

PROGRAMME SPECIFICATION

Foundation Certificate in International Foundation Programme (Engineering, Computing and Life Sciences)

Awarding institution	Liverpool John Moores University
Teaching institution	Study Group
JACS Code	Y000
Programme Duration	Full-Time: 1 Year
Language of Programme	All LJMU programmes are delivered and assessed in English
Subject benchmark statement	Biomedical Science 2015, Engineering 2015, Chemistry 2014
Programme accredited by	
Description of accreditation	
Validated target and alternative exit awards	Foundation Certificate in International Foundation Programme (Engineering, Computing and Life Sciences)
Link Tutor	Jack Mullett

Educational aims of the programme

To provide students with a general knowledge and understanding of engineering, computing and life sciences subject content underpinning degree-level study and to consolidate prior learning acquired in their home countries.

To develop students' intellectual skills to enable them to acquire ability in the collection, analysis, interpretation and understanding of relevant information relating to the disciplines they will be progressing to.

To prepare students for the demands of UK degree-level study and introduce the academic skills required to succeed on LJMU undergraduate programmes.

To develop students English language, number, word-processing, research and writing skills.

Target award Learning Outcomes - Foundation Certificate

A student successfully completing the programme of study will have acquired the following subject knowledge and understanding as well as skills and other attributes.

A student who is eligible for this award will be able to:

1. Demonstrate a knowledge of specialist terms and vocabulary relevant to the pathway-related modules
2. Utilise an appropriate level of English academic skills
3. Understand key ideas and concepts relating to engineering, computing and life sciences
4. Identify the relevance of specialist theories and relate them to real-life situations
5. Analyse, interpret and summarise subject specific information
6. Use English language in an academic manner
7. Integrate and evaluate information relating to engineering, computing and life sciences from a variety of sources
8. Apply learned principles
9. Demonstrate independent learning
10. Retrieve and select relevant specialist information from a range of sources
11. Prepare for, and undertake, tests under exam conditions

12. Apply theory relating to engineering, computing and life sciences to the level of learning
13. Use specialist terms and vocabulary in proficient English in the appropriate context
14. Handle specialist equipment in laboratory/ workshop environments (in particular modules)
15. Employ numeracy and quantitative skills including basic data analysis, interpretation and extrapolation
16. Communicate effectively both orally and in writing, including in a second language
17. Work in a team
18. Work independently
19. Manage time effectively
20. Identify relevant source material
21. Effectively use IT for the presentation of work at the appropriate level
22. Use numerical skill

Teaching, Learning and Assessment

The methods used to enable outcomes to be achieved and demonstrated are as follows:

Acquisition of knowledge will be achieved via teaching methods such as lectures, seminars, tutorials, workshops, demonstrations and practical activities. Students will be expected to use IT, academic skills and proficiency in English when demonstrating learning.

A range of assessment methods will be used, to include subject-specific tasks alongside English language skills assessments. This includes written examinations, presentations, individual and group work, listening tests, report writing and practicals.

Intellectual skills will be developed through practical applications, guided research skills, presentations, group work, demonstrations and self-directed study.

Intellectual skills will be assessed via formative and summative processes such as in-class tests, research skills exercises, examination, coursework, practical exercises and reflective statements.

Practical skills will be acquired via lectures, data analysis exercises, group problem-solving, presentation and research skills development. Some modules include laboratory work whereby skill in the handling of equipment and management of an experiment will be taught.

Students will demonstrate their practical skills via assessments which include listening tests, practical report-writing, presentation and seminar exercises, examinations and group work.

Transferable skills are generally incorporated in to all teaching and learning methodologies. The development and acquisition of transferable skills is embedded in the programme curriculum to prepare students for degree-level study and eventual employment. The English language provision underpins the application of transferable skills for further study in the UK.

The full range of assessments enables students to demonstrate transferable skills.

Programme structure - programme rules and modules

The Foundation Certificate in Engineering, Computing and Life Science will be offered as a full-time programme delivered September to May and January to August (two intakes per year). Students will study 120 credits in a programme.

