

### Overview

Programme Code	45931
Programme Title	Electronic Information Engineering
Awarding Institution	Liverpool John Moores University
Programme Type	Degree with Foundation

### Awards

Award Type	Award Description	Award Learning Outcomes
Target Award	Bachelor of Engineering with Honours (Fnd) - BGHF	N/A
Alternative Exit	Foundation Certificate - FC	Study effectively as reflective and independent learners at level 4 and above Select and apply appropriate basic mathematical techniques to engineering and technology problems Use basic physical models and understand how physical principles underpin a range of engineering and technology disciplines Appreciate how algorithms and computer systems are used to solve problems, analyse data and make decisions Carry out an effective experimental investigation

Alternate Award Names	
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Partner Name	Partnership Type
Changshu Institute of Technology	Dual

### External Benchmarks

Subject Benchmark Statement	UG-Engineering (2019)
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## Programme Offering(s)

Mode of Study, Mode of Delivery	Intake Month	Teaching Institution	Programme Length Programme Length Unit
Full-Time, Face to Face	September	LJMU Taught	4 Years

## Aims and Outcomes

Educational Aims of the Programme	<p>The BEng. programme in Electronic Information Engineering (with Foundation) partially fulfils all the educational requirements for Chartered Engineer status. It is designed to develop a high level of technical expertise together with the emotional intelligence to be able to practice successfully as a professional engineer in a modern interdisciplinary engineering environment. New graduate engineers are increasingly expected to take on important technical leadership and management responsibilities early in their careers and the knowledge and skills gained from this programme are designed to produce graduates who are able to make an immediate contribution to their employers organisations. The programme aims to: Provide a programme of study, which develops core knowledge, and understanding of engineering principles, mathematics, and computation, appropriate to the field of Electrical and Electronic engineering. Enable students to develop specialist knowledge, intellectual and practical skills that will enable them to analyse, investigate and develop robust solutions to Electrical and Electronic engineering problems. Develop relevant study and personal skills so that students progressively take responsibility for their learning, becoming, independent learners, while receiving appropriate tutoring and support. Equip students with a range of transferable skills and attributes in the use of computers, software packages, team working, communication, time management and problem solving methodology which will enable them to undertake responsible roles in industry and commerce. Provide a degree programme which meets the accreditation requirements of AHEP-3 UK Spec and the needs of industry. Develop Students to work in and manage teams and also work independently at managerial level utilising project management and technical skills. Encourage students to engage with the development of employability skills by completing a self-awareness statement.</p>
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## Learning Outcomes

Code	Number	Description
PLO1	1	Maintain and extend a sound theoretical approach to the application of technology in engineering.
PLO2	2	Communicate in technical English with others at all levels.
PLO3	3	Present and discuss proposals in an engineering context.
PLO4	4	Demonstrate personal and social skills.
PLO5	5	Comply with relevant codes of conduct.
PLO6	6	Manage and apply safe systems of work.
PLO7	7	Undertake engineering activities in a way that contributes to sustainable development.
PLO8	8	Carry out and record CPD necessary to maintain and enhance competence in own area of practice
PLO9	9	Exercise responsibilities in an ethical manner.
PLO10	10	Use a sound approach to problem-solving and contribute to continuous improvement.
PLO11	11	Identify and select techniques, procedures and methods to undertake engineering tasks.

PLO12	12	Contribute to the design and development of engineering solutions to problems
PLO13	13	Implement design solutions and contribute to their evaluation.
PLO14	14	Plan for effective project implementation.
PLO15	15	Manage tasks, people and resources to plan and budget in engineering projects.
PLO16	16	Manage teams and develop staff to meet changing technical and management in engineering needs.
PLO17	17	Manage continuous quality improvement in engineering systems.

## Course Structure

Programme Structure Description	<p>There is no RP(E)L allowed on to this programme. This is a requirement of the Chinese Ministry of Education (MOE). Students will need to meet the current minimum UK requirements for IELTS for transition to L6 in the UK from L5 in China.</p> <p>Students who started the programme prior to 2022 will follow previously approved structures at levels 4 and 5. Those students entering L6 in 2022 will study the updated modules on this version of the spec.</p>
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<b>Programme Structure - 360 credit points</b>	
<b>Level 3 - 120 credit points</b>	
<b>Level 3 Core - 120 credit points</b>	CORE
[MODULE] 3100CIT Algorithms and Computing Approved 2022.01 - 10 credit points	
[MODULE] 3101CIT Engineering and Technology Practice Approved 2022.01 - 20 credit points	
[MODULE] 3102CIT Foundation Mathematics for Engineering and Technology 1 Approved 2022.01 - 20 credit points	
[MODULE] 3103CIT Foundation Mathematics for Engineering and Technology 2 Approved 2022.01 - 20 credit points	
[MODULE] 3104CIT College Physics 1 Approved 2022.01 - 20 credit points	
[MODULE] 3106CIT Embedded C Language Approved 2022.01 - 10 credit points	
[MODULE] 3107CIT Engineering Principles Approved 2022.01 - 20 credit points	
<b>Level 4 - 120 credit points</b>	
<b>Level 4 Core - 120 credit points</b>	CORE
[MODULE] 4302CIT Microprocessors and Software Approved 2022.01 - 20 credit points	
[MODULE] 4303CIT Electrical Circuit Principles Approved 2022.01 - 20 credit points	
[MODULE] 4304CIT Digital and Analogue Electronics Approved 2022.01 - 20 credit points	
[MODULE] 4305CIT Electrical Engineering Practice 1 Approved 2022.01 - 20 credit points	
[MODULE] 4306CIT College Physics 2 Approved 2022.01 - 20 credit points	
[MODULE] 4315CIT Engineering Mathematics 1a Approved 2022.01 - 10 credit points	
[MODULE] 4316CIT Engineering Mathematics 1b Approved 2022.01 - 10 credit points	
<b>Level 5 - 120 credit points</b>	
<b>Level 5 Core - 120 credit points</b>	CORE
[MODULE] 5301CIT Digital and Embedded Systems Approved 2022.01 - 20 credit points	
[MODULE] 5302CIT Electric Machines Approved 2022.01 - 20 credit points	

