



Welcome to UCD Science!

An information session for parents, guardians & partners

Professor Jeremy Simpson (Dean)

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www.ucd.ie/science [@ucdscience](https://twitter.com/ucdscience)





UCD SCIENCE

- Flexible Curriculum
- World Class Facilities and Teaching
- Dynamic Campus
- Internship Opportunities

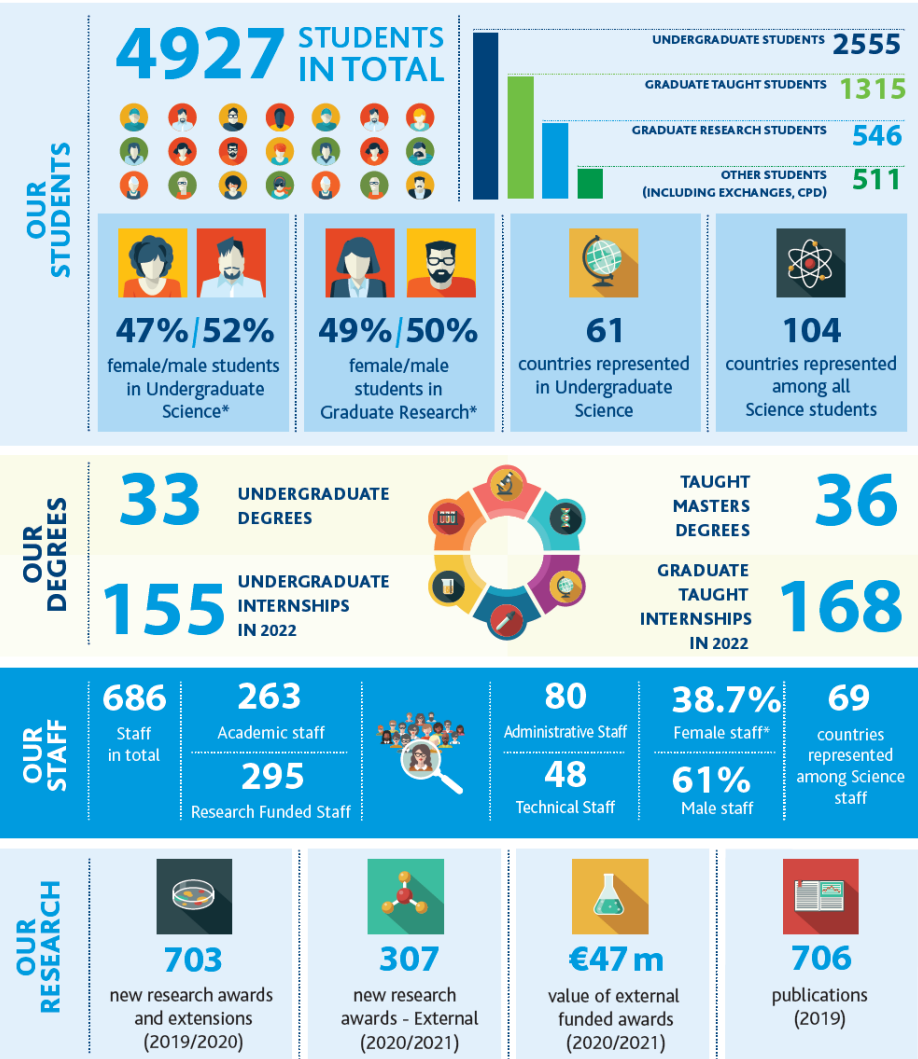


FACTS & FIGURES 2022



University College Dublin
Ireland's Global University

UCD COLLEGE OF SCIENCE



All totals as of June 2022
*In line with UCD's Gender Identity and Expression Policy, a small number of students/staff (-0.3 - 1%) have chosen not to identify a gender.