For progression to subjects based in the Faculty of Engineering and Technology students will study (at level 3):

- 3510IFESG PURE MATHS 1 (core) 20 credits
- 3511IFESG PURE MATHS 2 (core) 10 credits
- 3518IFESG APPLIED MATHS 1 (core) 10 credits
- 3519IFESG APPLIED MATHS 2 (core) 10 credits
- 3512IFESG PHYSICS 1 (core) 10 credits
- 3513IFESG PHYSICS 2 (core) 10 credits
- 3521IFSG PROJECT STUDY (core) 10 credits
- 3502IFSG ACADEMIC ENGLISH SKILLS (core) 40 credits

For progression to subjects based in the Faculty of Science, students will study (at level 3):

- 3522IFESG MATHS FOR SCIENCE (core) 10 credits

3516IFESG CHEMISTRY 1 (core) 10 credits
 3517IFESG CHEMISTRY 2 (core) 20 credits
 3514IFESG BIOLOGY 1 (core) 20 credits
 3515IFESG BIOLOGY 2 (core) 10 credits
 3521IFESG PROJECT STUDY (core) 10 credits
 3502IFESG ACADEMIC ENGLISH SKILLS (core) 40 credits

Level 3	Potential Awards on completion	Foundation Certificate
Core	Option	Award Requirements
3502IFESG Academic English Skills (AES) (40 credits) 3521IFESG Project Study (10 credits)	3510IFESG Pure Maths 1 (20 credits) 3511IFESG Pure Maths 2 (10 credits) 3512IFESG Physics 1 (10 credits) 3513IFESG Physics 2 (10 credits) 3514IFESG Biology 1 (20 credits) 3515IFESG Biology 2 (10 credits) 3516IFESG Chemistry 1 (10 credits) 3517IFESG Chemistry 2 (20 credits) 3518IFESG Applied Maths 1 (10 credits) 3519IFESG Applied Maths 2 (10 credits) 3522IFESG Maths for Science (10 credits)	50 core credits at level 3 70 option credits at level 3

Information about assessment regulations

All programmes leading to LJMU awards operate within the University's Academic Framework.
<https://www.ljmu.ac.uk/about-us/public-information/academic-quality-and-regulations/academic-framework>

(1) The Head of Centre (ISC) has the authority to exercise discretion in offering students who fail the FC. International Foundation Programme (Engineering, Computing and Life Sciences) a further 'de novo' attempt (including subsequent rights to referral and 'final module attempts') at all modules on the programme. (2) This programme has been approved to include an in-semester referral period (during semester 2 for semester 1 referral assessments). (3) AES 3502IFESG has been approved as a non-standard 40 credit module.

Opportunities for work-related learning (location and nature of activities)

This will take place when students progress to level 4 programmes. These international students will not be engaging with specific work-related learning whilst on the FC.

Criteria for admission

Other

An English level equivalent to at least IELTS 4.5 overall with a minimum of 4.0 in writing

Overseas qualifications

Country Qualification

- ANGOLA - Secondary school Certificate (Grade 12) with overall GPA at least 10 with at least 10 in relevant subjects.
- BOTSWANA - Cambridge Overseas School Certificate grades 1 - 8 in 4 or more subjects.
- CAMEROON - Minimum overall grade 10 in Baccalaureat or Certificat de Probation with 10+ in all relevant subjects.
- ETHIOPIA - Grade 12 HE Entrance Qualification Certificate, over 251 average, including relevant subjects.
- GAMBIA - West African School Certificate or Senior School Certificate - grades 1 - 8 in 4 or more subjects.
- GHANA - West African School Certificate or Senior School Certificate - grades 1 - 8 (A - E) in 4 or more

subjects. Integrated science is studied as a combination of Physics/Chemistry/Biology.

