



Course Title	BSc (Hons) Broadcast Engineering
Final Award	BSc (Hons) Broadcast Engineering
Interim Awards	Certificate of Higher Education in Broadcast Engineering Diploma of Higher Education in Broadcast Engineering BSc Broadcast Engineering
Awarding Body	Ravensbourne University London
Teaching Institution	Ravensbourne University London
UCAS Code	P312
HECOS code (with Subject percentage Splits if applicable)	
QAA Subject Benchmark	Engineering (2019)
External Accrediting Bodies	N/A
Apprenticeship Standard used to inform the development of the course (if applicable)	Broadcast Media & Systems Engineering
Accelerated Degree Option	<input checked="" type="checkbox"/> Yes
Level 6 Top Up Option (online only)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Study Load	<input checked="" type="checkbox"/> Full-time <input checked="" type="checkbox"/> Part-time
Mode of study	<input checked="" type="checkbox"/> Face-to-face
Delivery Location(s)	<input checked="" type="checkbox"/> Ravensbourne University campus
Length(s) of Course(s)	3 Years FT 6 years PT 2 years accelerated
Type (open/closed)	Open
Validation period	Five years (September 2022 – September 2027)
Intended First Cohort Start Date	September 2022
Date produced/amended	July 2022
Course Leader	Peter Morgan
Course Development Team Members	Peter Morgan Stephen Partridge
Course Administrative Contact	Yvonne Ochuba

### Course Description

Broadcast engineering courses at Ravensbourne have provided industry with designers, Multi Skilled Technical Operators (MSTOs), engineers, and developers for half a century. The course prepares students for employment at a range of highly respected broadcasters and other media organisations.

The course encompasses emerging, existing, and legacy technologies including streaming, on demand video, television transmission plus systems managing audio and video data such as in post-production facilities, studios, outside broadcast and any situation where media is handled, modified and transported.

This course equips students with the underlying professional skills and knowledge needed to succeed in a fast-paced broadcast environment. Whether live or within other workflows, graduates are able to work under pressure and deliver to exacting technical industry standards.

This course nurtures specialist technical experts who can service primetime and flagship entertainment, media, film, effects, and in exciting developmental areas such as virtual production. The evolving nature of technology means that boundaries in traditional genres are blurring, but the need for technical excellence is greater than ever.

#### Course Aims

- Development of a range of broadcasting techniques and skills
- To foster collaborative skills required within this sector (emotional intelligence: problem solving, communication, empathy)
- To interface with industry to provide work-related opportunities that enhance employability
- Development of intellectual capability to contextualise production, while also enhancing research skills to enable critical analysis of contemporary issues and debates

#### Course Learning Outcomes

The course provides opportunities for students to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in the following areas.

On completion of the **BSc (Hons) Broadcast Engineering** students will be able to:

<b>Explore</b>	Demonstrate industry standard knowledge in Broadcast Engineering
<b>Create</b>	Choose appropriate broadcast engineering processes and deploy them, producing professional results
<b>Influence</b>	Demonstrate industry standard knowledge of broadcast technologies and their place in society
<b>Integrate</b>	Critically engage with complex primary and secondary sources, in self-directed study, to produce evidence- based arguments

Where a student does not complete the full course, but exits with an Ordinary Degree, they will have had the opportunity to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in the following areas.

On completion of the **BSc Broadcast Engineering** students will be able to:

<b>Explore</b>	Demonstrate a rich and intricate appreciation for a particular area within broadcast engineering
<b>Create</b>	Work autonomously on broadcast engineering projects, with support and advice from tutors and peers
<b>Influence</b>	Demonstrate a rich and intricate appreciation for broadcast technologies and their place in society

<b>Integrate</b>	Work autonomously on research and practice, producing professional-quality reports
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Where a student does not complete the full course, but exits with a Diploma in Higher Education, they will have had the opportunity to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in the following areas.

On completion of the **Diploma of Higher Education in Broadcast Engineering** students will be able to:

<b>Explore</b>	Demonstrate a growing appreciation for a particular area within broadcast industries
<b>Create</b>	Apply broadcast engineering processes, with support and advice from tutors and peers
<b>Influence</b>	Demonstrate detailed knowledge of broadcast technologies and their place in society
<b>Integrate</b>	Demonstrate clear understanding and appropriate techniques of evaluation relevant to broadcast sectors and technologies

Where a student does not complete the full course, but exits with a Certificate of Higher Education, they will have had the opportunity to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in the following areas.

