

## Template C4



# Programme Specification

**Title of Course:** *International Foundation Year (IFY) Science, Technology, Engineering and Mathematics (STEM)*

<b>Date first produced</b>	31/03/2020
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<b>Version number</b>	3
<b>Faculty</b>	Faculty of Business and Social Sciences
<b>School</b>	Study Group
<b>Department</b>	*Foundation Year*
<b>Delivery Institution</b>	Kingston University International Study Centre – (“KULISC”) – Study Group

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 module can be found in the course VLE site and in individual Module Descriptors.

## SECTION 1: GENERAL INFORMATION

<b>Award(s) and Title(s):</b> <i>Up to 10 pathways</i>	International Foundation Year (IFY) Science, Technology, Engineering and Mathematics (STEM)
<b>Intermediate Awards(s) and Title(s):</b> <i>There are 4 Intermediate awards for each pathway</i>	N/A
<b>Course Code</b> <i>For each pathway and mode of delivery</i>	UFSGF1SEC95
<b>UCAS code</b> <i>For each pathway</i>	N/A

<b>RQF Level for the Final Award:</b>	
<b>Awarding Institution:</b>	Kingston University
<b>Teaching Institution:</b>	Kingston University International Study Centre – (“KULISC”) – Study Group
<b>Location:</b>	Kingston University, Stable Block, Kingston Hill Campus
<b>Language of Delivery:</b>	English
<b>Modes of Delivery:</b>	Full-time
<b>Available as:</b>	Full field
<b>Minimum period of registration:</b>	Full-time - 1
<b>Maximum period of registration:</b>	Full-time - 2
<b>Entry Requirements:</b>	<p><b>The minimum entry requirements for the programme are:</b>            Good high school grades or equivalent. Details of minimum international entry qualifications and qualification equivalencies are provided on a separate spreadsheet maintained by both the validated partner and the university.            Academic IELTS for UKVI 4.5 overall (minimum 5.0 in writing and no other skill less than 4.0), or a higher entry requirement for progression to the MPharm in Pharmacy (5.5 in all skills).</p> <p><b>Progression Requirements:</b>            Details of progression requirements and conditions are provided on a separate spreadsheet maintained by both the validated partner and the university.</p> <ul style="list-style-type: none"> <li>• Progression to MPharm Pharmacy degree is subject to a successful interview during the International Foundation Year.</li> </ul>

	<ul style="list-style-type: none"> <li>• Progression to the Architecture degree is subject to a successful interview and design portfolio review with the university.</li> </ul>
<b>Programme Accredited by:</b>	N/A
<b>QAA Subject Benchmark Statements:</b>	<p><a href="#">QAA Characteristics Statement for Foundation Degrees (2020)</a>  <a href="#">UK Standing Committee for Quality Assessment &amp; QAA, The revised UK Quality Code for Higher Education (March 2018)</a>  GCE AS and A level Subject Criteria for Mathematics, April 2016,  <a href="https://www.gov.uk/government/publications/gce-subject-level-conditions-and-requirements-for-mathematics">https://www.gov.uk/government/publications/gce-subject-level-conditions-and-requirements-for-mathematics</a>  GCE AS and A level Subject Criteria for Computer Science, April 2014,  <a href="https://www.gov.uk/government/publications/gce-subject-level-conditions-and-requirements-for-computer-science">https://www.gov.uk/government/publications/gce-subject-level-conditions-and-requirements-for-computer-science</a>  GCE AS and A level Subject Criteria for Science, May 2016,  <a href="https://www.gov.uk/government/publications/gce-subject-level-conditions-and-requirements-for-science">https://www.gov.uk/government/publications/gce-subject-level-conditions-and-requirements-for-science</a></p>
<b>Approved Variants:</b>	<p>Students failing to achieve at least 40% in any module, Core or Pathway specific, will be allowed a maximum of two opportunities to re-sit the module assessments (examination or coursework) but these opportunities must fall within the maximum period for registration, that is, two years. The student re-sitting may opt, following discussions with the Head of Centre, either to submit new examination/coursework or carry over his/her existing marks. Students who improve their mark on a re-sit will be allowed to carry forward the improved mark without its being capped, and this improved mark will appear on the student's final transcript.</p>
<b>Is this Higher or Degree Apprenticeship course?</b>	

***For Higher or Degree Apprenticeship proposals only***

<b>Higher or Degree Apprenticeship standard:</b>	N/A
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<b>Recruitment, Selection and Admission process:</b>	N/A
<b>End Point Assessment Organisation(s):</b>	N/A

