●	●	●	●	●	●	●	●	●	●
MATH10290	Linear Algebra for Science	Spr	●	●	●	●	●	●	●	●	●	●	●	●	●	●
MATH10310	Calculus for Science	Aut	●	●	●	●	●	●	●	●	●	●	●	●	●	●
CHEM20100	Basis of Inorganic Chemistry	Aut												●	●	●

#### NOTES:

**A** Students required to take MATH00010 must defer MATH10310 or MATH10350 until Stage 2.

**B** Students must take at least 2 of BIOL10130, BIOL10140 or BMOL10030 in either Stage 1 or Stage 2.

**C** Students required to take MATH10290 can take MATH10340 instead. MATH10340 is required for all Mathematical or Physical Science degrees.

**D** Students required to take MATH10310 can take MATH10350 instead. MATH10350 is required for all Education, Mathematical or Physical Sciences degrees.

## Core Modules required for Stage 1

### Mathematics; Physics; Mathematics & Education Streams in DN200

- Conditional core (may need to be taken in Stage 1))
- Programme core (taken in Stage 1 or 2)
- Core (taken in Stage 1)

**Table 6: Core Module Summary by Streams**

Module Code	Title	Trimest	Maths stream	Physics Stream	Mathematics & Education Stream
SCI10010	Scientific Enquiry	Aut	● ● ● ●	● ● ●	● ● ● ● ●
BIOL10110	Biology-Cell Biology & Genetics	Spr			●
CHEM10050	Basis of Organic & Biol Chem	Spr			● ●
BIOL00010	Fundamentals of Biology	Aut			●
CHEM00010	Introductory Chemistry	Aut			●
PHYC10070	Foundations of Physics	Aut		● ● ●	●
BIOL10130	Biology in Action	Aut			●
BIOL10140	Life on Earth	Aut			●
BMOL10030	Biomedical Sciences	Spr			●
MATH00010	Introduction to Mathematics	Aut		● ● ●	
CHEM20100	Basis of Inorganic Chemistry	Aut			●
ACM10080	Intro to Applied & Comp Math	Aut	●	● ● ●	● ●
ACM10060	Appl of Differential Equations	Spr	● ● ● ●		● ● ● ●
MATH10290	Linear Algebra for Science	Spr			● ●
MATH10340	Linear Algebra (MPS)	Spr	● ● ● ●	● ● ●	● ● ● ●
MATH10350	Calculus (MPS)	Aut	● ● ● ●	● ● ●	● ● ● ● ●
STAT10060	Statistical Modelling	Spr	● ● ● ●		● ● ● ● ●
MATH10040	Numbers & Functions	Aut	● ● ● ●		● ● ● ●
MATH10320	Mathematical Analysis	Spr	● ● ● ●		● ● ● ●
ECON10720	Microeconomics for Business	Spr	● ● ● ●		● ● ● ●
PHYC10080	Frontiers of Physics	Spr		● ● ●	●
PHYC10050	Astronomy & Space Science	Aut		● ● ●	
PHYC10250	Thermal Physics and Materials	Aut		● ● ●	●
PHYC20080	Fields, Waves & Light	Spr		● ● ●	●
MATH10410	Maths & Science Education	Spr			● ● ● ● ●
COMP10020	Intro to Programming II	Spr			● ● ● ●
COMP10290	Computation for Scientists	Aut	● ● ● ●	● ● ●	● ● ● ●

#### NOTES:

A Students required to take MATH00010 must defer MATH10310 or MATH10350 until Stage 2.

B Students must take at least two of BIOL10130, BIOL10140 or BMOL10030 in either Stage 1 or Stage 2.

C Students should also take either ACM10060 in Stage 1 or if not taken, take ACM10100 in Stage 2.

D Students who wish to pursue Physical Sciences and who are required to take MATH00010 MUST achieve at least an A- and take MATH10400 in the Summer Trimester as a substitute for MATH10350.

E Students who wish to progress with both subjects Applied & Computational Mathematics and Financial Mathematics in Stage 2 must take ECON10720 in Stage 1.





## Top Tips

- Students are required to study **twelve modules in a year** – it is recommended that you try to balance your workload as evenly as possible across the year, e.g. study six modules in the Autumn Trimester and six modules in the Spring Trimester. The maximum number permitted in a trimester is eight.
- Eleven of your Stage 1 modules must be from within Science. As well as core modules, there are modules which students can choose from a selection offered in their programme (**Option Modules**). You may take one non-science elective module in Stage 1 in the Spring Trimester. **Elective modules** allow you to explore subjects outside of Science or to deepen your knowledge in Science. For example, a student in Science can take a Business or Language elective module. You are advised to consider your choice of elective module carefully.
- The **wide variety of science modules** available in Stage 1 allows you to sample and experience a number of subjects, while also studying the core modules required for your discipline. **The choices you make in first year will have a bearing on your final degree subject(s).** Make sure that you meet the core (compulsory) requirements for your subjects of choice and consider taking Programme Cores (Table 2) to reduce restrictions on your Stage 2 choices.
- The Level 0 and Level 1 modules required for entry to the degrees in the various subject areas are listed in Table 2.
- Laboratory and/or tutorial times for Science modules, where required, will be allocated at the start of trimester after you register online to your preferred area and your optional Science modules. Once the allocation to practicals and tutorials has been made, you will be able to see and print your individual timetable.
- **Attendance**  
Lack of attendance at lectures has been identified in several studies as a significant risk factor for having below average scores in Science courses. Students who attend >75% of lectures generally achieve higher grades.





### **College of Science Office**

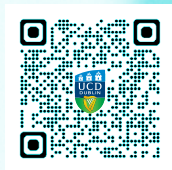
UCD College of Science  
Room E1.09, UCD O'Brien Centre for Science  
University College Dublin, Belfield, Dublin 4, Ireland D04 V1W8

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