

Unit and programme catalogues

University of Bristol

Programme structure: Advanced Microelectronic Systems Engineering (MSc) - what's running in 2024/25

Please note: Programme and unit information may change as the relevant academic field develops. We may also make changes to the structure of programmes and assessments to improve the student experience.

This section describes which Units you will take in which year of study. It indicates which units are mandatory and where you will be able to choose. The overall pass marks you will need to achieve in order to progress or achieve an award are shown. The full regulations concerning progression and completion are held in the [University's Regulations and Code of Practice](#). Any particular aspects of your programme that are unusual will be highlighted. If any Units are must pass this will be shown below. The linked unit specifications detail any additional requirements.

[What do the Levels represent?](#)

[What do the teaching blocks \(TB\) mean?](#)

- Year 1 (2024/25)

Unit name	Unit code	Credit points	Status	Teaching Block
Digital Filters and Spectral Analysis (M)	EENGM1400	10	Mandatory	TB-1
Integrated Circuit Electronics	EENGM6011	10	Mandatory	TB-1
Embedded and Real-Time Systems	EENG34030	10	Mandatory	TB-1
Engineering Research Skills	EENGM0004	20	Mandatory	TB-2
VLSI Design M	EENGM4050	10	Mandatory	TB-2
Advanced DSP & FPGA Implementation	EENGM4120	10	Mandatory	TB-2
Analogue Integrated Circuit Design	EENGM6030	10	Mandatory	TB-2
<i>MSc Advanced Microelectric Systems Engineering</i>		180		

Unit name	Unit code	Credit points	Status	Teaching Block
Optoelectronic Devices and Systems (M)	EENGM6020	10	Mandatory	TB-1
Radio Frequency Engineering (M)	EENGM6500	10	Mandatory	TB-1
Research Project	EENGM8000	60	Mandatory	AYEAR
Students should also select 20 credit points from the following list:				
Design Verification (Teaching Unit)	COMS30026	0	Optional	TB-1
Design Verification	COMS30024	10	Optional	TB-1
Learning, Computation and the Brain	COMSM0094	10	Optional	TB-1
Sensing Technologies for Diagnostics and Monitoring	EENGM0031	10	Optional	TB-1
Image and Video Coding	EENGM4021	10	Optional	TB-2
Bio-Inspired Artificial Intelligence	EMATM0029	10	Optional	TB-2
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Progression/award requirements

The pass mark set by the University for any level 7 unit is 50 out of 100.

For detailed rules on progression please see the [Regulations and Code of Practice](#) for Taught Programmes and the relevant faculty handbook.

Degree classifications:

An award with Merit or Distinction is permitted for postgraduate taught masters, diplomas and certificates, where these are specifically named entry-level qualifications. An award with Merit or Distinction is not permitted for exit awards where students are required to exit the programme on academic grounds. An exit award with Merit or Distinction may be permitted where students are prevented by exceptional circumstances from completing the intended award.

The classification of the award in relation to the final programme mark is as follows:

Award with **Distinction***: at least 65 out of 100 for the taught component overall and, for masters awards, at least 70 out of 100 for the dissertation. **Faculties retain discretion to increase these thresholds.

Award with **Merit***: at least 60 out of 100 for the taught component overall and, for masters awards, at least 60 out of 100 for the dissertation. Faculties retain discretion to increase these thresholds.

* The MA in Law has separate regulations for awarding distinction and merit.

** For the award of Distinction, the Faculty of Engineering requires at least 70 out of 100 for the taught component overall and, for masters awards, at least 70 out of 100 for the dissertation.

Diploma/certificate stages:

All taught masters programmes, unless exempted by Senate, must allow the opportunity for students to choose, or be required, to leave at the postgraduate diploma or certificate stage.

To be awarded a postgraduate diploma, students must have successfully completed 120 credit points, of which 90 must be at level 7.

To be awarded a postgraduate certificate, students must have successfully completed 60 credit points, of which 40 must be at level 7.

Related links

[Structure by entry cohort](#)

[Specification](#)

[Programmes available in the School of Electrical, Electronic and Mechanical Engineering](#)