

## Unit and programme catalogues

University of Bristol

## Programme structure: Advanced Microelectronic Systems Engineering (MSc) - what's running in 2022/23

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 (2022/23)

Unit name	Unit code	Credit points	Status	Teaching Block
<a href="#">Digital Filters and Spectral Analysis (M)</a> 数字滤波器和光谱分析	EENGM1400	10	Mandatory	TB-1
<a href="#">Integrated Circuit Electronics</a> 集成电路电子元件	EENGM6011	10	Mandatory	TB-1
<a href="#">Embedded and Real-Time Systems</a> 嵌入式和实时系统	EENG34030	10	Mandatory	TB-1
<a href="#">Engineering Research Skills</a> 工程研究技能	EENGM0004	20	Mandatory	TB-2
<a href="#">VLSI Design M</a> 超大规模集成电路设计	EENGM4050	10	Mandatory	TB-2
<a href="#">Advanced DSP &amp; FPGA Implementation</a> 高级数字信号处理&现场可编程门阵列实现	EENGM4120	10	Mandatory	TB-2
<a href="#">Analogue Integrated Circuit Design</a> 模拟集成电路设计	EENGM6030	10	Mandatory	TB-2
<a href="#">Optoelectronic Devices and Systems (M)</a> 光电器件和系统	EENGM6020	10	Mandatory	TB-1
<a href="#">Radio Frequency Engineering (M)</a> 射频工程	EENGM6500	10	Mandatory	TB-1
<a href="#">Research Project</a> 研究项目	EENGM8000	60	Mandatory	AYEAR
Students should also select 20 credit points from the following list:				
<a href="#">Design Verification (Teaching Unit)</a> 设计验证	COMS30026	0	Optional	TB-1
<a href="#">Design Verification</a>	COMS30024	10	Optional	TB-1
<b>MSc Advanced Microelectric Systems Engineering</b>		<b>180</b>		

Unit name	Unit code	Credit points	Status	Teaching Block
<a href="#">Learning, Computation and the Brain</a> 学习、计算和大脑	COMSM0094	10	Optional	TB-1
<a href="#">Sensing Technologies for Diagnostics and Monitoring</a> 诊断和监测的传感技术	EENGM0031	10	Optional	TB-1
<a href="#">Image and Video Coding</a> 图像和视频编码	EENGM4021	10	Optional	TB-2
<a href="#">Bio-Inspired Artificial Intelligence</a> 仿生人工智能	EMATM0029	10	Optional	TB-2
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## Progression/award requirements

The pass mark set by the University for any level 7(M) 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.

## Exit awards

All taught masters programmes, unless exempted by Senate, must allow the opportunity for students to exit from the programme with a postgraduate diploma or certificate.

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

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

## 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 but is permitted in designated programmes (as set out in the programme specification) where students choose to withdraw from the intended programme but otherwise achieve the necessary credit points for the exit 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 M/7.

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

### **Related links**

[Structure by entry cohort](#)

[Specification](#)

[Programmes available in the Department of Electrical & Electronic Engineering](#)