On completion of the **Certificate of Higher Education in Broadcast Engineering** students will be able to:

<b>Explore</b>	Demonstrate a basic appreciation for a particular area within broadcast industries
<b>Create</b>	Apply broadcast engineering processes, with support
<b>Influence</b>	Demonstrate a basic knowledge of broadcast technologies and their place in society
<b>Integrate</b>	Demonstrate understanding and basic evaluation relevant to broadcast sectors and technologies

### Ravensbourne University Assessment Criteria

Explore	Research and Analysis Subject Knowledge Critical Thinking and Reflection Problem Solving
Create	Ideation Experimentation Technical Competence Communication and Presentation
Influence	Social Impact Ethical Impact Environmental Impact
Integrate	Collaboration Entrepreneurship and Enterprise Professional Development

**Core Competencies**

Each module learning outcome should be aligned to at least one competency.

Competency	Definition	Aligned Assessment Criteria
<b>Cognitive</b>	<p>The ability to acquire, retain and use knowledge, recognise, pose and solve problems. Attributes may include:</p> <ul style="list-style-type: none"> <li>• Evaluate their own beliefs, biases and assumptions</li> <li>• Evaluate strengths, weaknesses, and fallacies of logic in arguments and information</li> <li>• Apply lesson from the past or learned knowledge and skills to new and varied situations</li> <li>• Perform basic computations or approach practical problems by choosing appropriately from a variety of mathematical techniques</li> <li>• Devise and defend a logical hypothesis to explain observed phenomenon</li> <li>• Recognise a problem and devise and implement a plan of action</li> </ul>	<b>Explore, Create, Integrate, Influence</b>
<b>Creative</b>	The ability to generate new ideas, express themselves creatively, innovate and/ or solve complex problems in an original way.	<b>Create</b>
<b>Professional</b>	The ability to understand and effectively meet the expectations of industry partners, through outputs and behaviours.	<b>Integrate, Influence</b>
<b>Emotional, Social and Physical</b>	<p>Emotional -The intrapersonal ability to identify, assess, and regulate one's own emotions and moods; to discriminate among them and to use this information to guide one's thinking and actions and where one has to make consequential decisions for oneself. Attributes may include:</p> <ul style="list-style-type: none"> <li>• Self-awareness &amp; regulation (including metacognition)</li> <li>• Mindfulness</li> <li>• Cognitive flexibility</li> <li>• Emotional resilience</li> <li>• Motivation</li> <li>• Ethical decision- making</li> </ul> <p>Social - The interpersonal ability to identify &amp; understand the underlying emotions of individuals and groups, enhancing communication efficacy, empathy and influence. Attributes may include:</p>	<b>Explore, Influence, Integrate</b>

	<ul style="list-style-type: none"> <li>Managing your audience</li> <li>Coordinating with others</li> <li>Negotiation</li> <li>Creativity</li> <li>People management</li> <li>Leadership &amp; entrepreneurship</li> <li>Service orientation</li> <li>Active listening</li> <li>Coaching and mentoring</li> </ul>	
	Physical - The ability to perceive and optimise physiological activity and responses to influence emotion, solve problems or otherwise effect behaviour. Physical intelligence engages the body to train neuron pathways to help change an inappropriate response to an appropriate response. Attributes may include	
	<ul style="list-style-type: none"> <li>Self-discipline &amp; management</li> <li>Attention</li> <li>Reaction &amp; response time</li> <li>Cognitive &amp; muscle memory</li> <li>Managing stress</li> <li>Physical resilience</li> </ul>	
<b>Cultural</b>	The capability to relate to and work effectively across cultures including intercultural engagement, cultural understanding and intercultural communication.	<b>Influence, Integrate</b>
<b>Enterprise and Entrepreneurial</b>	The generation and application of ideas within a practical setting. It combines creativity, idea generation and design thinking, with problem identification, problem solving, and innovation followed by practical action. This can, but does not exclusively, lead to venture creation (UK Quality Assurance Agency, Enterprise and Entrepreneurship Education 2018).	<b>Create, Influence, Integrate</b>
<b>Digital</b>	The confident adoption of applications, new devices, software and services and the ability to stay up to date with ICT as it evolves. The ability to deal with failures and problems of ICT and to design and implement solutions (Jisc Digital Capabilities Framework)	<b>Explore, Create, Integrate, Influence</b>
<b>Ravensbourne Return</b>	Engagement with inhouse activities including mentoring other students, volunteering, acting as a student rep or ambassador. Demonstrate a knowledge of current events and social issues	<b>Explore, Create, Influence, Integrate,</b>