UCD SCIENCE UNDERGRADUATE COURSES



Science

- 27 Degree Subjects across a range of disciplines
- Degree Subjects organised into thematic streams

Computer Science

- Computer Science
- Computer Science with Data Science

Sustainability

- Sustainability with Environmental Sciences
- Sustainability with Social Sciences, Policy & Law
- Sustainability with Business & Economics

Actuarial & Financial Studies

- Actuarial & Financial Studies



SCIENCE

EXPLORE MULTIPLE STREAMS
OR CHOOSE ONE STREAM

CAO points 555



**Biological,
Biomedical &
Biomolecular
Sciences**



**Earth &
Environmental
Sciences**



**Chemistry
(includes
Medicinal/
Sustainable/Bi
ophysical)**



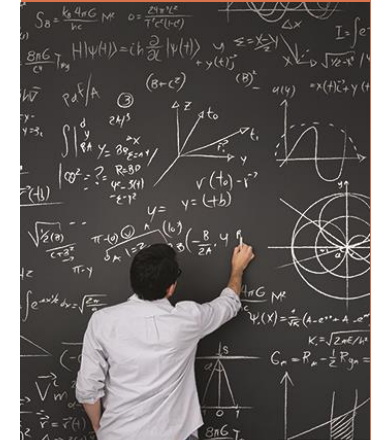
**Physics
(includes
Theoretical/
Astronomy &
Space
Science)**



**Mathematics
(includes
Applied/
Financial/
Statistics)**



**Science,
Mathematics &
Education**





SCIENCE

Biological, Biomedical & Biomolecular Sciences



- **Common First Year for all Biology subjects**
- **Study a minimum of 2 Degree Subjects of your choice in Second Year**

10 Degree Subjects

- Biochemistry & Molecular Biology
- Cell & Molecular Biology
- Environmental Biology
- Genetics
- Microbiology
- Neuroscience
- Pharmacology
- Physiology
- Plant Biology
- Zoology





SCIENCE

Earth & Environmental Sciences

- Students interested in Earth & Environmental Sciences and Biological, Biomedical & Biomolecular Sciences can study both streams in First Year.

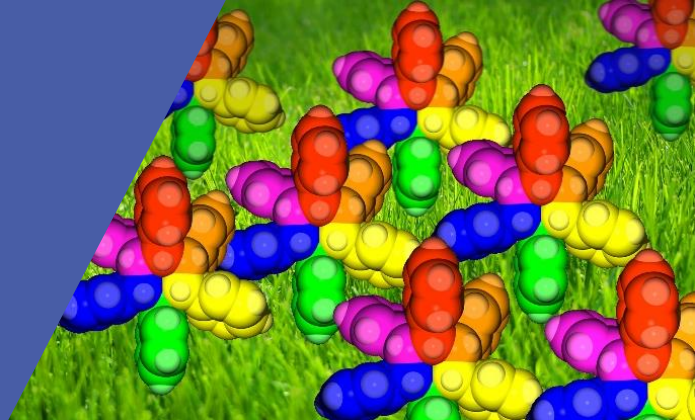
2 Degree Subjects

- Environmental Biology
- Earth Sciences





SCIENCE Chemistry



- **Common First Year for most Chemistry subjects**
- **Students interested in Medicinal Chemistry & Chemical Biology will have to study some Biology.**
- **Students interested in Chemistry and Biological, Biomedical & Biomolecular Sciences can study both streams in First Year.**

4 Degree Subjects

- Chemistry
- Chemistry with Environmental & Sustainable Chemistry
- Chemistry with Biophysical Chemistry
- Medicinal Chemistry & Chemical Biology





SCIENCE

Physics



- Students can study Physics subjects from First Year.
- Students interested in Physics and Mathematics can study both streams in First Year.

3 Degree Subjects

- Physics
- Physics with Astronomy & Space Science
- Theoretical Physics





SCIENCE Mathematics

- **Common First Year for all Mathematics Degree Subjects available**
- **Study a minimum of 2 Degree Subjects of your choice in Second Year**
- **Students interested in Mathematics and Physics can study both streams in First Year**

4 Degree Subjects

- Applied & Computational Mathematics
- Mathematics
- Financial Mathematics
- Statistics





