Vision and Values

The aim of the programme is to provide a broadly-based education in the knowledge and practical skills needed by students to pursue careers in the range of sectors underpinned by chemical science and technology. Graduates will combine extensive knowledge and skills in advanced chemistry with the knowledge of fundamental chemical principles of functioning of biological systems and their industrial applications in chemical, biomedical, biotechnological, pharmaceutical, food and other industries. In addition to this they will be well positioned to provide an interface between chemistry, biology and bioengineering and to competitively pursue employment or advanced degrees in the related fields of science and technology. Immersed in our world class research-intensive environment, students will work individually and in teams, and engage in cutting-edge projects that will hone their critical thinking, communications, autonomous learning, and technical skills. In addition to lectures, laboratory classes and tutorials, we use a range of student-centred, active-learning activities, including workshops, seminars, and team-based projects, culminating in research projects in which students are embedded in academic research teams to work on leading-edge problems. Both the core material and the transferrable skills acquired in the programme are assessed, using a range of techniques, including assessment of laboratory skills and reports, assessment of presentations, assessment of team work, and assessment of a research thesis and of an oral thesis defense, in addition to in-class tests and written examinations.

Subject Description

Programme Outcomes

- 1 Demonstrate a broad and balanced knowledge and appreciation of key concepts in chemistry, the molecular principles of functioning of life and their applications in modern technologies.
- 2 Safely and effectively carry out a range of modern experimental procedures.
- 3 Apply their theoretical and practical skills, and adopt a rigorous and rational approach, to solve problems in the field.
- 4 Engage imaginatively, analytically, and creatively with the molecular basis of matter to understand the materials and processes inherent in the natural world.
- 5 Predict, design and develop the new materials and processes that will be critical to promoting and ensuring health and well-being, and sustainable global progress and prosperity.
- 6 Design and implement efficient, safe and sustainable methods for the synthesis of molecules and materials.
- 7 Develop and employ quantitative methods for the measurement, characterisation, and analysis of the structure and dynamics of molecular systems.
- 8 Understand the nature of scientific research and be able to design, plan and execute research projects.
- 9 Demonstrate an intellectual, critical, ethical and professional approach to Chemistry, and in their thinking generally.
- 10 Demonstrate an aptitude for life-long, self-directed learning as well as collaborative learning in professional settings throughout their careers.
- 11 Exhibit the potential for taking leadership roles in their future careers, and in addressing complex societal and global challenges.

Non-standard Progression Requirements

Additional Standards for Continuation

Approved Additional Standards for Continuation in undergraduate degree programmes in Science (all majors):

Students who return failing grades in a semester amounting to 15 credits, or more, will be identified under the UCD Continuation and Readmission Policy. Students whose rate of progression and performance over two academic sessions (2 years) is deemed unacceptable will be referred to the Academic Council Committee on Student Conduct and Capacity for exclusion from the programme.

Understanding your Degree

Mapping your Degree

International Study Opportunities

Career Opportunities

Further Information & Contact Details

Major Information by Stage

<div class="subHeadCB">Stage 3</div>

Students must select eight core modules and at least 2 options. Additional modules may be selected from the BSc programme or alternatively, students may select 10 credits from elective modules.

<div class="subHeadCB">Stage 4</div>

Students take five core modules and five option modules.

View All Modules

Module ID	Module Title	Trimester	Credits				
Stage 3 Core Modules							
		Autumn	5				
		Autumn	5				
		Autumn	5				
		Autumn	5				
		Spring	5				
		Spring	5				
		Spring	5				
		Spring	5				
Stage 3 Option	ns - A)MIN2OF	: Students	must select at				
least 2 module	es from this list	t.					
		Autumn	5				
		Autumn	5				
		Autumn	5				
		Autumn	5				
		Autumn	5				
		Autumn	5				
		Spring	5				
		Spring	5				
		Spring	5				
		Spring	5				
		Spring	5				
		Spring	5				
		Spring	5				
Stage 4 Core I	Modules						
		2 Trimester	20				
		duration					
		(Aut-Spr)					
		Autumn	5				
		Spring	5				

View All Modules (continued)

Module ID	Module Title	Trimester	Credits				
		Spring	5				
		Spring	5				
Stage 4 Option	Stage 4 Options - B)40F: Select 4 option modules						
from the list below. Please Note: Students who							
successfully completed SCI30080 will be manually							
registered to this module by the relevant School.							
		Autumn	5				
		Autumn	5				
		Autumn	5				
		Autumn	5				
		Autumn	5				
		Spring	5				
		Spring	5				
		Spring	5				
		Spring	5				

Degree GPA and Award Calculation Rules

See the UCD Assessment for further details<hr>

Module Weighting Info <a data-toggle="modal" data-target="#hubModal"</pre>

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Programme	Module Weightings	Award		GPA	
		Rule Description	Description	>=	<=
BHSCI001 Stage 4 - 70.00% Stage 3 - 30.00%	70.00% Stage 3 -	Standard Honours Award	First Class Honours	3.68	4.20
			Second Class Honours, Grade 1	3.08	3.67
			Second Class Honours, Grade 2	2.48	3.07
			Pass	2.00	2.47

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<h1 class="printOnly"> UCD Course Search

Chemistry with Biophysical Chemistry (CBS1) </h1><h3 class="printOnly">Academic Year 2019/2020</h3> The information contained in this document is, to the best of our knowledge, true and accurate at the time of publication, and is solely for informational purposes. University College Dublin accepts no liability for any loss or damage howsoever arising as a result of use or reliance on this information.

<h3 class="noPrint"> Chemistry with Biophysical Chemistry (CBS1)</h3>

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<dl>

<dt>School:</dt>

<dd>Chemistry</dd>

<dt>Attendance:</dt>

<dd>Full Time</dd>

<dt>Level:</dt>

<dd>Undergraduate</dd>

<dt>NFQ Level:</dt>

<dd>8</dd>

<dt>Programme Credits:</dt>

<dd>Stage 1

Core/Option: 55

Electives: 5

Stage 2

Core/Option: 50 Electives: 10

Stage 3

Core/Option: 50 Electives: 10

Stage 4

Core/Option: 60 Electives: 0 </dd>

<dt>Major/Minor Core & Option Credits:</dt>

<dd>Stage 3: 50 Stage 4: 60 </dd>

<dt>Mode of Delivery:</dt>

<dd>Face-to-Face</dd>

<dt>Programme Director:</dt>

<dd>Assoc Professor Vitaly Buckin</dd>

</dl>

</nav>

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