	Identify their personal convictions and explore options for putting these convictions into practice Engagement with the external community through (from) employment, volunteering, participation in a Professional Life or other programme-based project.	
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### Learning, Teaching and Assessment

Learning and Teaching methods	Assessment Strategy
<p>This programme integrates work-based learning with intensive study periods to deliver the range of learning outcomes. The learning and teaching methods have been carefully selected to address the challenges associated with this mode of study.</p> <p>Broadcast Engineering is a BSc degree meeting the specific needs of companies in the broadcast and media sectors, who require differentiated learning for their apprentices. This differentiation is achieved by supplementing the main core taught units with specialist tutorials and external lectures that provide deep and broad learning opportunities respectively.</p> <p>The learning experience is an evolving journey starting in the first year (Level 4) at an introductory level, progressing through the second year (Level 5) at an intermediate level, and culminating in the third year (Level 6) with an advanced level of taught modules, leading into 3 - 6 months independent work on a final project.</p>	<p>As students progress towards becoming a technician or engineer, assessment points throughout the course enable students to practise and demonstrate the learning outcomes with confidence and receive formative and summative feedback.</p> <p>The grades received in the final stages constitute your Broadcast Engineering degree result. Each unit will have one or more mixed assessments appropriate to the learning outcomes. 20-credit modules will typically have two assessments. 40-credit units may have more assessments depending on the unit requirements. In some modules, you may be given an overall grade for the module and not individual grades for each assessment element.</p> <p>Work is usually submitted in electronic form and graded through assessments that are defined in Module Briefs and issued at the start of a module.</p> <p>Typical assessment methods are:</p> <ul style="list-style-type: none"> <li>• Presentation (Individual / Group)</li> <li>• Demonstration (Individual / Group)</li> <li>• Reports (Technical, Laboratory)</li> <li>• Article / White Paper</li> <li>• Video, Audio, and captioned Media</li> <li>• Software Programme - Electronic Project</li> <li>• Engineering Project</li> <li>• Examination (typically online multiple choice)</li> </ul>

### Work-Based Learning

In keeping with the course's commitment to equip students with the attributes of 'critical practitioners' needed for the contemporary world of work, we recognise the value of experiential learning through placement and workplace observation.

Students will undertake appropriate work-based learning. The course will increase students' opportunities to find placements by collaborating closely with Student Services, in particular with the Careers team at Ravensbourne which connects employers to students who are looking for placements and internships. Furthermore, placements will be facilitated by abroad network provided by the course team, liaising also with local businesses and charities to develop links and civic engagement opportunities.

If organised by the student, placements must be approved by the course team. All placements will be supported by an allocated supervisor from the Digital Film Production team. Placement opportunities may be organised independently or on students' behalf by the course team.

Taking advantage of Ravensbourne's London location, the modules will include industry speakers, talks and workshops, and give students the opportunity to develop networking skills leading to placements.

## Course Structure

Module Code	Module Title	Shared Module	Mandatory / Elective	Credits
Level 4				
FIL22100	Production Skills and Technologies	x	Mandatory	40
BEN24102	Moving Image Industries		Mandatory	20
BEN24105	Storytelling On Screen		Mandatory	20
PLP22103	Professional Life Practice: Developing your Practice	x	Mandatory	20
PLP22106	Professional Life Practice: Exploring your Practice	x	Mandatory	20
			Total	<b>120</b>
Level 5				
BEN22201	Fundamentals of Sound	x	Mandatory	20
BEN22202	Live Studio and Outside Broadcast	x	Mandatory	20
BEN22204	Virtual Production		Mandatory	20
BEN22205	Electronics		Mandatory	20
PLP22203	Professional Life Practice “Applying your Practice”	x	Mandatory	20
PLP22206	Work Based Learning	x	Mandatory	20
				<b>120</b>
			Total	<b>240</b>
Level 6				
BEN22301	Immediate future of broadcasting		Mandatory	40
BEN22302	Final Major Project		Mandatory	40
PLP22303	Professional Life Practice “Situating your Practice”	x	Mandatory	20
BEN22304	Performance Module		Mandatory	20
				<b>120</b>
			Total	<b>360</b>

## Learning Hours

Learning Hours (per 20 credit module excluding the Work-Based Learning)			
Staff – Student Contact Hours		Independent Study Hours	
Taught hours	48	Independent Study, Self-Directed Study and Assessment	152
<b>Total</b>		<b>200</b>	

## Course Regulations

## Entry Requirements

Please refer to the institutional regulations on the expected minimum entry requirements (found under Section 5 of the General Academic Regulations found on the website [here](#)), and the course page on the [Ravensbourne University website](#) for course specific entry requirements.



