

Get ready for BEng(Hons) Robotics

I hope you are enjoying your summer holiday and are looking forward to starting at UWE Bristol. I warmly welcome you to our BEng(Hons) Robotics course. I thought it would be helpful to provide some information below that will help you prepare to start with us this autumn.

Gary Atkinson

Programme Leader

Before you start

We are looking forward to welcoming you in September for Starting Block and the beginning of your programme.

Starting Block will help you settle into university and to help you get to know your teaching team and course mates. We will help you find your way around, get used to our systems, and practise the skills you need to make a strong start. Look out for further emails and explore the Starting Block website with more details.

Your <u>timetable</u> will be available to you via MYUWE (login required) once you have started the registration process. Please visit the <u>'Understanding your teaching timetable'</u> website to find out when your timetable will be published.

Preparing and arrival

You can find everything you need to know about registration, Starting Block and the start of teaching, on our <u>Preparing and Arrival</u> webpage. Take a look at our website to familiarise yourself with our facilities and services such as the <u>library</u>, <u>study skills</u>, <u>academic support</u>, <u>health and wellbeing support</u> and much more.

Our study skills workbook introduces you to essential services as well as key skills.

You can also explore our support for careers and enterprise. <u>UWE Careers & Enterprise</u> provide a range of workshops, appointments and a huge range of online resources to support students in realising their future ambitions. The <u>Careers Toolkit</u> is our online portal to finding vacancies, booking onto events and accessing a range of resources.

Registration

Once you have satisfied all admissions requirements, we'll send you your login details for our IT systems to enable you to activate your university email account. Once your account has been activated, you'll gain access to the MYUWE platform where you can register. Note that your login details for MYUWE are different to those used for the UWE Welcome website. Registration for September programmes will only be open from August onwards. You can find guidance and further information on our Registration website.

ID card - upload your photo now

We can only print your ID card if you have added your photo to MYUWE. To avoid delays, upload your photo as soon as you receive login details. For help, go to our student card quidance.

Engage with your programme

Start your learning

Key elements of Robotics are mathematics, computer programming languages (in particular, C Programming), modelling and simulation (e.g. Matlab/Simulink, Autodesk Fusion and Multisim). I strongly advise you to use the time between now and induction week to undertake the following activities:

- 1. **Mathematics Refresher:** you may wish to start exploring <u>math centre</u> (online resource), which you will find useful during the first year of your university studies. Key concepts include Fourier series, differential equations, algebra, differentiation, integration and Laplace transforms.
- 2. Modelling and Simulation: Matlab/Simulink is an industry standard tool that allows you to develop complex models and simulations to assist in designing robotic systems. You will use it right from your first year and is available on all computers within the Engineering building. Why not download a free trial copy via the Math works website and familiarise yourself with the software through the following free online tutorials.
- 3. **Computer Programming:** Start learning to program in the C programming language. You can do this by starting to work through the <u>free online course on C and ComputerScience</u>.
- 4. Visit the UWE website, find the pages for the <u>School of Engineering</u>, and look up the Robotics staff: they will be teaching you, they will be your Academic Personal Tutors, and you will generally be seeing them around. It's good to know these faces in advance!

Read around your subject

To succeed within your chosen programme, you will need to think critically about key issues and practices. Here are some books and resources to help you to understand the scope of your programme:

Key modules are 'Fundamental Robotics Principles', 'Programming for Engineers' and 'Practical Electronics'. These modules are complementary to other aspects of the course in your first year and lay the foundation for several robotics modules that follow in subsequent years. You may want to look at these books prior to starting:

- Ben-Ari, Mordechai, Mondada, Francesco Elements of Robotics, Springer Open, 2018.
- Fiore, James, Embedded Controllers Using C and Arduino, 2 Ed., dissidents, 2018.

You can access these books online from our library.

If you are completely new to programming, I recommend that you acquire (new or second-hand) a "Studying Programming" textbook by Sally Fincher.

We will be happy to discuss any aspects of this preparatory work with you.

Be prepared

Access support

Check the information on our <u>Disability web pages</u> so you know what you need to do. If you need any urgent additional mobility or other support to fully access all activities during your studies, contact me as your programme leader.

Get equipped

The University has computers on all our campuses for you to use during your studies. These provide access to our core digital learning tools and any specialist software required for your course. You may have scheduled sessions in computer labs or other specialist facilities, and you will be able to use open-access PCs for self-study.

UWE Bristol licenses many specialist software packages for use on personal laptops for the duration of your course. If you're struggling to meet the financial demands of your course, please contact the Student Money Service team for advice and guidance.

See the UWE website for detailed information on <u>choosing your IT equipment</u> including <u>recommended specifications</u>.

The core software used in your course includes:

- CLion
- Matlab/Simulink
- AutoDesk suite (including Fusion and Eagle)
- Multisim (currently, only for Windows)

These packages will run on Windows, but may also run on macOS, and Linux devices.

International students

<u>The Global Student Support Team</u> offer information and advice to ensure you receive all the support you need to get the best from your time at UWE Bristol. They are here to help you to settle in when you first arrive at UWE Bristol and organise social events to help you to adapt to your new environment.

Who to contact if you have questions

For any questions about the programme, please contact me: **Gary Atkinson** via email at gary.atkinson@uwe.ac.uk

Please note: this information has been provided on the assumption that you will meet the conditions of your offer and be eligible to take up your place.

Entry: September 2025 Last updated: Spring 2025