UNIVERSITY OF PLYMOUTH
International College

UNIVERSITY OF PLYMOUTH INTERNATIONAL COLLEGE

PROGRAMME SPECIFICATION

University Foundation in Computing, Engineering and Robotics

RQF 3

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PATHWAY/s

Pathway Type	Undergraduate			
Pathway Areas				
Pathways/s	**Computing, Engineering and Robotics**			
University UNITe Code/s	Codes now applied per pathway, please see available spreadsheet			
College NAVIGATE Code/s				
Three Semester				
Two Semester	L1E1	L1E2	L1E4	
Pathway Provision	College: RQF Level/s		3 and 4	
	University: RQF Level/s		5 and 6	
Awarding University	University of Plymouth			
Awards by Pathway	Degree awards Stream 1			RQF Award Level
Transfer	Stream 1 (L1E1) *Generalist Stream* – allows, on successful completion, transfer to candidacy of the prescribed UPIC 1st Year degree (equivalent) integrated programme/s leading to the following University of Plymouth, Faculty of Science and Engineering and the , Faculty of Arts, Humanities and Business degree schemes at HE Level 2: BSc (Hons) Computer Science BSc (Hons) Audio and Music Technology Stream 2 (L1E2) *Specialist Stream* – allows, on successful completion, transfer to candidacy of the prescribed UPIC 1st Year degree (equivalent) integrated programme/s leading to the following University of Plymouth, Faculty of			6

	Science and Engineering and Faculty of Arts, Humanities and Business degree schemes at HE Level 2:
	BSc (Hons) Architectural Engineering
	BEng (Hons) Civil and Coastal Engineering
	BEng (Hons) Civil Engineering
	BEng (Hons) Mechanical Engineering
	BEng (Hons) Marine Technology
	Stream 4 (L1E4) Specialist *Stream* – allows, on successful completion, transfer to candidacy of the prescribed UPIC 1st Year degree (equivalent) integrated programme/s leading to the following University of Plymouth, Faculty of Science and Engineering degree schemes at HE Level 2:
	BEng (Hons) Electrical and Electronic Engineering
	BEng (Hons) Robotics

Subject Benchmark Statements	Reference, where appropriate, to the following overall degree Learning Outcomes: Computing QAA 5th Edition 30/03/2022; Engineering QAA 5th Edition 08/03/2023; Chemistry QAA 5th Edition 30/03/2022; MSOR QAA 5th Edition 08/03/2023
College Status	Associate College
College Location	15 Portland Villas, Drake Circus
University Location	Drake Circus, Plymouth, PL4 8AA
University Faculty	Faculty of Science and Engineering; Faculty of Art, Humanities and Business
University School/s	School of Engineering, Computing and Mathematics; School of Art, Design and Architecture, School of Society and Culture
Rationale	The partnership between UPIC and University of Plymouth facilitates the acquisition of an undergraduate degree by international students who, because of their previous educational experience, are not normally able to gain direct access to the University's degree schemes in the Faculty of Science and Engineering. The programme has been developed to satisfy important pedagogical issues: 1. To ensure that international students have a dedicated period of time, in a familial and safe setting, to acquire the basic knowledge and skills to prepare for undergraduate degree studies within a western learning environment. Thus, supporting transfer to the UPIC 1st Year degree (equivalent) integrated programmes in Electronic and Electrical Engineering; Robotics; Civil, Structural and Coastal Engineering; Building and Construction Management, Mechanical, Marine and Materials Engineering; and Computing studies and thereon, on successful completion, transfer to the prescribed HE Level 2/Stage 2 studies at University of Plymouth. 2. To satisfy the University's quality protocols, which, in turn, are directed by the QAA Subject Benchmark requirements, for transfer to undergraduate degree studies in the disciplines of Electronic and Electrical Engineering; Robotics; Civil, Structural and Coastal Engineering; Mechanical, Marine and Materials Engineering; Building and Construction Management; and Computing; Architectural Engineering at HE Level 2/Stage 2. 3. Facilitate access to the UPIC 1st Year degree (equivalent) integrated programmes and from there the opportunity to transfer to a prescribed University of Plymouth degree scheme at undergraduate HE Level 2/Stage 2 for those students who, for a number of reasons, do not

meet the direct entry tariff to the Faculty of Science and Engineering degree schemes at HE Level 1/Stage 1.

4. Protect the Faculty of Science and Engineering entry tariff to its undergraduate degree schemes and ensure that the University does not need to lower its entry tariff in order to increase its international student population.

5. Widen access and participation in higher education in line with the University's internationalisation agenda.

6. Commit to the provision of best practice customer service and student experience for international students and thus add value to the University's award-winning student lifestyle.

7. Support the integrity of the University's QAA commitment by adopting and adapting the University's quality regime to form the basis of a robust, quality driven set of academic programmes and administrative systems and processes.

8. Facilitate effective and efficient, low risk public/private partnership in line with the University's strategic research mission.

9. Enhance the global reach of the University into previously untapped markets and market segments.

10. Add resource, human and financial, to the University's marketing process.

11. Facilitate access to a global recruitment process.

12. Assist in the diversification of the student body.

13. Make available the benefits derived from access to Navitas' global reach and corporate marketing arm.

The UPIC University Foundation in Computing, Engineering and Robotics offers successful candidates the opportunity to transfer seamlessly to the UPIC 1st Year degree (equivalent) integrated programmes in Electronic and Electrical Engineering; Robotics; Civil, Structural and Coastal Engineering; Mechanical, Marine and Materials Engineering; Building and Construction Management; Architectural Engineering and Computing and, on successful completion, to the prescribed University of Plymouth degree schemes at HE Level 2/Stage 2. The UPIC University Foundation is recognised by University of Plymouth, see *Recognition Agreement*, March 2009, Schedules 1 and 2, and thus operates, where possible, in line with the quality framework of University of Plymouth, Faculty of Science and Engineering and the Faculty of Arts, Humanities and Business to which these pathways lead.

Educational Aims	The programme has been devised in accordance with the NVT UK Ltd University Foundation general educational aims along with those formulated for UPIC, see CPR QS01; CPR QS 04; CPR QS08; and CPR QS09.