- KENYA - East African School Cert/Camb Overseas School Cert/Kenyan Cert (KCSE) - grades 1- 8 in 4 or more subjects.
- NIGERIA - West African School Certificate or Senior School Certificate - grades 1-8 (A - E) in 4 or more subjects.
- RWANDA - Rwandan Advanced GCSE - 3 subjects 40% (Grade D).
- SOUTH AFRICA - Senior Cert with Matriculation Endorsement = Four E's (relevant subjects) or National Senior Certificate - four subjects grade 3 or above (relevant subjects).
- TANZANIA - East Africa Cert/Cambridge Overseas School Cert/Certificate of Secondary Education - grades 1 - 8 (A-D) in 4 or more subjects.
- UGANDA - Ugandan Certificate of Education - grades 1 - 8 in 4 or more subjects.
- ZAMBIA - Zambian School Certificate grades 1 - 8 in 4 or more subjects.
- AUSTRALIA - Completion of year 11 with equivalent grades to the GCSE/IGCSE requirements.
- AZERBAIJAN - 11th grade - Passes in 4 or more subjects.
- SAUDI ARABIA - Tawjahiya (secondary school leaving cert) average grade 60% or above, including relevant subjects.
- BANGLADESH - Higher Secondary Certificate (HSC) / Intermediate Certificate / Polytechnic Diploma - passes in 4 or more subjects. HSC grades 55% or SSCs 65%. All students must provide a language proficiency test certificate. SG test alone is not acceptable. 50% min. required for relevant subjects i.e. Maths and Sciences.
- BELARUS - Attestat/11th grade – with minimum GPA 5.5.
- BRAZIL - Ensino Medio - 4 subjects min (6.9 - 5.0 / regular / C / 3).
- BRUNEI - Cambridge O level grades 1-6 are equivalent to GCSE A*-C. Minimum of 4 subjects required, grades 1-6. Will consider forecast/predicted results.
- BULGARIA - LJMU Only - Diploma of Completed Secondary Education taken at end of 12th grade (Diploma Za Sredno Obrazovanie) = AS level equivalency.
- CAMBODIA - Diploma of Upper Secondary school = year 12. Grading A - Excellent , B - Very Good, C - Good, D - Satisfactory .4 subjects minimum grade D including relevant subjects, Grade C required in Maths for Business students.
- CANADA - Completion of year 11 with equivalent grades to the GCSE/IGCSE requirements. 55% minimum overall.
- CHINA - SH2 (Gao Er): 70% average across the academic year (& the average must include key subjects) with a minimum of 4 academic subjects pass or above. SH3 (Gao San): 65% average across the academic year (& the average must include key subjects).
- COLOMBIA - Bachillerato - 5 relevant subjects including Maths (A) Acceptable or above.
- CYPRUS - LJMU Only - Apolytirion (Lyceum or Technical/Vocational Secondary School) - 14 (out of 20) upward.
- EGYPT - Certificate of General Secondary Education - Overall 55% including relevant subjects
- GEORGIA - Successfully completed Secondary School Leaving Certificate (sashualo skolis attestat).
- GREECE – LJMU Only - Apolytirion (Lykeio) - grade 14 average upwards accepted (14/20). Apolytirion of Lykeio is considered comparable to GCE Advanced Subsidiary (AS) level. Apolytirion of Gymnasio considered to be below GCSE standard.
- HONG KONG - HKCEE taken at the end of form 5. 4 passes (pass = E grade) at HKCEE in academic subjects (excludes Chinese (language), Religious Studies, Music, Physical Education, Art and Home Economics). English level L2 (= 4.5 IELTS) + 4 E's passes. New Form 5 (see separate Hong Kong tab) HKDSE: Minimum 222, relevant subjects, must have Maths.
- INDIA - Accept for Fdtn/UG Cert as follows: 45-47% at Year 12 (known as 'Board Exams' or HSC), 55% at year 11 65% at year 10. IF studied English then a score of 60% (year 12) or 70% (year 10) or above required. 50% min. required for relevant subjects i.e. Maths and Sciences.
- INDONESIA - SMU 2 Grade 6.5; SMU 3 Grade 6.0 (4 relevant subjects required).
- IRAN - Transcript of High School Diploma (3 years) required. Passes in 4 or more subjects, including relevant subjects. GPA is out of 20 Min. overall GPA requirement is 11 including relevant subjects.
- IRAQ - 12 years of schooling = either Certificate of Preparatory Education (Adadiyah) or Secondary School Certificate or Sixth Form Baccalaureat = all equivalent to GCSE level grades A-C when grades of 50% or more have been achieved. Adadiyah (or equivalent) with min 50% in 4 relevant subjects.