## SECTION 2: THE COURSE

### A. Aims of the Course

- To prepare students for the demands of undergraduate study by building on the knowledge gained and academic skills acquired in earlier studies in their home country, enabling them to enter undergraduate courses at Kingston University.
- To introduce students to UK Higher Education teaching styles and to provide students with opportunities to acquire, through the teaching medium of English, a sound and appropriate knowledge base in their chosen discipline.
- To assist students to acquire the skills in the collection, analysis, interpretation and understanding of appropriate data and information in preparation for undergraduate courses in either science, technology, engineering and mathematics at Kingston University.
- To develop the students' academic English language, critical thinking, and reading and investigating skills so that they are prepared to study at undergraduate level at Kingston University.
- To support students in the acquisition of practical, employability and transferable skills to be utilised in students' future studies and career.
- To promote the development of a range of communication and information technology skills.
- To engender in students an awareness of their potential to contribute to the international academic community of Kingston University.
- Empower students with a range of transferable skills including the use of information technology and the virtual learning environment (VLE) to obtain, process and use information for effective learning at Kingston University.

The three-term (30 weeks) International Foundation Year (IFY) in Science, Technology, Engineering and Mathematics (STEM) is designed and structured to help international students acculturate and attain the level of English language, learning and academic knowledge and skills needed to progress to undergraduate level study in the areas of science, engineering and computing at Kingston University. The strength of the programme is not just in the design and structure of the programme but also in the use of English language, academic and employability skills as well as the delivery which supports students' effective transition to the rigour of academic life at Kingston University. The overall structure and modules are thoughtfully designed to offer the students a holistic learning experience that puts the students on a level that is comparable to students admitted via direct entry.

The International Foundation Year (IFY) programme has been designed in collaboration with Kingston University to create course-specific content that will prepare students for progression to relevant undergraduate degree programmes and to avoid repetition in content delivery. This ensures the programme contains the right level of intellectual challenge and academic rigour. Students successfully completing the Programme have the opportunity to gain admission to the first year of specified and relevant undergraduate degree courses at Kingston University. To achieve this outcome students have to meet or exceed progression requirements and conditions agreed with Kingston University, and to satisfy, as required, the entry regulations of any relevant professional, statutory and regulatory bodies (PSRBs).

### B. Intended Learning Outcomes

The course outcomes are referenced to Office of Qualifications and Examinations Regulation (Ofqual) standards for Level 3 (A Level Standard) and QAA Characteristics Statement for Foundation Degrees (2020). The course provides opportunities for students to develop and

demonstrate knowledge and understanding specific to the subject, key skills and graduate attributes in the following pathways:

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

Programme Learning Outcomes					
	Knowledge and Understanding		Intellectual Skills		Subject Practical Skills
	On completion of the course students will be able to:		On completion of the course students will be able to		On completion of the course students will be able to
A4	Review and explain key terminology and theories required for a deeper understanding of computing, science and engineering	B4	Test and evaluate outcomes of a given problem and review developed solution to the problem	C3	Effectively communicate in written and oral formats to a range of audience using a variety of tools and techniques
A3	Identify and critically select relevant sources, and reference them using appropriate tools	B3	Assess risks, ethical dimensions and safety standards required in a science and engineering project	C2	Become self-aware of personal strength and weaknesses, take the responsibility to manage own learning to enhance their independent learning skills
A2	Gain knowledge and competency in mathematical, chemical, physical and computational techniques and methods with practical applications in science and engineering, to appropriate level required for route of study	B1	Apply mathematical and computing methods and techniques to other field of science, correctly use the appropriate symbols and language, conventions to make logical deductions	C1	Work effectively as a member of a team, respecting the viewpoints of others recognising other factors that affect team performance
A1	Describe facts, concepts and principles in a variety of contexts and develop the ability to correctly identify the required theories and methods to solve problems	B2	Collect and organise data/information, using the information to analyse problems and develop solutions within a given set of requirements and specifications	C4	Critically think on professional, moral and ethical aspects of problems, designs and solutions, identify and reflect on risks or safety aspects in a given context

In addition to the programme learning outcomes, the programme of study defined in this programme specification will allow students to develop the following range of 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

### C. Outline Programme Structure

The programme is made up of four core modules, each with a credit-value of 30 credits; a student must complete 120 credits from the programme to progress. Designated modules are determined by the designated route students are taking through the programme. All students will be provided with the relevant designated route, progression requirements and conditions, university academic regulations and any specific additions that are sometimes required for accreditation by outside bodies (e.g., professional, statutory and regulatory bodies that confer professional accreditation) when they commence studies on the programme. Full details of each module are provided in module descriptors and student module guides/handbooks.