The educational aims of the programme are to:

1. Prepare students, who would not normally be considered qualified, to an appropriate standard for entry into the UPIC 1st Year degree (equivalent) integrated programmes in Electronic and Electrical Engineering; Robotics; Civil, Structural and Coastal Engineering; Mechanical, Marine and Materials Engineering; Building and Construction Management; and Computing – equivalent to the prescribed HE Level 1 Faculty of Science and Engineering degree schemes at University of Plymouth.

2. Develop in students a fundamental knowledge and understanding that can demonstrate basic facts, concepts, theories and principles of engineering and related technological disciplines, and their underpinning science of mathematics so as to support their transfer into the UPIC 1st Year degree (equivalent) integrated programmes in Electronic and

Electrical Engineering; Robotics; Civil, Structural and Coastal Engineering; Mechanical, Marine and Materials Engineering; Building and Construction Management; and Computing.

3. Ensure students acquire and foster an appreciation of the wider engineering context and its underlying principles, inclusive of the social, environmental, ethical, economic and commercial impacts and effects as well as the potential careers involved so as to support their transfer into the UPIC 1st Year degree (equivalent) integrated programmes in Electronic and Electrical Engineering; Robotics; Civil, Structural and Coastal Engineering; Mechanical, Marine and Materials Engineering; Building and Construction Management; and Computing.

Encourage in students the ability to use analytical and practical processes to engineering and related technological queries so as to support their transfer into the UPIC 1st Year degree (equivalent) integrated programmes in Electronic and Electrical Engineering; Robotics; Civil, Structural and Coastal Engineering; Mechanical, Marine and Materials Engineering; Building and Construction Management; Architectural Engineering and Computing.

4. Develop in students an appreciation and desire to learn based on competent intellectual and practical skills that build to a set of transferable skills that will support them in all aspects of their onward academic studies/careers and support their decision making in an informed manner.

5. Ensure that graduates have attained the prescribed level of inter-disciplinary language competence described as Level B2 'Independent User' by the Council of Europe, see *Common European Framework of Reference for languages: Learning, teaching assessment 2001*, Council of Europe, CUP, Cambridge, p. 24, Table 1. *Common Reference Levels: global scale*.

6. Ensure that graduates have attained the prescribed level of inter-disciplinary language competence to a minimum pass mark of 50% in the ACL accredited module Interactive Learning Skills and Communication, and therein a minimum 6.0 IELTS equivalent.

PROGRAMME

Title	University Foundation in Computing, Engineering and Robotics	
RQF	3	
Credit Points	Entry Point 1	Entry Point 2
	Stream 1= 170 Stream 2= 180 Stream 4 = 180	Stream 1= 120 Stream 2= 130 Stream 4 = 130
Duration of Study	Two (2) semesters	
Weeks of Study	Twenty Six (26) weeks	
Mode of Study	Full-time	
Mode of Delivery	Face to Face	
Notional Hours	Two Semester	
Credit Points	Stream 1= 120 Stream 2= 130 Stream 4 = 130	
Contact Hours	Stream 1 = 460 Stream 2 = 472 Stream 4 = 472	
Self-directed Study Hours	Stream 1 =940 Stream 2 = 1028 Stream 4 = 1028	

Delivery Model	Integrated Delivery Model (IDM): First Year Direct Entry for Middle Eastern Sponsored Students	
Language of Delivery	Delivery	English
	Assessment	English
	Council of Europe	Entry Level 1: Common language reference level B1 increasing to B2 Independent User
		Entry Level 2: Common language reference level B2 Independent User
	ACL Accreditation	Interactive Learning Skills and Communication

Intended Learning Outcomes	Generic:

All modules have a set of Generic Learning Outcomes (LOs) attached to them; see relevant Definitive Module Documents (DMDs). These provide a basic set of core transferable skills that can be employed as a basis to further study and life-long learning. They are delivered using an interdisciplinary and progressive approach underpinned by the relevant Interactive Learning Skills and Communication (ILSC) module, to build these core skills within the context of subject-specific learning. Incorporated in these core skills are the key themes of relationship-management, time-management, professional communication, technological and numerical understanding and competency.

The Generic LOs for the programme are tabled below:

Key knowledge will be demonstrated by:	Key skills will be demonstrated by the ability to:
Personal organisation and time-management skills to achieve research goals and maintain solid performance levels.	Meet converging assessment deadlines – based on punctuality and organisation with reference to class, group and individual sessions within a dynamic and flexible learning environment with variable contact hours and forms of delivery.
Understanding of the importance of attaining in-depth knowledge of terminology as used in a given topic area, as a basis to further study.	Communicate clearly using appropriate nomenclature to enhance meaning in all oral and written assessments with no recourse to collusion or plagiarism.
Understanding, knowledge and application of appropriate and effective methods of communication to meet formal assessment measures.	Present clearly, coherently and logically in a variety of oral and written formats using a variety of appropriate qualitative and quantitative tools and evidence bases.
Understanding and knowledge as to the development of the industry and/or scholarship in relation to a given topic under study.	Demonstrate an understanding of the current themes of a given topic, the academic and practical foundation on which they are based – demonstrated by a lack of plagiarism and need for collusion in both individual and group work.
Understanding of the rules applying to plagiarism and collusion.	Collate, summarise, reason and debate/argue effectively on a given topic with appropriate reference to another's work or ideas/concepts.
Ability to work as an individual, in a small team and in a larger group to effect data collation, discussion and presentation of evidence.	Meet and succeed in each of the varied assessments presented.

Generic LOs – All modules have a set of generic Learning Outcomes (LOs) attached to them, see relevant DMDs. These provide a basic set of core transferable skills that can be employed as a basis to further study and life-long learning. They are delivered using an interdisciplinary and progressive approach to build these core skills within the context of subject-specific learning. Incorporated in these core skills are the key themes of relationship management, time management, professional communication, technological and numerical understanding and competency.

