

# Welcome to UCD Science!

An information session for parents, guardians & partners

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## **UCD SCIENCE**

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









FACTS & FIGURES 2022





4927 STUDENTS IN TOTAL

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0 0 0 0 0 0 0

GRADUATE TAUGHT STUDENTS 2555

GRADUATE TAUGHT STUDENTS 1315

GRADUATE RESEARCH STUDENTS 546

OTHER STUDENTS 511

(INCLUDING EXCHANGES, CPD)



female/male students

in Undergraduate

Science\*

49%/50%

female/male students in Graduate Research\*



61
countries represented
in Undergraduate
Science



104
countries represented
among all
Science students

OUR DEGREES UNDERGRADUATE DEGREES

UNDERGRADUATE INTERNSHIPS IN 2022



TAUGHT MASTERS DEGREES

GRADUATE TAUGHT INTERNSHIPS IN 2022 **36** 

168

OUR STAFF **686**Staff

263 Academic staff

295
Research Funded Staff

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**80**Administrative Staff

48
Technical Staff

38.7% Female staff\*

61%

countries represented among Science staff

OUR RESEARCH 703

new research awards and extensions (2019/2020)



307 new research

awards - External (2020/2021)



€47 m

value of external funded awards (2020/2021)



706
publications (2019)

All totals as of une 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 & Computer Science\*

3 Months

5-6 Months

**Professional Science Placement** for Third Year students

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 700
- Takeda
- Allianz
- Google
- Ericsson
- EPA

- Deloitte
- Sanofi
- Citibank
- Pfizer
- Deutsche Bank
- Mastercard





# **Computer Science**

**CAO Points 558** 

 Does not assume prior knowledge of Computer Science (including prior programming)

 Emphasis is on software development and engineering, theory and practice

Industry Internship in Third Year (Multinational and Irish companies available) OR a Software Project\*

## 2 Degree Subjects

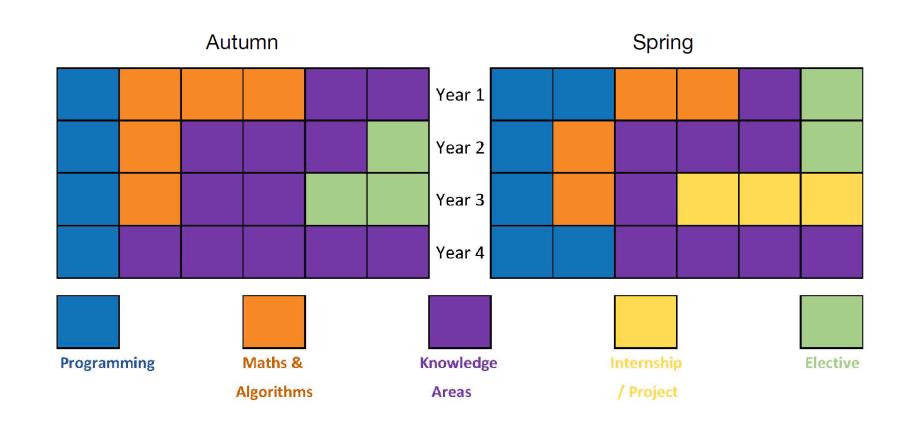
- Computer Science
- Computer Science with Data Science

\* All internships and placements are secured on a competitive basis.





# What do they learn over 4 years?





# What are the opportunities for Computer Science graduates?





Computing,
Analytics,
Entrepreneurship,
Computer
Security

Software
Developer,
Quality Insurance
Engineer,
UX Designer

Further Education
& Research to
become Computer
Scientists













# Sustainability

**CAO Points 529** 

 Common entry with guaranteed choice to pursue one degree subject at the end of First Year, assuming students meet all the academic requirements of the course.

## 3 Degree Subjects

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

First Year is structured so that students can progress into their preferred degree option in Second Year.





# What will students study in first year? - Core modules

- Mapping a
  Sustainable World
- Environmental Change & Policy
  - Intro to Sustainability
- SustainabilityChallenges





- Business in Society
- Economics and Sustainability



- Principles of Scientific Enquiry
- Intro to Earth Sciences





# What will students study in first year? - A selection of option modules

- Earth & Humanity
- Anthropology: An Introduction
- People, Places,Regions
- Climate Change: Causes and Consequences
- How sustainable is my food?

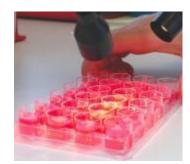




- Business Plan
- Intro to Accounting
- Energy, ClimateChange & Policy



- Life on Earth
- Astronomy & Space Science
- Cell & Plant Biology





# Field Trip, Exchange and Internships

## Stage 3

- Field trip to
   Copenhagen
   (September before
   Stage 3 begins)
- Exchange opportunities (Spring of Stage 3) – Asia, Australia, US, Spain, the Netherlands, Sweden

Internship opportunities during the summer (6-12 weeks)





# **Actuarial & Financial Studies**





**CAO Points 613** 

- This degree is aimed at students with a very high proficiency in Mathematics
- Ideal for students considering a career in the actuarial or financial professions

## 1 Degree Subject

- The Actuarial and Financial Studies degree at UCD offers potential exemptions from the Core subjects CS1, CS2, CM1, CM2, CB1, CB2 and CP1 of the professional examinations of the Institute and Faculty of Actuaries, UK.
- In Third Year there is a 6-month professional placement in insurance or financial institutions in Ireland, UK or the USA. This forms part of the degree.





# **Key Decisions and Pathway to Graduation**

- Students choose their degree subject after they have studied it for a while
- 1<sup>st</sup> year engage with the principles
- End of 2<sup>nd</sup> year choose their degree subject/major
- 3<sup>rd</sup> and 4<sup>th</sup> year focus on chosen subject



## "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

# UCD DUBLIN

## **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**









#### 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**

Cinema V

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/studentsupport/

**Careers & internships for UCD Science students** 

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