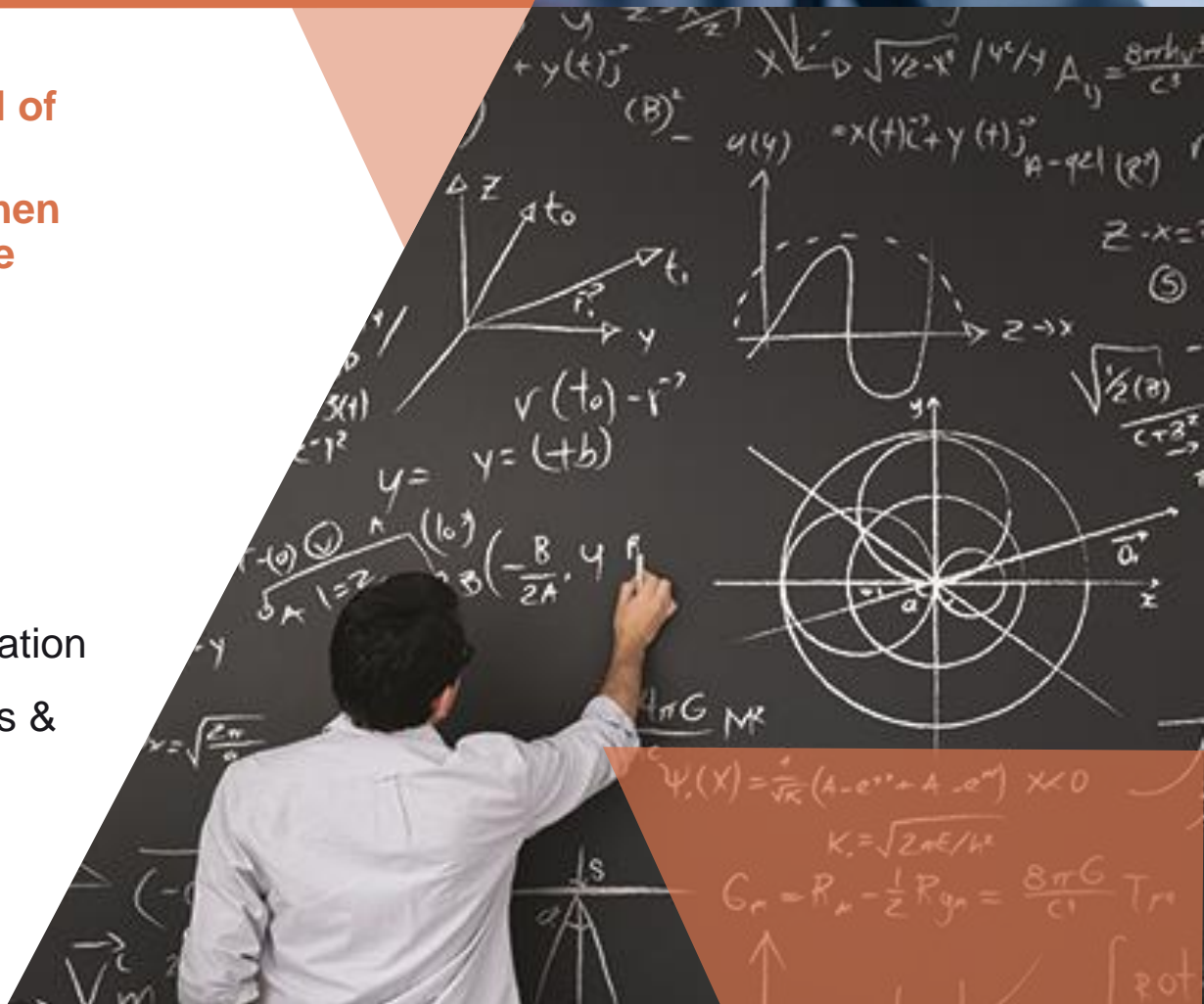
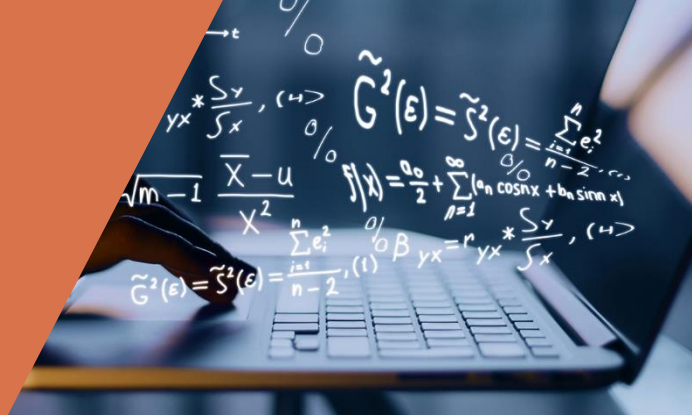
SCIENCE

Science, Mathematics & Education

- All degrees are accredited by the Teaching Council of Ireland.
- Students graduate with a 4-Year Level 8 BSc and then continue to a 1-Year MSc in Mathematics & Science Education.