The generic LOs for the programme are tabled below:

A	Knowledge and Understanding		
	To obtain a knowledge and understanding:	Teaching/learning methods and strategies:	Assessment methods and strategies are tested via...
1	The relationship the subject of engineering has to industry, business, human development and lifestyles and its applications to the contemporary world.	Acquisition of intended LOs via a combination of small group lectures, small group-based tutorial coursework (oral and written presentation), individual coursework (oral and written presentation) and summative examination. Additional support is provided through the provision of small peer-led tutorial group work; laboratory-based work in University of Plymouth labs; UPIC module-specific subject specialists;	A combination of summative (closed-book) examinations and summative coursework along with written assignments and in-course assessments, computer-based coursework, project reports and presentations, laboratory work.
2	The principles underlying the use of materials in engineering applications along with their production, use and control.		
3	The fundamentals of		

		programming and how it is used and contributes to the engineering and computing process and solves engineering and computing problems.	guest speakers (industry/topic specific); monitoring and appraisal by UPIC academic management as well as NVT UK Ltd management.
	4	The context and future development of engineering processes at personal, commercial, national and global levels.	Ensuring all candidates acquire grounding in University of Plymouth and associated end-user IT platforms for academic study. The opportunity to interface regularly with noted platforms in the College University of Plymouth library and independent environments to develop an understanding of the implications of the use of different computer and IT systems for research.
	5	The theories and key concepts of physical science in an interdisciplinary context.	
	6	How engineering contributes to the wider range of social and political issues.	Acquisition of A.2, A.3, A.7, A10 and A.11 via topic specific small lab-based group lectures and the additional support and guidance provided via the provision of small peer-led tutorial group work in differing, sometimes laboratory-based, environments.
	7	Physical laws and their relevance to engineering principles.	
	8	How economic and technological developments affect the environment and their management.	*All lecturers are available via email and the student portal for queries to be met.*
	9	The application of mathematic techniques to the engineering and logical decision making process.	*Students are encouraged throughout the programme to undertake independent study both to supplement and consolidate what is being taught/learnt and to broaden their individual knowledge and understanding of the subject.*
	10	The purpose and processes of object-orientated programming and an introductory understanding of Java.	
	11	The application of ICT as a fundamental tool for extracting, sourcing, describing and presenting data and information in a variety of relevant forms, and distributing data and information via a range of channels and formats.	*Feedback is given to all students on all work produced and, where appropriate, confirmed in individual appraisal events associated with modules and more generally NVT UK Ltd academic management. Additional interviews are made with the lecturer and/or the College Director/Principal to evaluate and discuss any emerging learning issues and therein a candidate's options.*
	12	The techniques and forms of effective and clear communication in a variety of	Academics preferably have a strong commercial-related and engineering background as well as academic and

		academic and professional settings in accordance with Level B2 'Independent User' as described by the Council of Europe, see p. 3 of this document for reference.	teaching credentials to ensure that the programme satisfies the generic outcomes required by the QAA Foundation Degree qualification benchmark – application of concepts to the work environment.	
	13	The role and importance of the study of the history of scholarship as a basis to determining a full understanding, correct use of accurate nomenclature and an appreciation of fundamental concepts associated with a subject area.		
	B	Cognitive/Intellectual Skills		
		To obtain intellectual/cognitive skills with the ability to:	Teaching/learning methods and strategies	Assessment methods and strategies via...
	1	Make full use of library and IT search (catalogue and bibliographic) resources.	Acquisition of intended LOs via a combination of small group lectures, small group-based tutorial coursework (oral and written presentation), individual coursework (oral and written presentation) and summative examination. Additional support is provided through the provision of small peer-led tutorial group work; monitoring and appraisal by UPIC academic management as well as NVT UK Ltd management. Ensuring all candidates acquire grounding in University of Plymouth and associated end-user IT platforms for academic study. The opportunity to interface regularly with noted platforms in College University of Plymouth library and independent environments to develop an understanding of the implications of the use of different computer and IT systems for research. Acquisition of B.1 and B.2 via topic specific small lab-based group lectures and the additional support and guidance provided via the provision of small peer-led tutorial group work in differing environments. Candidates are always encouraged to further develop intellectual skills by independent self-directed study as in the setting and monitoring of projects and coursework that require research and compilation skills as well as in-course spot-tests, examinations and participation. Students are encouraged to understand and evaluate with critical awareness the concepts studied at this level.	B.1 to B.5 – a combination of summative (closed-book) examinations and summative coursework along with written assignments, portfolios and in-course assessments/tests, computer-based coursework and tests, project reports, presentations and practical's. All students are required to maintain an 85% attendance record.
	2	Apply basic research techniques to sourcing and selecting appropriate academic data and literature.		
	3	Integrate oral, written, non-verbal and diagrammatic skills for clear communication.		
	4	Ability to analyse data and various modes of information using appropriate techniques.		
	5	Ability to begin to evaluate and start to apply, reasoned thinking and supportive evidence collation to conflicting sets of information and academic opinion.		
	C	Practical Skills		
		To obtain practical skills with the ability to:	Teaching/learning methods and strategies	Assessment methods and strategies via...

	1	Transfer and utilise key skills at a higher level of study.	Additional support is provided through the provision of small peer-led tutorial group work and integrated assessment regimes fostering interactivity of skills and knowledge across modules within the programme. Monitoring and appraisal by UPIC academic management as well as NVT UK Ltd management. Ensuring all candidates acquire grounding in University of Plymouth and associated end-user IT platforms for academic study. The opportunity to interface regularly with noted platforms in College, University of Plymouth library and independent environments to develop an understanding of the implications of the use of different computer and IT systems for research.	Integrated themes used across the continuous assessment framework for the programme to test robust capability skills in a number of environments.
	2	Employ analytical skills and methodologies as a basis to further study.	Through a combination of small group lectures and small group-based tutorial supported by an assessment framework that requires a high level of self-directed study allows candidates to foster a range of analytical skills to support further study. This is aided by inclusion of the module ILSC1&3 in the programme. Ensuring all candidates acquire grounding in University of Plymouth and associated end-user IT platforms for academic study. The opportunity to interface regularly with noted platforms in College, University of Plymouth library and independent environments to develop an understanding of the implications of the use of different computer and IT systems for research and skills application.	A combination of summative (closed-book) examinations and summative coursework along with written assignments and in-course assessments, computer-based coursework, project reports and presentations that test all analytical skills and require the application of taught methodology to solve queries across a range of subject areas.
	3	Ability to begin to engage critically with regard to science.	Application of the central mathematical themes throughout all core modules of the programme via examples and topics for assessment regimes.	Integrated themes used across the continuous assessment framework for the programme to test robust capability skills in a number of environments.
	D	Transferable Skills		
		To obtain transferable skills with the ability to:	Teaching/learning methods and strategies	Assessment methods and strategies via...
	1	Select, read, digest, summarise	Embedded in all aspects of delivery	A combination of summative (closed-

