

# ABOUT THE UNIVERSITY ABOUT OUR SUMMER OF SOUTHAMPTON

The University of Southampton has an outstanding reputation for Electronic Engineering. We are a member of the prestigious Russell Group of research universities and our degrees are ranked amongst the best in the UK. Our graduates are highly regarded by leading employers and we work closely with industrial partners, both in our research and our teaching.

Our popular Summer Taster Courses have been running successfully for many years. They are a great way to find out more about subjects which are at the cutting edge of technology and to explore whether this sector is right for you.

†Summer school activities may be subject to change to accommodate social distancing in response to the ongoing COVID 19 pandemic. Further details will be available closer to the events.

# TASTER COURSES

These one-week residential courses will enable you to experience either Biomedical Engineering (Electronics) or Electronics and Computer Science. You will live life as a university student and enjoy a busy programme:†

- → Try your hand at real experiments in our state-of-the-art laboratories
- → Learn about our teaching and research from our globally renowned lecturers
- → Get to know our current students and recent graduates
- → Enjoy social events and meet fellow students
- → Experience life on campus and in our halls of residence
- → Meet leading employers at our annual Taster Course Careers Fair
- $\rightarrow$  £299 for a one-week residential experience. (reduced rate and full bursaries available)

# Exclusive £1000

degree scholarship for course attendees

#### The Zepler Scholarship 2023

This exclusive scholarship from the School of Electronics and Computer Science (ECS) at the University of Southampton provides £1000 for students in the first year of their degree\* who meet all of the following conditions:

- → attended<sup>††</sup> our Electronics and Computer Science or Biomedical Electronic Engineering Taster Course in 2020, 2021 or 2022 all students that attended will be considered
- → selected an ECS degree at Southampton as their firm acceptance through UCAS, and enrol on this programme
- → meet (or exceed) their offer and obtain at least A\*AA at A-Level (to include/exclude any subjects specified in the wording) are eligible for UK fees
- \*Scholarships are payable at the end of the first term of study in year one. All information correct at the time of going to print (November 2021). Students may only receive one scholarship from the University of Southampton in any one year (however they may hold both a University scholarship and a bursary).
- †† 2021 and 2022 participants who have received an attendance certificate are regarded as having attended. As the 2020 Taster Course was cancelled due to the COVID-19 pandemic, any student who was accepted onto that Taster Course will also be considered to have attended.

## Find out more: www.taster.ecs.soton.ac.uk

"I enjoyed doing electronics. which I hadn't done

before"

"Mentors provided first hand experience of the courses and campus."



# ELECTRONICS AND COMPUTER SCIENCE TASTER COURSE

25-29 JULY 2022, course fee £299 (reduced rate and full bursaries available)

If you love maths, technology or science, this course will enable you to apply your skills to computer science and electronic engineering. You will work on a variety of challenges, including investigating and designing solutions to real-world problems in our state-of-the-art undergraduate labs.†

#### What is Computer Science?

We use computers in every area of our lives; but getting computers to do what we want them to do requires specialist expertise and knowledge. Computer science is a problem solving science, modelling and analysing problems and providing solutions in engineering, health care, business and industry.

On the course, you will explore the domains of artificial intelligence, computer vision and cybersecurity, developing your programming skills and applying them to real problems.

### What is Electronic Engineering?

Electronics is the use of electricity to communicate, compute and control the world around us – from the processor in your phone, to the intelligent prosthetic arms that allow amputees to lead a normal life. Electronics is an engineering discipline and is underpinned by mathematics and physics. These are applied to designing and inventing cutting-edge products and systems.

On the course, you will simulate, prototype and solder together electronic circuits built from logic gates - the basic building blocks for all digital electonic systems, including computer processors - as well as learn about how complex chips are fabricated in our nanofabrication cleanrooms.



for degree scholarships from the UK Electronics Skills Foundation

Awarded more degree scholarships from the UK Electronics Skills Foundation than any other university.

"The time I have spent in the labs has given me a lot of valuable skills and made me more sure of myself in regards to the practical aspects of the course."

**Lucy Hodgins** 

MEng Biomedical Electronic Engineering, third year





"Very informative and fun, and

helped me figure out what I would like to study at university."