- JAPAN - 11th grade (lower secondary) or 12th grade (higher secondary) completion - passes in 4 or more subjects and GPA 2.
- JORDAN - Tawjihi (General Secondary Education Certificate) - 50%+ in 4 or more subjects, including relevant subjects.
- KAZAKHSTAN - Year 11/Certificate of Secondary Education - passes in 4 or more subjects.
- KOREA - From Senior High 3: Successful completion or equivalent, with adequate grades in relevant subjects (adequate \geq 6th Grade). From Senior High 2: 5th grade in relevant subjects. Korean High school graduation equivalency exam - 60%+ including relevant subjects.
- KUWAIT - Shahadat-al-thanawia-al-a'ama (General Secondary School Leaving Certificate) - passes in 4 or more subjects (60% +).
- LAOS - Baccalaureat/11th grade - 4 subjects combining C and D including relevant subjects.
- LEBANON - Baccalaureat - minimum 10 points including relevant subjects.
- LIBYA - Secondary Education Certificate - 60% or above.
- MACAU - iGCSE/'O' Levels - Grade C in 4 relevant subjects including English. Completion of Form 5 or Senior Middle 2 with 60-65% average.
- MALAYSIA - SPM (Malaysia Certificate of Education) (or forecast) 4 A-C in relevant academic subjects, including English and Maths. Four (4) 'O' Levels passes at grade C or above in the appropriate subjects, or equivalent evidence of satisfactory completion of secondary or high school education. UEC with aggregate of not more than 36 points for 5 relevant academic subjects including English & Mathematics. Will consider forecast/predicted results.
- MEXICO - Bachillerato 65% +.
- MOLDOVA - Attestat/11th grade – with minimum GPA 5.5.
- MYANMAR - Basic Education High school Matriculation = 11 years. Minimum of 60% achieved overall, including 60% in 4 relevant subjects.
- NEPAL - Higher Secondary Certificate - 55% or above or School Leaving Certificate - 65%.
- NEW ZEALAND - NCEA Level 2 (Year 12) = equivalent to GCSE (Grades = N (not achieved), A (achieved), M (merit), E (excellence) NCEA Level 2 with (Year 12) with relevant subjects - Achieving 60 credits with no fewer than 48 from Level 2 + no fewer than 12 credits (Level 2) in relevant subjects, including maths. Also need to see copy of "Record of Learning / Achievement" Majority marks merits / achieved + refer to Record of Learning Achievement for marks. As new market need to use comparative grades and common sense to other markets initially i.e. accept with 4 subjects Grades C or above.
- OMAN - Thanawiya Amma (School Leaving Certificate) 60% in min 4 relevant subjects.
- PAKISTAN - Higher Secondary Certificate (HSC) / Intermediate Certificate / Polytechnic Diploma - passes in 4 or more subjects. HSC grades 50%, year 11 60% or SSCs grades 65% 50% min. required for relevant subjects i.e. Maths and Sciences.
- PHILIPPINES - 75% pass in High School Diploma from list of top schools (school list in general rules tab) or 80% pass in High School Diploma from all other schools .
- QATAR - Thanawaya Aam Qatari (School Leaving Certificate) - average pass mark of 60%+, including relevant subjects. New certificate, QSSC - min. 5 subjects inc. Advanced level, grades A – Ds.
- RUSSIA - (+ Chechnya) Attestat minimum GPA 3.5.
- SAUDI ARABIA - Tawjihiya (General Secondary Education Certificate)/ = high school graduation. Passes in 4 or more subjects required (50% +) including relevant subjects (LJMU Sep 2013 Entry - Maths 60%).
- SINGAPORE - Singapore/Cambridge O level - A-C required in 4 or more subjects. iGCSE as standard. Will consider forecast/predicted results. SELT required, but C6 or above in English can replace SG English test where students SELT is lower in individual bands of English.
- SRI LANKA - Sri Lankan General Certificate of Education (Ordinary Level) are GCSE comparable on subject for subject basis (excluding English Language) - at least 5 x O Levels at Grade C or above / at least 2 x A levels at E or above.
- TAIWAN - Senior High School Leaving Certificate/Senior High 2 or Senior High 3 - passes in 4 or more subjects, with 55% average in High School Exam from Year 12/SH3 or 60% average from Year 11/SH2.
- THAILAND - Year 11 (Mathayom Suska 5) completion or Year 12 completion with GPA 2.0 in last two years in relevant subjects 6 with an average grade of at least 2.0 in academic subjects including at least 2.0 in Maths and Science subjects Grades = 2 (pass - 60-69), 3 (good 70-79%) and 4 (excellent 80-100%) = GCSE comparable grades A*-C.
- TURKEY - Devlet Lise Bitirme Diplomasi (State Lycee graduation). Successful completion of any high school, minimum overall grade 45%, including relevant subjects.