		and synthesise information material in a variety of forms, both qualitative and quantitative (text, numerical data and diagrammatic) and in an appropriate manner to identify and determine key facts/themes and relevancy.	and assessment structures is the need to disseminate information presented in a variety of forms and modalities.	book) examinations and summative coursework along with written assignments and in-course assessments, computer-based coursework, project reports and presentations.

and synthesise information material in a variety of forms, both qualitative and quantitative (text, numerical data and diagrammatic) and in an appropriate manner to identify and determine key facts/themes and relevancy.

2 Use and clearly communicate discursive, numerical, statistical and diagrammatic ideas, concepts, results and conclusions using appropriate technical and non-technical language and language style, structure and form.

3 Application of basic research and referencing techniques to all aspects of study, information collation, information presentation and formulation of academic opinion.

4 Embedding the importance of self-study and reliance. This involves cultivating and developing a responsibility within each student to take cognizance for their own learning, initiative, effective time management and self-discipline within the academic and professional environments.

5 Students will also begin to develop a very good conceptual understanding and evaluation of the main aspects of the disciplines of Life Sciences / Sciences that can serve them well in their future studies and careers.

and assessment structures is the need to disseminate information presented in a variety of forms and modalities.

Using a combination of all delivery and assessment styles (oral and written, group and individual) used within the programme to demonstrate competence in presentation, reports, long and short essays (to enhance summarisation techniques and limit collusion and plagiarism), timed assignments (indicating knowledge, organisation, time management and clear communication ability), of the following: design a persuasive message from the audience's perspective; demonstrate effective presentation delivery skills in a variety of situations; leave effective voice-mail messages; write persuasive e-mails, memos, letters; and write factual essays and reports in plain English.

Benchmarking of skills with regard to IT software packages (Word, PowerPoint, Excel, Access), internet access, web-content management (CMS, via Drupal).

book) examinations and summative coursework along with written assignments and in-course assessments, computer-based coursework, project reports and presentations.

This indicates an ability to effectively manage a complex and flexible timetable, combining a variety of delivery and assessment modes, some of which are conflicting in submission and style (oral/written and individual/small group, to demonstrate effective organisation, self-reliance and time-management skills.

Assessment Regulations	Summary: The programme is compliant with both the generic assessment regulations of Navitas UK and those of the College; see CPR QS9. Each module within the programme/stage of study has an associated Module Outline Guide (MG) that may be broadened into a Definitive Module Document (DMD) either of which will be provided to students at the beginning of their studies. These documents offer generic information on the Aims and Specific LOs of the subject/s under study, basic references and the attendance and notional contact requirements. They also include topics/subject areas of study and outlines of the assessment events. Each module has an associated textbook, as prescribed by the University's Module Outlines, and a specifically developed Module Content Guide (MG) which includes the types of assessment activities employed, teaching methods, resources, assessment criteria and expectations, contact details of the tutor/s, referencing (if applicable) and submission/completion requirements. Contained is also a detailed lecture-by-lecture schedule of subject's students can be expected to cover over the teaching period. This acts as a useful reference for study and revision purposes. All assessment is designed to reflect and measure both an individual's and a cohort's achievement against the Specific LOs of the module and Intended LOs of the programme. In-course written, reading, listening and oral assessment is built into all modules through general interaction between tutors and students, student peer review and small group tutorials or individual tutorials/appraisals. Modes of assessment include essay/report writing, oral presentation (group or individual, and poster), portfolio, and e-based, in-class or take-home exercises/tests. All written assessments must follow certain criteria in style and submission as noted in the relevant Module Content Guides. This form of assessment is considered fundamental to a student's ability to communicate ideas and evidence with clarity, relevance and logic in a planned and organised manner. Plain writing style, syntax and grammar are core skills that can be enhanced to support the maturing of individual students' composition and thus academic and transferable proficiency. Oral presentations, whether part of formal or informal assessment practice, are encouraged within all modules as they promote, among others, transferable skills and can identify those students who may be plagiarising material. It is advised, however, that they should not make up more than 60% of the final module mark unless as part of the learning rational. Oral group presentations should ideally contain no more than five (5) students, unless specific reasoning is applied. Each member, irrespective of their role, should be awarded the same mark unless where obvious differentiation arises, for management of this process see CPR QS9. This form of expression should not be allocated more than fifty (50) minutes per group, with less than a 30% weighting. Time limits must be upheld by tutors so as to ensure all students have the same opportunity to perform. Furthermore, tutors ought to notify students as to the materials available to them before preparation takes place. Final summative examination normally adheres to closed-book, invigilated, timed conditions and takes place during allocated exam periods of a programme. It represents a more Abstract measure of a student's achievement as a consequence of the Specific LOs associated with a module. It is utilised as a key measure of quality in teaching standards and provides a basis to aspects of delivery and environment which takes place at the conclusion of a semester by College academic services, see CPR QS9. Marks indicated in the relevant DMDs cannot be referred. Only in extenuating circumstances, sickness, personal tragedy or in the possibility of a clerical error, will deferral take place, see CPR QS9. Formal assessment modalities (coursework and examination, respectively), combine to produce the following weightings applied to any give module: | Coursework	Examination
100%	0%
80%	20%
70%	30%
60%	40%
50%	50%
40%	60%
30%	70%
20%	80%
0%	100% | Successful completion of a module is based on attaining the required overall pass grade prescribed. All students must achieve a grade D* in the Interactive Learning Skills and Communication (see DMD ILSC1&3). The assessment mode for a given module is based on the desired Specific LOs, their expressions can be found in the relevant DMD. Students must be briefed at the beginning of each module as to which weightings are in use. They should also be clearly advised as to the marking criteria and, hence, the achievement requirements for each grade cluster. Where a student has a special need or disability, appropriate steps must be taken by the College,

