Get ready for BEng(Hons) Electrical and Electronic Engineering

I hope that you are enjoying your summer holiday and are looking forward to starting at UWE Bristol. As your Programme Leader, I warmly welcome you into our BEng(Hons) Electrical and Electronic Engineering course. I have provided some information below that will help you to prepare for starting with us in September.

Dr.-Ing. Joerg Mossbrucker
Programme Leader

Before you start

We are looking forward to welcoming you in the week commencing 15 September for the 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 timetable will be available to you via MYUWE (login required) once you have started the registration process. Please visit the 'Understanding your teaching timetable' 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 Preparing and Arrival webpage. Take a look at our website to familiarise yourself with our facilities and services such as the library, study skills, academic support, health and wellbeing support 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**.** UWE Careers & Enterprise provide a range of workshops, appointments and a huge range of online resources to support students in realising their future ambitions. The Careers Toolkit 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 guidance.

Engage with your programme

Start your learning
Key elements of Electrical and Electronic Engineering are mathematics, computer programming languages (especially C – Programming on both Windows and Linux platforms), modelling and simulation (Matlab, Multisim, LTSpice, Quartus). I strongly advise all new students to use the time between now and induction week in September to undertake the following activities:

1. Mathematics Refresher: you may wish to start exploring math centre (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. MATLAB is an industry standard tool that allows you to develop complex simulations to assist in, for example, designing electrical and electronic engineering systems. You will use it right from your first year and it 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. LTSpice is an industry standard tool that allows you to simulate complex electronic circuits. The software is freeware (as in free) and can be downloaded here. Tons of tutorials can be downloaded for free from the internet as well.

4. Start to learn to program in the **C programming language**. You can do this by starting to work through free online courses on C such as this one.

5. Join our Engineering@UWE Facebook and Twitter accounts, where you will find a supportive environment where to ask any questions you may have about the course.

6. Visit the UWE website, find the pages for the Department of Engineering, Design and Mathematics, and look up the Electrical and Electronic Engineering 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!

7. Visit the UWE Library pages to find out about all the services the Library offers. Then have a go at using the Library search tool (for example by searching for critical work on one of the primary texts in your reading lists). Good research is crucial to your academic success and it benefits from practice.

After you arrive at UWE, members of staff will be happy to discuss any aspects of this preparatory work that you have found problematic.

Start your reading
A key skill which is required to achieve a high level of success within your chosen programme is the ability to think critically about key issues and practices. To help you to enhance these skills and be ready to engage with your studies, you should start to read and research around your subject before you arrive.

You will be taking key core modules in your first year, including Maths, Principles of Electrical Engineering, and Applied Electronics. These modules lay the foundation for a number of Electrical and Electronic Engineering modules that follow in subsequent years.

Here are some of our recommended titles for you to read, to be inspired by and to understand the scope of your degree programme:

- Boylestad, R. L (2003) Introductory Circuit Analysis (10th Edition) Prentice Hall
- Floyd, T. L. (2008). Digital Fundamentals, Pearson Education (ISBN: 0-13-235923-5)
- Kernigan, B.W & Ritchie, B (1988) The C Programming Language 2nd Ed. New Jersey:Prentice Hall.

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

If you do intend to purchase the above books (alternatively copies are available in the UWE library), then second hand copies are better value for money.

Connect with others
You will be joining a scholarly community of academics and students with a passion for learning about your subject. There is a range of opportunities for you get involved in the community. Join the UWE's Formula Student which accepts students from all academic years with a goal of overseeing their personal development progressing them to a leadership position in the coming years.

Be prepared

Access support
Check the information on our Disability web pages 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 choosing your IT equipment including recommended specifications.

The core software used in your course includes:

- **Matlab**
- **Clion**
- **Quartus**
- **Multisim**
- **LTSpice**
- **Code Composer Studio**
- **Autodesk Eagle**
- **Microchip MPLAB**

Most of these packages will run on Windows (and Mac with a WINE Environment) devices but not on tablets or Chromebooks. Please note that some of the software packages are computation and memory-intensive and require modern processors and sufficient memory and storage space.

The size of the screen is depending on your personal preferences and not critical for any of the used software. Please note, however, that CAD programs such as Multisim and Eagle benefit from larger screens. We recommend a full HD screen resolution.

Your year-1 laboratory work contains 80% of logbook-based experimental work. You will be provided with a free tool kit that includes clipper, plier and screwdrivers. In addition, if you would like to buy software that are normally used, student editions might be available. To find out further information on buying software, you will need to contact the UWE, IT Help desk team.

International students

The Global Student Support Team 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: **Joerg Mossbrucker** via email at Joerg.Mossbrucker@uwe.ac.uk

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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