#### International Foundation Year (IFY) Science, Technology, Engineering and Mathematics (STEM)

<b>Level 3</b>							
<b>International Foundation Year (IFY) Science, Technology, Engineering and Mathematics (STEM)</b>							
<b>Core modules</b>	<b>Module code</b>	<b>Credit Value</b>	<b>Level</b>	<b>Teaching Block</b>	<b>Pre-requisites</b>	<b>Full Time</b>	<b>Part Time</b>
Applied Mathematics	XS3025	30	3	1, 2 +3		1	
Core Biology	XS3024	30	3	1, 2 +3		1	
Core Chemistry	XS3026	30	3	1, 2 +3		1	
Core Computing	XS3027	30	3	1, 2 +3		1	
Core Physics	XS3028	30	3	1, 2 +3		1	
Foundation Academic English Skills	XS3016	30	3	1, 2 + 3			
Pure Mathematics	XS3023	30	3	1, 2 + 3			
<b>Optional Modules</b>							



## **D. Principles of Teaching, Learning and Assessment**

Recognition is given to the fact that students have come to the International Study Centre from a wide range of academic and cultural backgrounds worldwide. Throughout their studies on the International Foundation Year, from the Induction Programme onwards, significant emphasis is placed on the importance of explaining to students the style and strengths of the British approach to teaching and learning as key elements in their academic acculturation.

The teaching and learning strategy of the programme introduces the latest method in curriculum design and aims to inspire all students and encourage them towards their studies. The teaching and learning strategy consist of a combination of Blended and Flipped Learning, Problem-Based Learning and Learning-by-doing.

The VLE has a key role to play in the development and support of teaching, learning and assessment, including helping to facilitate a more independent approach to learning by students. Kingston University International Study Centre (“KULISC”) aims to implement Study Group’s own VLE framework, which is itself based on the Quality Assurance Agency for Higher Education’s Quality Code (QAA, 2014), aimed at enhancing students’ learning experience on the VLE. This will be achieved through making available appropriate learning resources, enabling students to develop the skills to use them as well as developing their own digital literacy. The KULISC VLE, built in line with Kingston University’s Academic Framework and VLE minimum expectations, will ensure that each teaching session/lecture is supported by a wide range of learning and assessment resources which can be easily accessed by students. As well as improved accessibility, the VLE will encourage higher levels of engagement with the learning process through the use of a range of activities, including online tests and quizzes, videos and podcasts. It will also enable students to interact and collaborate with their tutors as well as each other by opening up a range of channels for effective and efficient communication through group messages, announcements, forums, conferences and direct messaging. The KULISC VLE will be further enhanced by a Peer Review system aimed at enabling the achievement of Level 2 on the VLE framework.

All modules are aiming to enable students to build their knowledge of concept and principles in their chosen subject areas such as computing, applied mathematics, physics, chemistry and biology required for progression to Kingston University.

Students’ involvement in learning activities across the programme will contribute towards their ability to correctly use relative technical terminology and gain an appreciation of how their learning and knowledge are applied in day-to-day life and expose them to applications of principles and concepts in industry and research. In addition, students will develop a range of skills that prepares them to become independent learners.

The delivery of the module content is achieved by a range of interactive seminars and tutorial sessions, workshops, laboratory work, group activities, class discussions, peer-learning, problem-solving, practical programming tasks and team work as well as independent learning. All module content is available to students in advance via the Virtual learning Environment (VLE) to facilitate better accessibility to module content.

Students’ employability factors are taken into consideration in the selection of the tools and online independent activities to equip students with technical skills for the world outside academia or for their future studies at Kingston University.

The assessment strategy consists of a combination of formative and summative assessments delivered throughout the programme. The assessment strategy consists of a combination of online quizzes, progress tests, individual and group assignments, writing essay/reports, poster presentations, practical examinations, written examinations and project work.

Formative assessment is integrated into the teaching and learning strategy to provide feedback for students in order to improve and guide them in next steps to succeed in summative assessments.

The programme is delivered through:

- Tutor-led classroom sessions
- Small group tutorials
- Seminars
- Formal lectures
- Group work
- Presentations, debates and discussions
- Project work
- Guided Independent Study
- Mentoring sessions

Students are given significant levels of tutor support, especially in the earlier stages of their studies, to help them come to terms with such an intensive and demanding programme. Apart from the active support of subject tutors each student is allocated a personal tutor who monitors his/her academic progress and has a vital counselling role in the wake of each set of module examinations and assessments.

## E. Support for Students and their Learning

Students are supported by:

**1) Academic Mentoring Sessions/CareerAhead:** This is a one-hour session per week for all International Foundation Year students. It is run as part of the KULISC Academic Progression Mentoring Scheme whereby a KULISC Tutor will empower students through mentoring to make choices that positively enhance their own wellbeing, academic progression and personal development, now and for the future. Embedded within the Scheme is a service called CareerAhead, supporting students to develop valuable employment skills.