	academic staff and/or internal/external invigilators to ensure that the need is recognised and a justified outcome identified, see CPR QS9.
	<u>Demonstration of achievement:</u>
	Students must pass all modules at the prescribed grade in order to progress to the next stage of their educational continuum, see Progression Criteria, below.
	<u>Categories of performance and grading levels</u>**:**
	A and A*(High Distinction) – Distinctive level of knowledge, skill and understanding which demonstrates an authoritative grasp of the concepts and principles and ability to communicate them in relation to the assessment event without plagiarism or collusion. Indications of originality in application of ideas, graphical representations, personal insights reflecting depth and confidence of understanding of issues raised in the assessment event.
	B and B* (Distinction) – Level of competence demonstrating a coherent grasp of knowledge, skill and understanding of the assessment and ability to communicate them effectively without plagiarism or collusion. Displays originality in interpreting concepts and principles. The work uses graphs and tables to illustrate answers where relevant. Ideas and conclusions are expressed clearly. Many aspects of the student's application and result can be commended.
	C and C*(Credit) – Level of competence shows an acceptable knowledge, skill and understanding sufficient to indicate that the student is able to make further progress. The outcome shows satisfactorily understanding and performance of the requirements of the assessment tasks without plagiarism or collusion. Demonstrates clear expression of ideas, draws recognisable and relevant conclusions.
	D (Pass) – Evidence of basic competence to meet requirements of the assessment task and event without plagiarism or collusion. Evidence of basic acquaintance with relevant source material. Limited attempt to organise and communicate the response. Some attempt to draw relevant conclusions.
	F (Fail) – The student's application and result shows that the level of competence being sought has not yet been achieved. The assessed work shows a less than acceptable grasp of knowledge, skill and understanding of the requirements and communication of the assessment event and associated tasks.
	<u>Generic marking criteria:</u>
	Response – the response must address all parts of the question, that is not just a part or parts of the question. A response that is not specifically tailored to the needs of the question will not be accepted.
	Structure – the student has identified the main issues of the question and attached the appropriate emphasis to them; has stated their agreement accurately and in some detail; and has utilised the supporting data.
	Context – the student has displayed knowledge of the basic subject matter under assessment; has included only relevant material where required; has provided a written agreement or mathematical/numerical/diagrammatic/modelled statement and, in doing so, has addressed all aspects of it in reaching a conclusion; and has provided a clear understanding of a question in reaching a conclusion.
	Presentation – due credit, specified as a percentage of the marking criteria, will be given for a succinct and fluent writing style.
	Illegible material will not be given due credit, specified as a percentage of the marking criteria.
	Penalty – a student will be penalised if they have not tackled each issue of a question separately, stating their agreement and or rationalised progression, and then applying this to the facts; and will be penalised for not providing evidence of academically based reasoning in an answer.
	Sources – the student should provide accurate referencing; it is essential that a student does not plagiarise from any source, see CPR QS9.
English and Maths Support	Students who have joined at Entry Level 1 will attend the weekly English and Maths clubs that are provided by UPIC free of charge. The students will also attend free sessions hosted by University of Plymouth's English Language Centre. UPIC will also employ teaching assistants for maths and physics to give in class support
Moderation	See CPR QS09 – All examination papers are internally moderated through a peer review process. The College undertakes second marking as a matter of course and a 30% sample (or ten scripts, whichever is less) of the highest weighted piece is double marked for quality control purposes. Model answers are prepared alongside examination papers.
Progression Criteria	See Appendix 2 of this document; also see relevant DMDs and MGs in *Associated Documentation* (noted below):

	Summary: Minimum pass mark of 50% achieved in all modules.
	Specialist Stream 2 and 4 summaries: All modules require a minimum pass mark of 60% for students seeking transfer through Specialist Stream 2 or 4, to a UPIC 1st Year degree (equivalent) integrated BEng programme.
	Students progressing to BEng (Hons) Degree Programmes would normally be required to achieve a minimum pass of 60% in all Stage 1 modules. However consideration can be given to progressing students to Stage 2 BEng (Hons) programmes who have not achieved 60% in all modules. An average of the grades across the six academic modules (Not ILSC1&3 or ICT) will be taken into account and students achieving an aggregate of 60% will be allowed to progress. All decisions regarding progression to BEng (Hons) shall be determined by the end of Stage 1 Progression Boards which will assess the students across their full range of module grades. Students who fail to achieve 60% across all modules (individually or as an aggregate grade) or who do not show an academic progression will be deemed to have failed. Students achieving more that 50% but less than 60% will be offered the choice of a referred examination or progression on to the BSc equivalent (if available).
	In the case of BEng (Hons) Civil Engineering Students the BSc Equivalent is the BSc (Hons) Construction Management and the Environment pathway in the faculty of Arts and Humanities.
Failure to Progress	See CPR QS9 – Summary: a student may not fail any module more than three times; failure of a module that the student is judged through the processes set out in Sections 8 and 9 in CPR QS9. Depending on the amount of credits failed a student may be allowed a referral in the failed assessment elements. Failure of a student to successfully complete a module on the repeat of that module will result in referral to the College Progression Board for a student management decision to be made
Associated Documentation	Definitive Module Documents (DMDs) as follows: DMD UF/ILSC1&3; DMD U/F SCI101MB; DMD UF/SCI101SC; DMD UF/SCI103; DMD UF/BUS107; DMD UF/SCI115; DMD UF/SCI116; DMD UF/SCI130; DMD UF/SCI131; DMD UF/SCI132; DMD UF/SCI135; DMD UF/SCI125
	Module Introductory Documents (MGs) as follows: MG UF/ILSC1&3; MG UF/SCI101SC; MG UF/SCI101; MG UF/SCI103; MG UF/BUS107; MG UF/SCI115; MG UF/SCI116; MG UF/SCI130; MG UF/SCI131; MG UF/SCI135; MG UF/SCI125; MG UF/SCI132
	Associated teaching aids for a module as required
	Associated *Student Handbook* and *Student Study Guide*
	College Policies and Regulations (CPRs)
Human Resource	Sessional academics (tutors) – with appropriate qualifications, experience and abilities. Guest speakers – relevant industries as requested by the College.
Built Environment	All lectures/classes/labs and small group tutorials are held in the designated UPIC/University of Plymouth class rooms, seminar rooms and dedicated IT laboratories; students are encouraged to use University of Plymouth's library and e-learning facilities for self-directed study; students are encouraged to use their private IT facilities where possible; field-trips will be taken as required.
E-learning	College Portal; University Moodle; Library
Library	Charles Seale-Hayne library