- UAE - Tawjihyya (School Leaving Certificate) - 60% or above in 4 or more subjects (incl relevant subjects).
- UKRAINE - Attestat/11th grade – with minimum GPA 4.5.
- USA – USA - High school Diploma: Min GPA 2.00 (grade C-, 70%).
- UZBEKISTAN - Attestat/11th grade = grade 3 or above in 4 or more subjects.
- VENEZUELA - Titulo de Bachiller (Bachiller de la Republica) - 4 subjects min 12/20.
- VIETNAM - Secondary School Graduation/Year 12 completion * Year 12 (Bang Tu Tai): completion report with GPA 6.0 overall, and with 6.0+ for Math and science subjects (possible to accept students with a Pass grade of 5.0 on a case-by-case basis, but refer to RO for check of school). Possible to accept from Year 11 with GPA 6.5 in Year 10 & 11 and with 6.5 + for Math and Science subjects. Borderline cases to be referred to RO for check of school.

External Quality Benchmarks

All programmes leading to LJMU awards have been designed and approved in accordance with the UK Quality Code for Higher Education, including the Framework for Higher Education Qualifications in the UK (FHEQ) and subject benchmark statements where applicable.

The University is subject to periodic review of its quality and standards by the Quality Assurance Agency (QAA) Published review reports are available on the QAA website at www.qaa.ac.uk

Programmes which are professionally accredited are reviewed by professional, statutory and regulatory bodies (PSRBs) and such programmes must meet the competencies/standards of those PSRBs.

Support for students and their learning

The University aims to provide students with access to appropriate and timely information, support and guidance to ensure that they are able to benefit fully from their time at LJMU. All students are assigned a Personal Tutor to provide academic support and when necessary signpost students to the appropriate University support services.

Students are able to access a range of professional services including:

- Advice on practical aspects of study and how to use these opportunities to support and enhance their personal and academic development. This includes support for placements and careers guidance.
- Student Advice and Wellbeing Services provide students with advice, support and information, particularly in the areas of: student funding and financial matters, disability, advice and support to international students, study support, accommodation, health, wellbeing and counselling.
- Students studying for an LJMU award at a partner organisation will have access to local support services

Methods for evaluating and improving the quality and standards of teaching and learning

Student Feedback and Evaluation

The University uses the results of student feedback from internal and external student surveys (such as module evaluations, the NSS and PTES), module evaluation questionnaires and meetings with student representatives to improve the quality of programmes.

Staff development

The quality of teaching is assured through staff review and staff development in learning, teaching and assessment.

Internal Review

All programmes are reviewed annually and periodically, informed by a range of data and feedback, to ensure quality and standards of programmes and to make improvements to programmes.

External Examining

External examiners are appointed to programmes to assess whether:

- the University is maintaining the threshold academic standards set for awards in accordance with the FHEQ and applicable subject benchmark statements
- the assessment process measures student achievement rigorously and fairly against the intended outcomes of the programme(s) and is conducted in line with University policies and regulations
- the academic standards are comparable with those in other UK higher education institutions of which

external examiners have experience

- the achievement of students are comparable with those in other UK higher education institutions of which the external examiners have experience

and to provide informative comment and recommendations on:

- good practice and innovation relating to learning, teaching and assessment observed by external examiners
- opportunities to enhance the quality of the learning opportunities provided to students

Please note:

This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes, content, teaching, learning and assessment methods of each module can be found in module and programme guides.