Students should ideally have a background in technology, science, maths, technical drawing/design or media. Experience in live events or theatre is also valuable. Applicants do not need to submit a portfolio of work, but they may wish to do so.

#### **Accreditation of Prior Learning (if applicable)**

Applications are welcomed from those who may not possess formal entry qualifications, mature students, those with work experience or with qualifications other than those listed above. Such applicants should demonstrate sufficient aptitude and potential to complete the course successfully. Applicants will be assessed at interview in accordance with Ravensbourne's Accreditation of Prior Learning Policy and Procedure and Student Transfer Plan.

#### **Conditions for Progression**

Students will be deemed to have passed a module if they achieve a 40% for undergraduate students; or a 50% for postgraduate students.

A student who has passed all assessments to date but has not yet reached the end of a level (or stage) will be permitted to proceed into the following term by the Interim Assessment Board.

#### **Reassessment of Failed Elements**

Failure in any component will result in a Fail grade for the component.

Non-submission in any component will result in a non-submission for the component.

Students must then successfully retrieve the failed or non-submitted component by resubmission of assessment in order to pass the module.

Where a student does successfully retrieve a component failure, the grade for the component will be capped at 40% (undergraduate) or 50% (postgraduate) (except where Extenuating Circumstances have been approved). The overall grade for the module will be calculated using all achieved grades where there are 2 or more components.

#### **Conditions for the Granting of Awards**

A student who completes an approved course of study, shall be awarded BSc (Hons) Broadcast Engineering.

Those students who exit the Course without completing it may be entitled to exit with an award of either a:

1. Certificate of Higher Education in Broadcast Engineering, provided they complete an approved course of modules and the learning outcomes for such award as set out in the Course Specification.
2. Diploma of Higher Education in Broadcast Engineering, provided they complete an approved course of modules and the learning outcomes for such award as set out in the Course Specification.
3. BSc Broadcast Engineering (ordinary degree), provided they complete an approved course of modules and the learning outcomes for such award as set out in the Course Specification.

#### **Any derogation(s) from the Regulations required?**

NA

Student Support	<a href="https://www.ravensbourne.ac.uk/student-services">https://www.ravensbourne.ac.uk/student-services</a>
Assessment Regulations	<a href="https://www.ravensbourne.ac.uk/staff-and-student-policies">https://www.ravensbourne.ac.uk/staff-and-student-policies</a>

Course Learning Outcomes	CLO1	CLO2	CLO3	CLO4
<b>Level 4 Modules</b>				
FIL22100 Production Skills and Technologies		X		
BEN24102 Moving Image Industries	X		X	X
BEN24105 Storytelling On Screen	X		X	X
PLP22103 Professional Life Practice: Developing your Practice		X	X	
PLP22106 Professional Life Practice: Exploring your Practice		X	X	
<b>Level 5 Modules</b>				
BEN22201 Fundamentals of sound	X	X		X
BEN22202 Live Studio & Outside Broadcast	X			X
BEN22204 Virtual Production	X	X		
BEN22205 Electronics	X			
PLP22203 Professional Life Practice: Applying Your Practice		X	X	
<b>Level 6 Modules</b>				
BEN22301 Immediate future of broadcasting	X	X		X
BEN22302 Final Major Project		X	X	X
PLP22303 Professional Life Practice: Situating Your Practice			X	
BEN22304 Performance Module		X	X	X

### Course Diagram

	Semester 1	Semester 2
Level 4	FIL22100 Production Skills & Technologies 40 credits	
120 credits	BEN24102 Moving Image Industries 20 credits	BEN24105 Storytelling On Screen 20 credits

## COURSE SPECIFICATION

	PLP22103 Professional Life Practice: Developing your Practice 20 credits	PLP22106 Professional Life Practice: Exploring your Practice 20 credits	
Semester 1		Semester 2	
Level 5	BEN22204 Virtual Production 20 credits	BEN22201 Fundamentals of Sound 20 credits	PLP22206 Work-Based Learning 20 credits
120 credits	BEN22205 Electronics 20 credits	BEN22202 Live Studio and Outside Broadcast	
	PLP22203 Professional Life Practice Applying Your Practice 20 credits		
Semester 1		Semester 2	
Level 6	BEN22301 Immediate future of broadcasting 40 credits	BEN22302 Final Major Project 40 credits	BEN22304 Performance Module 20 credits
120 credits	PLP22303 Professional Life Practice Situating Your Practice 20 credits		