Programme Framework	**University Foundation in Computing, Engineering and Robotics**

University Foundation – Computing, Engineering and Robotics (Stream 1; L1E1)

Core Modules		Credit Points	% Examination *(closed-book and timed conditions)*	% Coursework *(oral and written communication – small group and individual)*
Module Code	*Module Name*			
ILSC1&3	Interactive Learning Skills and Communication 1&3	20	30	70
BUS107	Principles of ICT	10	-	100
SCI115	Physics 1	20	90	10
SCI101SC	Numerical Techniques 1	20	100	-
SCI30	Research and Referencing	20	-	100
SCI131	Programming Techniques	20	-	100
SCI135	Preparation for Computer Science	20	-	100
SCI102	Numerical Techniques 3	20	100	-
		150 Credit Points		

University Foundation – Computing, Engineering and Robotics (Stream 2; L1E2)

Core Modules		Core Modules	% Examination *(closed-book and timed conditions)*	% Coursework *(oral and written communication – small group and individual)*
Module Code	*Module Code*			
ILSC1&3	Interactive Learning Skills and Communication 3	20	30	70
BUS107	Principles of ICT	10	50	50
SCI101SC	Numerical Techniques 1	20	100	-
SCI103	Numerical Techniques 3	20	100	-
SCI115	Physics 1	20	90	10
SCI116	Physics 2	20	90	10
SCI30	Research and Referencing	20	-	100
SCI132	Materials and Mechanics	20	100	-
Computing, Engineering and Robotics		**150 Credit Points**		

University Foundation – Computing, Engineering and Robotics (Stream 4; L1E4)				
Core Modules			**% Examination** *(closed-book and timed conditions)*	**% Coursework** *(oral and written communication – small group and individual)*
Module Code	*Module Name*	*Credit Points*		
BUS107	Principles of ICT	10	30	70
ILSC1&3	Interactive Learning Skills and Communication 3	20	-	100
SCI101SC	Numerical Techniques 1	20	100	-
SCI103	Numerical Techniques 3	20	100	-
SCI115	Physics 1	20	90	10
SCI116	Physics 2	20	90	10
SCI130	Research and Referencing	20	-	100
SCI131	Programming Techniques	20	-	100
Computing, Engineering and Robotics		**150 Credit Points**		

Management	The University Foundation in Computing, Engineering and Robotics programme is delivered by UPIC on the Drake Circus campus of University of Plymouth. This scenario seeks to provide the necessary resources to ensure that all students enrolled with UPIC are afforded an educational experience that not only provides assimilation into campus and student life but is aligned with the standards and protocols of the University experience.
	The programme operates under and according to the general compliance structures determined by the Quality and Standards Office Navitas UK. This Office has oversight of all Navitas programmes operating in the UK. Any changes to a programme must be submitted via the normal Navitas UK processes through the Quality and Standards Office.
	The general operational management of the programme lies with UPIC's academic services which assume overall responsibility for the administrative and implementation functions.
	The UPIC Head of Teaching and Learning or nominee is responsible for the day-to-day management of the programme inclusive of attendance monitoring.
	UPIC provides additional tutorial support to any student who may require it, to the amount of two (2) extra contact hours per week per enrolled student.
	The various sessional academic module leaders/lecturers/tutors are responsible for the delivery and initial assessment of modules whilst appraisal of delivery and programme content is advised by the UPIC Head of Teaching and Learning or nominee in consultation with the Quality and Standards Office Navitas UK, the Head of the Faculty of Science and Environment and associated appropriate Programme Directors/Leaders and/or Link Tutor.
	The Learning and Teaching Board of the College, is identified as responsible for candidate selection to the UPIC University Foundation in Business Studies.
Monitoring and Review	Formal review of the University Foundation in Computing, Engineering and Robotics, takes place as an annual review by UPIC with representation from the Faculty of Science and the Environment. Strategic, logistical and operational issues are developed within the remit of the Academic Advisory Committee (AAC) held on a trimester basis and chaired by University of Plymouth. Progression is determined via the UPIC Board of Examiners. For a details of this review and quality management of this and all UPIC programmes, see, CPR QS9.
	Informal Review takes place on a regular basis via interface between students, academic services and

	the teaching staff using both student surveys (inclusive of i-graduate) and teaching observation
Entry Requirements	Standard and approved requirements for academic international benchmark qualifications; see CPR QS3. English language for Entry Point 1 is at CEFR level B1; English language for Entry Point 2 is at CEFR level B2 in line with UKVI requirements for RQF 6.
Appendix 1	Intended Learning Outcomes in the constituent modules – table inserted indicating direct mapping of LOs per module.
Appendix 2	Delivery schedule incorporating notional, contact and self-directed hours of study applied to each module and therein the programme. Appendix 2 = Two Semester
Appendix 3	-
Appendix 4	-
Appendix 5	- See DMDs.

Appendix 1

University Foundation – Computing, Engineering and Robotics

Development of Programme Learning Outcomes in the Constituent Modules

The table below maps where the LOs of a programme are assessed in the core/constituent modules. It provides an aid to (i) academic staff in understanding how individual modules contribute to the programme aims, (ii) a checklist for quality control purposes, and (iii) a means to help students monitor their own learning, and personal and professional development as the programme progresses.