[MODULE] 5304CIT Linear Electronics Approved 2022.01 - 10 credit points	
[MODULE] 5305CIT Control System Design and Analysis Approved 2022.01 - 20 credit points	
[MODULE] 5306CIT Electrical Engineering Practice 2 Approved 2022.01 - 20 credit points	
[MODULE] 5312CIT Applied Instrumentation Approved 2022.01 - 20 credit points	
[MODULE] 5321CIT Engineering Mathematics 2 Approved 2022.01 - 10 credit points	
<b>Level 6 - 120 credit points</b>	
<b>Level 6 Core - 100 credit points</b>	CORE
[MODULE] 6401ELE Signals and Systems with Real World Applications Approved 2022.01 - 10 credit points	
[MODULE] 6405ELE Power Electronics and Energy Efficient Drives Approved 2022.01 - 20 credit points	
[MODULE] 6406ELE Further Electronic Design Approved 2022.01 - 20 credit points	
[MODULE] 6455ELE Engineering Project Approved 2022.01 - 40 credit points	
[MODULE] 6465ELE Engineering Management Approved 2022.01 - 10 credit points	
<b>Level 6 Optional - 20 credit points</b>	OPTIONAL
[MODULE] 6400ELE Automation and IoT Approved 2022.01 - 20 credit points	
[MODULE] 6412ELE Process Control and Applications Approved 2022.01 - 20 credit points	

#### Approved variance from Academic Framework Regulations

Variance
<p>Students may only progress to level 6 of this programme when they have achieved 360 credits from levels 3 – 5 (120 credits at level 3, 120 credits at level 4 and 120 credits at level 5). Different procedures and regulations with respect to resit opportunities and progression apply to levels 3, 4 and 5 of this programme: Students who fail a module at levels 3, 4 or 5 are required to repeat the module with attendance (normally in the following academic year). No marks carry over from previous attempts. Students will be allowed to progress to the second and third years of their programme (levels 4 and 5) only if they are level complete or trailing no more than 40 credits from previous levels. Students may retake failed modules no more than two times CIT procedures for dealing with academic misconduct, illness or other personal circumstances will apply to levels 3, 4 and 5 of this programme. LJMU procedures will apply to level 6 of this programme.</p>

## Teaching, Learning and Assessment

Teaching, Learning and Assessment	Acquisition of underpinning knowledge is achieved mainly through lectures and directed student-centred learning. Student-centred learning is used where appropriate resource material is available. The economic, Social and Environmental context of engineering operations is delivered by means of lectures and case studies. The use of appropriate case study material is an essential part of teaching in this area. Testing of the knowledge base is through a combination of unseen written examinations, and coursework assignment submissions Engineering Analysis is developed through lectures, case-studies and coursework assignments. Fundamental principles are delivered predominantly by lectures and laboratory classes. More advanced techniques are delivered by project work and coursework supported by lectures. Engineering Analysis and problem solving skills are assessed through a combination of unseen written examinations, assessed coursework and laboratory work, and project work Design is taught by coursework, individual and group project work supported by an appropriate lecture programme Design skills are assessed by coursework, individual and group written design project reports, and student presentations. Engineering Practice permeates almost every activity within the programme content and assessment. Assessment of Engineering Practice is varied throughout the programme but is mostly coursework based.
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## Entry Requirements

Type	Description
Other international requirements	National University Entrance Examinations, Second Level
Alternative qualifications considered	To be enrolled, students should attend national university entrance examinations and pass the line of second level (Normally their scores should be higher than the provincial score of second level). In China, the college entrance outcomes are divided into 3 levels (1st, 2nd,3rd). CIT belongs to the 2nd level. Students will be able to demonstrate efficiency in English to a standard equivalent to IELTS 5.5. CIT will operate within the guidance of the LJMU Admissions Policy, please see LJMU Code of Practice for Admissions at: <a href="https://www.ljmu.ac.uk/about-us/public-information/student-regulations/guidance-policy-and-process">https://www.ljmu.ac.uk/about-us/public-information/student-regulations/guidance-policy-and-process</a>

## Programme Contacts

### Programme Leader

Contact Name
Qian Zhang

### Link Tutor

Contact Name
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