Template C4

Kingston University London

Programme Specification

Title of Course: *Other Foundation Year in Engineering*

Date first produced	17/10/2024
Date last revised	28/02/2025
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Version number	3
Faculty	Faculty of Engineering, Computing and the Environment
Cross-disciplinary	
School	School of Engineering
Department	Department of Mechanical Engineering
Delivery Institution	None

This Programme Specification is designed for prospective students, current students, academic staff and employers. It provides a concise summary of the main features of the programme and the intended learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if they take full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes and content of each modules can be found in the course VLE site and in individual Module Descriptors.

SECTION 1: GENERAL INFORMATION

Award(s) and Title(s):	Other Foundation Year in Engineering
Exit Award(s) and Title(s):	None
Course Code *For each pathway and mode of delivery*	N/A
UCAS code *For each pathway*	

Awarding Institution:	Kingston University
Teaching Institution:	None
Location:	Roehampton Vale
Language of Delivery:	English
Delivery mode:	Primarily campus based (up to 20% of scheduled L&T hours delivered online)
Learning mode(s):	Full-time
Minimum period of registration:	Full-time - 1
Maximum period of registration:	Full-time - 2
Entry requirements	Kingston University typically uses a range of entry requirements to assess an applicant's suitability for our courses. Most course requirements are based on UCAS Tariff points, usually stipulated as a range, and are sometimes coupled with minimum grades in specific relevant subjects. We may also use interview, portfolio and performance pieces to assess an applicant's suitability for the course. We recognise that every person's journey to Higher Education is different and unique and in some cases we may take into account work experience and other non-standard pathways onto University level study. Additionally, all non-UK applicants must meet our English language requirements. Please see our course pages on the Kingston University website for the most up to date entry requirements

Regulated by	The University and its courses are regulated by the Office for Students
Programme Accredited by:	n/a
Approved Variants:	n/a
Is this Higher or Degree Apprenticeship course?	No

SECTION 2: THE COURSE

A. Aims of the Course

- To provide a pathway for students from diverse educational backgrounds, offering access to Level 4 of their chosen Engineering degree.
- To equip students with essential subject knowledge, study skills, IT competence, and practical experience, building their confidence and independence as learners.
- To foster self-awareness and encourage reflective thinking to enhance personal growth and learning strategies.
- To develop strong communication skills, both written and verbal, enabling students to express ideas clearly and effectively.
- To promote teamwork, ensuring students can collaborate successfully with others in various settings.
- To help students apply the knowledge and skill to solve basic engineering problems.

B. Programme Learning Outcomes

The programme learning outcomes are the high-level learning outcomes that will have been achieved by all students receiving this award. They have been aligned to the levels set out in ‘Sector Recognised Standards in England’ (OFS 2022).

Programme Learning Outcomes					
	Knowledge and Understanding On completion of the course students will be able to:		**Intellectual Skills** On completion of the course students will be able to		**Subject Practical Skills** On completion of the course students will be able to
A1	Demonstrate a knowledge and understanding in the core areas of the chosen subject discipline	B2	Assess and select the tools and methods appropriate for a number of given maths-related problems contextualised to the subject of study	C1	Carry out subject-specific practical work in accordance to defined protocols and appropriate Health and Safety regulations
A2	Demonstrate a knowledge of investigational techniques used within the subject disciplines and understand the basis for their use	B1	Apply the theoretical principles of the subject disciplines to tackle simulated projects and problems	C2	Demonstrate the ability to evaluate, interpret and present data generated through investigational techniques
A3	Understand the Health and Safety regulations relevant to the subject discipline and the need for compliance	B3	Demonstrate, by application of study skills, the ability to be an independent and reflective learner	C3	Demonstrate the ability to work effectively both independently and as part of a group

C. Future Skills Graduate Attributes

In addition to the programme learning outcomes, the programme of study defined in this programme specification will engage students in developing their Future Skills Graduate Attributes:

1. Creative Problem Solving
2. Digital Competency
3. Enterprise
4. Questioning Mindset
5. Adaptability
6. Empathy
7. Collaboration
8. Resilience
9. Self-Awareness