# BIOMEDICAL ENGINEERING (ELECTRONICS) TASTER COURSE

25-29 JULY 2022, course fee £299 (reduced rate and full bursaries available)

Learn about the new and innovative health and wellbeing technologies that biomedical engineers create, from AI assisted diagnostics and digital health systems, to rehabilitation technologies and implantable sensors. We will teach you how to design and construct a biosensor and analyse its performance, collect and analyse your own muscle movement signals using neural networks, and build a heart rate (ECG) sensor. You will also learn about miniaturised "Lab-on-a-Chip" diagnostics and smart signal analysis for wearable healthcare.†

### What is Biomedical Engineering (Electronics)?

Biomedical engineers design and create new technologies to solve medical and healthcare challenges created by an ageing population. Within this field, the intersection of state-of-the-art electronics and biomedicine is leading a revolution in new digital health solutions, intelligent home monitoring and smart biosensors.

"Studying at Southampton has been a truly incredible experience – there are so many opportunities and facilities that you have access to."

#### Lydia Moore

MEng Electical and Electronic Engineering with Industrial Studies, 2021

£8<sub>m</sub>

laboratory refurb including
Teaching Laboratory
benches, each with mixed
signal oscilloscope, digital
multimeter and arbitrary
waveform generator



## **HOW TO APPLY**

## If you would like to apply to attend one of our Summer Taster Courses:

- 1. Complete the application form at: www.taster.ecs.soton.ac.uk
- 2. We will acknowledge your application and notify you of our decision within 14 days.
- If we offer you a place on the course, you will have a further seven days to pay.

Please note these courses are very popular and are usually over-subscribed. All applications are individually reviewed by our admissions team.

#### **ELIGIBILITY**

### Typical requirements for our Summer Taster Courses are:\*

- → attained mostly grades of 7 or above at GCSE
- → currently in year 12 and age 16+ on 24 July 2022.
- → currently studying in the UK, or are a British citizen studying abroad
- → for the Electronics and Computer Science Taster Course: currently studying A-Level Maths and either Physics, Computing, Electronics, Biology, Chemistry or Further Maths
- → for the Biomedical Engineering (Electronics) Taster Course: currently studying A-Level Maths and either Physics, Biology, Chemistry or Further Maths
- \*Equivalent qualifications apply if you have studied outside the UK

#### You are welcome:

- → No prior experience or knowledge of computer science, electronics or programming is necessary.
- → There is no obligation to apply to the University of Southampton following the course.
- → You may just want to explore these subjects further and have no plans to study them at university.
- → We are committed to providing opportunities for all, regardless of gender. 50 per cent of our initial allocation of places are reserved for students who identify as female.

#### **Timing and course fees**

The course commences at 11.00am (registration from 10.00am) on Monday 25 July and finishes at 2.00pm on Friday 29 July 2022.

The fee for attending the course is £299, which includes overnight accommodation Monday - Thursday nights, and all food and drink for the week.

If you would prefer to arrive on Sunday 24 July, overnight accommodation and dinner on Sunday night, and breakfast on Monday are available for an additional £59.60. Overnight accommodation is not possible on Friday 29 July but we can provide a list of local hotels on request.

#### **Bursaries and reduced fees**

You may be eligible for a full bursary (covering the full course fee), or a reduced fee of £239.

Full bursaries are available to students who meet at least two of the following criteria:

- → you will be the first generation in your family to attend university, excluding brothers and sisters
- → your current home postcode is in an area with low levels of progression to Higher Education\*
- → you attend a school/college in the lowest two quintiles for average QCA points per A level student\*
- → you are in receipt of a 16-19 Bursary or similar grant OR received Free School Meals at any point during your secondary school education
- → you are living or grew up in Local Authority care
- → you are currently a Young Carer or Young Adult Carer

A reduced course fee of £239 is available to students who match one of the criteria above OR your whose current home postcode is an area with medium levels of progression to Higher Education\*

\*More information is provided on our website and online application form.

Please note bursaries do not cover the cost of additional accommodation and meals on Sunday night, or any travel expenses. Full bursary holders may be able to claim a contribution towards reasonable travel expenses by public transport. Please contact us at ecstaster@soton.ac.uk for more information.



## **Find out more:**

ecstaster@soton.ac.uk www.taster.ecs.soton.ac.uk





The University of Southampton has been recognised for work undertaken to address gender equality in science and engineering with an Athena SWAN Silver Award



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