5 Degree Subjects

- Applied Mathematics, Mathematics & Education
- Biology, Mathematics & Education
- Chemistry, Mathematics & Education
- Computer Science, Mathematics & Education
- Physics, Mathematics & Education





INTERNSHIPS AND PROFESSIONAL EXPERIENCE

Science & Computer Science*

3 Months

Professional Science Placement for Third Year students

5-6 Months

Industry placement (subject dependent)

** Available in most degrees but all placements are competitive. Some are in academic environments or are field trips that form part of a course.*



Actuarial & Financial Studies*

6 Months

Professional placement built into the programme

** Placements are not guaranteed and are competitive. Our dedicated Internships Managers help students with the application process. The companies we work with each year are subject to change.*

Companies we have worked with in the past include:

- Intel
- Amazon
- Aon
- EY
- Salesforce
- Irish Life
- Dublin Zoo
- Takeda
- Allianz
- Google
- Ericsson
- EPA
- Deloitte
- Sanofi
- Citibank
- Pfizer
- Deutsche Bank
- Mastercard





OPPORTUNITIES FOR SCIENCE GRADUATES



Pharmaceutical,
Biotechnology,
Medical Device
and Chemical
Industry

Energy,
Conservation
Wildlife &
Environment

Natural
Resources

Semiconductor,
Nanotechnology
& Space Industry

Computing,
Risk, Finance
& Analytics

Further
Education
& Research



DN200 Key Decisions and Pathway to Graduation

- Students choose their **degree subject** (i.e. one of the 27 possibilities)– after they have studied it for a while
- 1st year – **engage with the principles**
 - Students **don't** have to study a bit of everything
 - Cover at least 2 subjects
- End of 1st year – choose 2 to 4 subjects
- End of 2nd year – **choose their degree subject/major**
- 3rd and 4th year – focus on chosen subject

Degree Pathways summarised in brochure for all 27 subjects including information on careers etc.

- Available on line <https://www.ucd.ie/science/t4media/ucdscience.pdf>



“Jargon Buster”

- UCD is **“trimesterised”** : each stage (year) is divided into 3 trimesters, with exams at the end of trimester 1(Autumn) & 2 (Spring). Current trimester: (15 weeks: **12 (11)** lecture weeks + 1 study week + ~2 exam weeks) ends on **Thursday December 21st**
- UCD is **“modularised”** : each stage is divided into 12 **modules**.
Each module is worth 5 **credits** (60 credits per year)
- **Core & Optional modules** : modules within Science
- **Elective modules/UCD Horizons** : 1 in first year and 2 modules in next two years from “anywhere” (e.g. Chinese, Film studies, Philosophy...or Science)



Workload & Work Practice

- **Workload** includes Lectures, Tutorials, Laboratory classes, Workshops, Small group activity...amounts to ~40 hours per week, for the 15 weeks of a trimester – it's a **full time job!**
- Most modules include **continuous assessment**
- **Work practice** : students have a wide range of resources at their disposal, we are all here to help, but they **must take responsibility for their own learning**
- Students must form critical judgements, challenge knowledge taken for granted, become **independent thinkers** and learn with and from other students & staff



Assessment and Exams

- **Grades (Grade Points)** range from A+(4.2), A(4.0),...,D- (2.0), E,..., NG.
- **Grade Point Average (GPA)** : trimester/stage average of Grade Points. GPA of 2.0 is a pass. GPA of 4.2 is “perfect” !
- **Degree GPA/Class** : 70% final year, 30% penultimate year
- **Resit examinations** : Grade Point is capped at 2.0 (*resits are free*)
- **Repeat examinations** : Grade Point is reduced by 0.6
- **Extenuating Circumstances** : serious illness, accident, family bereavement, serious personal issues. Application should be made when assessment & exams are affected.
- **Communication** of results, performance etc. is **only** with the student and **not** with parents/guardians/partners.