D. Outline Programme Structure

This forms the extended degree in the following degree subjects:

- BEng (Hons) Aerospace Engineering
- BEng (Hons) Aerospace Engineering (Space Technology)
- BEng (Hons) Aerospace Engineering with Professional Placement
- BEng (Hons) Aerospace Engineering (Space Technology) with Professional Placement
- BEng (Hons) Aviation Engineering
- BEng (Hons) Aviation Engineering with Professional Placement
- BEng (Hons) Electrical and Electronic Engineering
- BEng (Hons) Electrical and Electronic Engineering with Professional Placement
- BEng (Hons) Electronic Products Engineering
- BEng (Hons) Electronic Products Engineering with Professional Placement
- BEng (Hons) Mechanical Engineering
- BEng (Hons) Mechanical Engineering (Automotive Engineering)
- BEng (Hons) Mechanical Engineering with Professional Placement
- BEng (Hons) Mechanical Engineering (Automotive Engineering) with Professional Placement
- BEng (Hons) Robotic Engineering and Artificial Intelligence
- BEng (Hons) Robotic Engineering and Artificial Intelligence with Professional Placement
- BSc Aviation Operations with Commercial Pilot Training
- BSc Aviation Operations with Commercial Pilot Training with Professional Placement

Full details of each module will be provided in module descriptors and in the module canvas pages.

Other Foundation Year in Engineering

Level 3							
Other Foundation Year in Engineering							
Core modules	**Module code**	**Credit Value**	**Level**	**Teaching Block**	**Pre-requisites**	**Full Time**	**Part Time**
Core Engineering Skills	EG3801	30	3	TB1 and TB2		1	
Foundation Mathematics	EG3802	30	3	TB1 and TB2		1	
Foundation Physics	EG3803	30	3	TB1 and TB2		1	
Project based learning	EG3804	30	3	TB1 and TB2		1	

E. Teaching, Learning and Assessment

This course uses a range of teaching and assessment methods which have been designed to support students' learning and achievement of the learning outcomes. The course has been developed with reference to the Kingston University Academic Framework which sets-out core principles relating to Course and Credit Structure (including Module delivery Structure and Pattern, and Learning Hours and Learning Formats); Curriculum Design (inclusion Learning Design Principles and Inclusive Curriculum); and Future Skills.

The curriculum design of this course emphasises building a robust foundation in both mathematics and physics, ensuring that students acquire essential knowledge to excel in their engineering degree. In addition, the course integrates core engineering skills, allowing students to apply their understanding to practical challenges effectively. A significant aspect of the program is its focus on project-based learning, where students engage in hands-on projects that reinforce the principles they have learned, fostering critical thinking, collaboration, and problem-solving skills. This comprehensive approach equips students to tackle real-world engineering problems by balancing theoretical concepts with practical application and innovative thinking.

Teaching and Learning on the course consist of Scheduled Learning and Teaching and Guided Independent Study (self-managed time). Scheduled Learning and Teaching includes the following, and the format for each module is set out in the module specification:

- Laboratory Sessions
- Lectures
- Seminars
- Tutorials
- Workshops

Guidance for students on the use of independent study time is communicated through the 'Succeed in your module' section on the Canvas Virtual Learning Environment and through other communications during the course.

In addition to the core Scheduled Learning and Teaching activities for the course, the University may offer students additional optional opportunities for learning.
The course will provide students with the opportunity to develop their knowledge and skills relating to at least two United Nations Sustainable Development Goals (UN SDGs). We are committed to empowering students with the knowledge, skills and opportunities to understand and address the UN SDGs: each course is thus also required to prepare students for at least two of the SDGs (not including Quality Education, which all courses must deliver). The key United Nations Sustainable Development Goals that the programme contributes to include:

Goal 9: Industry, Innovation and Infrastructure

Goal 12: Responsible Consumption and Production

F. Support for Students and their Learning

Given their prior educational background it is acknowledged that students entering onto the Foundation year often require additional support. Therefore students are provided with a range of support mechanisms to aid in the transition to Higher Education and also to maximise their chances of progressing to level 4 and beyond.