CareerAhead activities include:

- Keeping a reflective diary.
  - Completing a bespoke skills review, identifying personal strengths and areas for development.
  - Writing a personal development plan.
- Through CareerAhead activities, students will:
- Demonstrate self-awareness and personal skills development.
  - Acquire knowledge about the 'world of work'
  - Undertake self-reflection and take action to improve.
  - Develop an awareness of the need to take responsibility for their own future.

The Academic Progression Mentoring Scheme (and CareerAhead) does not contribute to the assessment of the International Foundation Year Programme. This session is based on the rationale of providing all International Foundation Year students with academic, employability and/or social support and guidance during their studies. The mentor and mentees are to work together to build positive relationships and fundamentally student success during the International Foundation Year.

**2) Library:** Students have access to a wide variety of specialist texts in the University Library and will have access to the Internet in the University's Computing suites. Students will also be encouraged to read the sections and articles relevant to their areas of study in broadsheet newspapers and specialist magazines and to listen to or view relevant radio and TV programmes.

**3) Student Progression and Wellbeing Team:** The ISC has designated wellbeing and safeguarding staff will also provide support to students who need guidance on non-academic matters.

4) **BLASC (Business and Law Academic Skills Centre)** Students will be provided with access to the Academic Skills Centre which offers advice on all aspects of academic work and is open weekdays throughout the academic year.

Students are also supported by:

- Online material such as videos, notes, announcements, recommended reading, revision and preparation material available via Virtual Learning Environment
- Formative Assessments for Learning
- Lists of recommended key texts and online readings per topic in addition to a clear schedule of delivery per week

## **F. Ensuring and Enhancing the Quality of the Course**

The ISC and Kingston University have several methods for evaluating and improving the quality and standards of its provision. These include:

- External examiners
- Quality Assurance and Enhancement Committee/Boards of Study with student representation
- Annual Monitoring and Enhancement
- Periodic review undertaken at subject level
- Student evaluation including Early, Mid and End-of-Module Evaluation Questionnaire (MEQs).
- Moderation policies
- Module/Programme Assessment Boards

## **G. Employability and work-based learning**

After completing the International Foundation Year, students will move onto a range of different degree programmes and eventually into a range of different forms of employability. There are a variety of skills that are fundamentally embedded with the foundation course and can be transferred to the undergraduate degree course of their choice. Students develop their English language skills which will enable them to participate more effectively in lectures and tutorials. Students also develop skills such as working across cultural boundaries, foundation research skills, critical thinking and presentations skills which can all be transferred when completing their undergraduate degree programmes and to real world contexts in which they will work in the future.

In addition, International Foundation Year students are also encouraged to make full use of the Careers and Employability Services at Kingston University. These services help students to make the most of their time at university and help them with CV preparation, applying for jobs and interview techniques.

***Work-based learning, including sandwich courses and higher or degree apprenticeships***

N/A

## **H. Other sources of information that you may wish to consult**

- 1) Higher Education Academy (HEA), Framework for Internationalising Higher Education - <https://www.heacademy.ac.uk/sites/default/files/resources/internationalisingheframeworkfinal.pdf> (Last accessed 18th of March 2020)
- 2) Higher Education Academy (HEA), Framework for Embedding Employability in Higher Education - <https://www.heacademy.ac.uk/sites/default/files/downloads/embedding-employability-in-he.pdf> (Last accessed 18th of March 2020)
- 3) Universities UK, Patterns and trends in UK Higher education 2015 - <https://www.universitiesuk.ac.uk/facts-and-stats/data-and-analysis/Pages/patterns-and-trends-uk-higher-education-2015.aspx#.VrSaSLKLTcs> (Last accessed 18th of March 2020)
  - Module guides/module handbooks
  - Student handbook
  - Kingston University website [www.kingston.ac.uk](http://www.kingston.ac.uk)
  - Canvas (Kingston University virtual learning environment – for current students only)

## I. Development of Course Learning Outcomes in Modules

This table maps where course learning outcomes are **summatively** assessed across the 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						
		XS3028	XS3025	XS3016	XS3024	XS3023	XS3027	XS3026
Knowledge & Understanding	A4	S					S	S
	A3	S		S	S			S
	A2	S			S	S		S
	A1	S	S	S	S	S	S	S
Intellectual Skills	B4		S				S	S
	B3	S	S			S		S
	B1		S			S	S	
	B2	S	S	S	S			S
Practical Skills	C3		S	S		S		S
	C2			S			S	
	C1			S			S	
	C4	S			S		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.