UCD Student Supports

we all want our students to succeed

- **Programme Office**
 - General enquiries on academic, registration or other queries
 - Often the first port of call
- **Academic Staff**
 - Available to discuss academic and other issues
- **Student Feedback**
 - Module questionnaires
 - Staff/Student committees
- **Peer Mentors**
 - First years have been assigned a peer mentor who is a student in Stage 2 or 3 of the programme
- **Maths Support Centre**

College of Science Student Advisers

Student Advisers for Science

Dani Foy
Megan Kuster

UCD Student Advisers Website





UCD Student Advisers Supporting Students



Individual level

Any issues from practical to more serious and confidential in nature

- Advice and Support (Social, Emotional Personal Financial)
- Listening
- Referral
- Advocacy
- Advisers attached to each programme

Programme Level

Facilitating a positive learning environment

- Peer Mentoring
- Staff/Student Liaison Committees
- Advising on student support strategy
- Co- manage complex student cases
- Representation at programme and exam boards

University Level

Promoting student engagement, retention and student experience

- Representation on Committees
- Student Financial Aid
- Orientation
- Consultation on Policy development



Academic supports

Library, writing center, maths support.....



Student Advisors

Offer assistance when personal, financial or social difficulties arise.....

UCD ALL

Committed to supporting access to Higher Education for All...



Careers Network

Join the dots between, UCD and your future Career...

Chaplaincy

Offers student support, pastoral care and spiritual direction....

Counsellors

Psychological support to assist students with personal challenges....



Student Desk

Provides assistance to students with administrative needs and much more...

UCD EDI

Supporting an inclusive and diverse university community for all.



Healthy UCD

Sleeping, eating, exercise, life hacks and all things healthy.....



Student Health

On-campus medical, psychological and psychiatric care for UCD registered students....

UCD SU

Your Union, Your Voice.....



College Schools/Offices

Provides guidance to student on all matters relating to your programme of study, and so much more...



Ways to Show Your Support

➤ Stay Connected

Communicate via phone, e-mail, and 'snail' mail. Students love to get real mail, especially care packages. Expect that your student will not respond to all of your contact but know that s/he appreciates hearing from you.

➤ Checking-In

Give your student the opportunity to share feelings and ideas with you. Trust your instincts.

➤ Be Knowledgeable About Campus Resources

Utilize the website. By acting as a referral source, you can demonstrate that you are interested in your student's life at the University, and at the same time, you empower your student to solve his or her own problems.

➤ Continue to Have Difficult Conversations

Create an atmosphere of open communication, and your student will not only appreciate that you respect him or her as an adult, but s/he will also be more likely to turn to you for guidance.

➤ Ask Questions—But Not Too Many

Most first-year college students desire the security of knowing that someone from home is still interested in them.

➤ Expect Change

Your student will change. College and the experiences associated with it can effect changes in social, vocational, and personal behavior and choices. It's natural, inevitable, and it can be inspiring. Often though, it's a pain in the neck.

➤ Do Not Tell Your Student That **“These Are the Best Years of Your Life”**

The first year of college can be full of indecision, insecurities, disappointments, and most of all, mistakes. It's also full of discovery, inspiration, good times, and exciting people.

➤ Trust Your Student

College is also a time for students to discover who they are and hopefully have fun too.



Parents/Guardians Support

Time of Transition: University environment, Style of study, Leaving home

Diane Barth, psychologist in US, suggests:

- “The most important thing you can do is try to maintain communication with your child.”
- “Give advice **sparingly** and help them to come to their own decisions.”
- "Stay in regular contact"



Useful Links

THESE SLIDES (and lots of other info) are at

www.ucd.ie/science/study/currentundergraduatesciencestudents/

DEGREE PATHWAYS for ALL Science degrees

<https://www.myucd.ie/courses/science/>

General UCD info. on student supports

<https://www.ucd.ie/studentcentre/services/studentssupport/>

Careers & internships for UCD Science students

<http://www.ucd.ie/science/careers/>

www.ucd.ie/science

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