Students are supported by:

- A **Module Leader** for each module
- A **Course Leader** to help students understand their programme structure and provide academic support
- A **Personal Tutor** to provide academic advice and guidance
- An **Academic Team** that seeks to maintain an open-door policy in the spirit of supporting students
- A **Student Support and Engagement Team** to help students with any problem that is affecting their studies
- A dedicated **Course Administrator**

- An **Induction programme** and study skills sessions at the start of each academic year
- **Student Academic Success Centre (SASC)**, a one-to-one drop-in Study Skills session for students every weekday. Help is available on a range of academic skills from writing reports and note-taking to exam revision, referencing, programming and mathematical skills.
- **Virtual Learning Environment (VLE)**, a versatile on-line interactive intranet and learning environment accessible both on-site and remotely
- **Course Representative scheme**
- **University Careers and Employability Service**
- Comprehensive **University Support Systems** including the provision of advice on finance, regulations, legal matters, accommodation, international student support, disability and equality support
- The **Students' Union**

Personal Tutor Scheme (PTS)

PT meetings provide an opportunity for students to discuss their personal and professional development, as well as career options. During these meetings, students receive individualised guidance and support tailored to their specific needs and goals. The following outlines the overall aims of the PTS in our School:

- To build a rapport between staff and students and contribute to personalising students' experience within the School
- To support students in the development of their academic skills providing appropriate advice and guidance to students throughout their time at Kingston, while monitoring their progress, helping to identify individual needs and referring students to other University services as appropriate
- To help students develop the ability to be self-reliant and confident self-reflective learners who use feedback to their best advantage
- To encourage students to reflect on how their learning relates to a wider context and their personal career progression

PTs are allocated on a course basis during induction week. Student numbers are divided equally amongst the staff within the Department. Students will keep the same tutor throughout their course of study, except in cases where they change disciplines in their first year of study.

Induction Activities
Students undertake a comprehensive induction week prior to teaching on the year. Apart from the course-specific activity, there are additional sessions from the Library staff, as well as sessions on IT, Health and Safety and Academic writing. Foundation students undertake the same induction programme as those entering directly into level 4 and this is designed to promote course and subject identity at an early stage. In addition, students have an additional IT session where students are introduced to the VLE, Canvas, and how to access course pages and module information, as well being self-directed to self-enrol on a range of modules relating to the Library and Study skills.
Induction is not just limited to this week but continues to be undertaken during the first teaching block. This allows reinforcement and also has the advantage that students who

arrive late in the first few weeks can catch up with the induction and support mechanisms on offer.

G. Ensuring and Enhancing the Quality of the Course

Students are supported through a range of services that provide academic and wider support. These include:

- A Module Leader for each module
- A Foundation Year Leader to help students understand the year structure
- Course Leaders to help students understand the extended degrees course structure
- Personal Tutors to provide academic and personal support
- Technical support to advise students on IT and the use of software
- Student Voice Committee – to ensure the views of students are heard
- Canvas – Kingston University's Virtual Learning Environment
- Student support facilities that can provide advice on issues such as finance, regulations, legal matters, accommodation, international student support
- Disabled student support
- The Kingston Students' Union
- Student Development and Graduate Success

H. External Reference Points

KU webpages

I. Development of Course Learning Outcomes in Modules

This table maps where programme learning outcomes are **summatively** assessed across the **core** modules for this course. It provides an aid to academic staff in understanding how individual modules contribute to the course aims, a means to help students monitor their own learning, personal and professional development as the course progresses and a checklist for quality assurance purposes.

Module Code		**Level 3**			
		EG3801	**EG3803**	**EG3802**	**EG3804**
Knowledge & Understanding	A1	S			S
	A2		S	S	S

	A3		S	S	
Intellectual Skills	B2	S			
	B1	S			S
	B3		S	S	
Practical Skills	C1	S	S		
	C2		S	S	
	C3		S	S	

Students will be provided with formative assessment opportunities throughout the course to practise and develop their proficiency in the range of assessment methods utilised.

Additional Information