Key:

Learning Outcomes which are assessed as part of a given module ✓✓

Learning outcomes which are not explicitly assessed as part of a given module ✓

University Foundation – Computing, Engineering and Robotics

Pathway Stage 1		Programme Intended LOs												
		Knowledge and Understanding												
Core Modules	Module Code	A.1	A.2	A.3	A.4	A.5	A.6	A.7	A.8	A.9	A.10	A.11	A.12	A.13
Interactive Learning Skills and Communication 3	ILSC1&3	✓✓		✓	✓✓	✓	✓✓		✓✓			✓	✓✓	✓✓
Principles of ICT	BUS107	✓	✓	✓✓	✓				✓✓		✓	✓✓	✓✓	✓
Numerical Techniques 1	SCI101SC			✓		✓			✓	✓✓			✓	✓
Numerical Techniques 2	SCI102	✓	✓	✓	✓	✓	✓	✓✓	✓	✓✓	✓	✓	✓✓	✓✓
Numerical Techniques 3	SCI103			✓		✓			✓	✓✓			✓	✓
Physics 1	SCI115		✓	✓		✓✓		✓✓	✓✓	✓			✓	✓
Physics 2	SCI116		✓	✓		✓✓		✓✓	✓✓	✓			✓	✓
Research and Referencing	SCI130	✓	✓✓	✓	✓✓	✓	✓✓		✓✓	✓✓			✓	✓✓
Programming Techniques	SCI131	✓	✓	✓✓	✓✓	✓	✓	✓✓	✓	✓✓	✓✓	✓✓	✓	✓
Materials and Mechanics	SCI132	✓	✓	✓✓	✓✓	✓	✓	✓✓	✓	✓✓	✓✓	✓✓	✓	✓
Preparation for Computer Science	SCI135	✓	✓	✓✓	✓✓	✓	✓	✓✓	✓	✓✓	✓✓	✓✓	✓	✓
Biology 1	SCI120	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓	✓✓	✓✓	✓✓	✓	✓✓	✓✓
Chemistry	SCI125	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓	✓✓	✓✓	✓✓	✓	✓✓	✓✓

Pathway Stage 1		Programme Intended LOs													
		Intellectual Skills					Practical Skills				Transferable Skills				
Core Modules	Module Code	B.1	B.2	B.3	B.4	B.5	C1	C.2	C.3	C.4	D.1	D.2	D.3	D.4	D.5
Interactive Learning Skills and Communication 3	ILSC1&3	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓		✓✓	✓✓	✓✓	✓	✓✓
Principles of ICT	BUS107	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓	✓	✓✓	✓✓	✓✓	✓	✓✓
Numerical Techniques 1	SCI101SC	✓	✓	✓✓	✓✓	✓✓	✓✓	✓✓			✓✓	✓✓	✓✓	✓	✓✓
Numerical Techniques 2	SCI102	✓	✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓	✓	✓✓	✓✓	✓✓	✓	✓✓
Numerical Techniques 3	SCI103	✓	✓	✓✓	✓✓	✓✓	✓✓	✓✓			✓✓	✓✓	✓✓	✓	✓✓
Physics 1	SCI115	✓	✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓	✓✓	✓✓	✓✓	✓✓	✓	✓✓
Physics 2	SCI116	✓	✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓	✓✓	✓✓	✓✓	✓✓	✓	✓✓
Research and Referencing	SCI130	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓	✓✓
Programming Techniques	SCI131	✓	✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓	✓	✓✓	✓✓	✓✓	✓	✓✓
Materials and Mechanics	SCI132	✓	✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓	✓	✓✓	✓✓	✓✓	✓	✓✓
Preparation for Computer Science	BUS105	✓	✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓	✓	✓✓	✓✓	✓✓	✓	✓✓
Biology 1	SCI120	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓	✓✓	✓✓	✓✓	✓	✓✓	✓✓	✓✓
Chemistry	SCI125	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓	✓✓	✓✓	✓✓	✓	✓✓	✓✓	✓✓

A.1 The relationship the subject of engineering has to industry, business, human development and lifestyles and its applications to the contemporary world.

A.2 The principles underlying the use of materials in engineering applications along with their production, use and control.

A.3 The fundamentals of programming and how it is used and contributes to the engineering process and solves engineering problems.

A.4 The context and future development of connectivity using mobile communications and the internet at personal, commercial, national and global levels.

A.5 The theories and key concepts of physical science in an interdisciplinary context.

A.6 How engineering contributes to the wider range of social and political issues.

A.7 Physical laws and their relevance to engineering principles.

A.8 How economic and technological developments affect the environment and their management.

A.9 The application of mathematical techniques to the engineering and logical decision making process.

A.10 The purpose and processes of object-orientated programming and an introductory understanding of Java.

A.11 The application of ICT as a fundamental tool for extracting, sourcing, describing and presenting data and information in a variety of relevant forms, and distributing data and information via a range of channels and formats.

A.12 The techniques and forms of effective and clear communication in a variety of academic and professional settings in accordance with Level B2 'Independent User' as described by the Council of Europe, see p. 3 of this document for reference.

A.13 The role and importance of the study of the history of scholarship as a basis to determining a full understanding, correct use of accurate nomenclature and an appreciation of fundamental concepts associated with a subject area.

Skills and Attributes

Intellectual/Cognitive Skills

B.1 Make full use of library and IT search (catalogue and bibliographic) resources.

B.2 Apply basic research techniques to sourcing and selecting appropriate academic data and literature.

B.3 Integrate oral, written, non-verbal and diagrammatic skills to effect clear communication.

B.4 Ability to analyse data and various modes of information using appropriate numerical techniques.

B.5 Ability to begin to evaluate and start to apply, reasoned thinking and supportive evidence collation to conflicting sets of information and academic opinion.

Practical skills

C.1 Transfer and utilise key skills at a higher level of study.

C.2 Employ analytical skills and methodologies as a basis to further study.

C.3 Ability to begin to engage critically with regard to the underlying challenges facing the environment and engineering-based industries.

C.4 Develop the knowledge and skills to carry out basic laboratory manipulations with reference toUniversity of Plymouth protocols and safety regulations.

Transferable skills

D.1 Select, read, digest, summarise and synthesise information material in a variety of forms, both qualitative and quantitative (text, numerical data and diagrammatic) and in an appropriate manner to identify and determine key facts/themes and relevancy.

D.2 Use and clearly communicate discursive, numerical, statistical and diagrammatic ideas, concepts, results and conclusions using appropriate technical and non-technical language, style, structure and form.

D.3 Application of basic research and referencing techniques to all aspects of study, information collation, information presentation and formulation of academic opinion.

D.4 Embedding the importance of self-study and reliance. This involves cultivating and developing a responsibility within each student to take cognizance for their own learning, initiative, effective time management and self-discipline within the academic and professional environments.

D.5 Students will also begin to develop a very good conceptual understanding and evaluation of the main aspects of engineering that can serve them well in their future studies and careers.

Appendix 2
University Foundation – Computing, Engineering and Robotics
Delivery Schedule: hours of study applied to the programme
Semester 1 – Streams 1, 2 and 3 (L1E1, L1E2 & L1E4) Entry Point 1

Week	Total Hours								Contact hours/week	Self-directed study hours/week
	ILSC1&3 Interactive Learning Skills and Communication 1&3		**BUS107** Principles of ICT		**SCI101SC** Numerical Techniques 1		**SCI115** Physics 1			
	Contact hours	Self-dir Study	Contact hours	Self-dir study	Contact hours	Self-dir Study	Contact hours	Self-dir study		
1	5	10	3	5	5	10	5	10	18	35
2	5	10	3	5	5	10	5	10	18	35
3	5	10	3	5	5	10	5	10	18	35
4	5	10	3	5	5	10	5	10	18	35
5	5	11	3	5	5	11	5	11	18	38
6	5	11	3	5	5	11	5	11	18	38
7	5	11	3	5	5	11	5	11	18	38
8	5	11	3	5	5	11	5	11	18	38
9	5	11	3	5	5	11	5	11	18	38
10	5	11	3	5	5	11	5	11	18	38
11	5	11	3	5	5	11	5	11	18	38
12	5	11	3	5	5	11	5	11	18	38
13 (Exam)	2	10	2	2	2	10	2	10	8	38
Total hours / module	62	138	38	62	62	138	62	138	224	476
Notional hours / module	200		100		200		200		700	
Credit Points	20		10		20		20		70	

Semester 2 (Entry point 2) – Stream 1 (L1E1)

Week	Total Hours										
	SCI130		**SCI131**		**SCI102**		**SCI135**			
	Research and Referencing		Programming Techniques		Numerical Techniques 2		Business Studies			
	Contact hours	Self-dir Study	Contact hours	Self-dir study	Contact hours	Self-dir Study	Contact hours	Self-dir study	Contact hours/week	Self-directed study hours/week
1	5	10	5	10	5	10	5	10	19	34
2	5	10	5	10	5	10	5	10	19	34
3	5	10	5	10	5	10	5	10	19	34
4	5	10	5	10	5	10	5	10	19	34
5	5	11	5	11	5	11	5	11	19	37
6	5	11	5	11	5	11	5	11	19	37
7	5	11	5	11	5	11	5	11	19	37
8	5	11	5	11	5	11	5	11	19	37
9	5	11	5	11	5	11	5	11	19	37
10	5	11	5	11	5	11	5	11	19	37
11	5	11	5	11	5	11	5	11	19	37
12	5	11	5	11	5	11	5	11	19	37
13 (Exam)	2	10	2	10	2	10	2	10	8	32
Total hours / module	62	138	62	138	62	138	62	138	248	552
Notional hours / module	200		200		200		500		700	
Credit Points	20		20		20		20		80	

Semester 2 (Entry point 2) – Stream 1 (L1E2)

Week	Total Hours								Contact hours/week	Self-directed study hours/week
	SCI130		**SCI132**		**SCI103**		**SCI116**			
	Research and Referencing		Materials and Mechanics		Numerical Techniques 3		Physics 2			
	Contact hours	Self-dir Study	Contact hours	Self-dir study	Contact hours	Self-dir Study	Contact hours	Self-dir study		
1	5	10	5	10	5	10	5	10	20	40
2	5	10	5	10	5	10	5	10	20	40
3	5	10	5	10	5	10	5	10	20	40
4	5	10	5	10	5	10	5	10	20	40
5	5	11	5	11	5	11	5	11	20	44
6	5	11	5	11	5	11	5	11	20	44
7	5	11	5	11	5	11	5	11	20	44
8	5	11	5	11	5	11	5	11	20	44
9	5	11	5	11	5	11	5	11	20	44
10	5	11	5	11	5	11	5	11	20	44
11	5	11	5	11	5	11	5	11	20	44
12	5	11	5	11	5	11	5	11	20	44
13 (Exam)	2	10	2	10	2	10	2	10	8	40
Total hours / module	62	138	62	138	62	138	62	138	248	552
Notional hours / module	200		200		200		200		800	
Credit Points	20		20		20		20		80	

Semester 2 (Entry point 2) – Stream 1 (L1E4)

Week	Total Hours									
	SCI130		SCI131		SCI102		SCI116			
	Research and Referencing		Programming Techniques		Numerical Techniques 2		Physics 2			
	Contact hours	Contact hours	Contact hours	Self-dir study	Contact hours	Self-dir Study	Contact hours	Self-dir study	Contact hours/week	Self-directed study hours/week
1	5	10	5	10	5	10	5	10	20	40
2	5	10	5	10	5	10	5	10	20	40
3	5	10	5	10	5	10	5	10	20	40
4	5	10	5	10	5	10	5	10	20	40
5	5	11	5	11	5	11	5	11	20	44
6	5	11	5	11	5	11	5	11	20	44
7	5	11	5	11	5	11	5	11	20	44
8	5	11	5	11	5	11	5	11	20	44
9	5	11	5	11	5	11	5	11	20	44
10	5	11	5	11	5	11	5	11	20	44
11	5	11	5	11	5	11	5	11	20	44
12	5	11	5	11	5	11	5	11	20	44
13 (Exam)	2	10	2	10	2	10	2	10	8	40
Total hours / module	62	138	62	138	62	138	62	138	248	552
Notional hours / module	200		200		200		200		800	
Credit Points	20		20		20		20		80	