

# **Programme Specification Document**

Approved, 2022.02

# Overview

Programme Code	36460	
Programme Title	Electrical and Electronic Engineering	
Awarding Institution	Liverpool John Moores University	
Programme Type	Тор-ир	
Programme Leader		
Link Tutor(s)	Clifford Mayhew	

Partner Name	Partnership Type
Auston College Myanmar, Yangon, Myanmar	Franchised

### Awards

Award Type	Award Description	Award Learning Outcomes
Target Award	Bachelor of Engineering with Honours - BGH	See Learning Outcomes Below

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# **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
Full-Time, Face to Face	February	Auston College Myanmar, Yangon, Myanmar	1 Years
Full-Time, Face to Face	June	Auston College Myanmar, Yangon, Myanmar	1 Years
Full-Time, Face to Face	September	Auston College Myanmar, Yangon, Myanmar	1 Years

### Aims and Outcomes

#### Educational Aims of the Programme

The BEng. programme in Electrical Engineering 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 needs of industry. Develop Students to work in and manage teams and also work independently at managerial level utilising project management and technical skills. To encourage students to engage with the development of employability skills by completing a self-awareness statement.

#### Learning Outcomes

Code	Description
PLO1	Maintain and extend a sound theoretical approach to the application of technology in engineering practice
PLO2	Communicate in English with others at all levels.
PLO3	Present and discuss proposals.
PLO4	Demonstrate personal and social skills.
PLO5	Comply with relevant codes of conduct.
PLO6	Manage and apply safe systems of work.

Code	Description
PLO7	Undertake engineering activities in a way that contributes to sustainable development.
PLO8	Carry out and record CPD necessary to maintain and enhance competence in own area of practice
PLO9	Exercise responsibilities in an ethical manner.
PLO10	Use a sound evidence-based approach to problem-solving and contribute to continuous improvement.
PLO11	Identify, review and select techniques, procedures and methods to undertake engineering tasks.
PLO12	Contribute to the design and development of engineering solutions.
PLO13	Implement design solutions and contribute to their evaluation.
PLO14	Plan for effective project implementation.
PLO15	Manage tasks, people and resources to plan and budget.
PLO16	Manage teams and develop staff to meet changing technical and managerial needs.
PLO17	Manage continuous quality improvement.

#### **Programme Structure Description**

Programme Structure - 180 credit points	
Level 5 - 60 credit points	
Level 5 Core - 60 credit points	CORE
[MODULE] 5501ELEMM Digital and Embedded Systems Approved 2022.01 - 20 credit points	
[MODULE] 5505ELEMM Control System Design and Analysis Approved 2022.01 - 20 credit points	
[MODULE] 5512ELEMM Applied Instrumentation Approved 2022.01 - 20 credit points	
Level 6 - 120 credit points	
Level 6 Core - 120 credit points	CORE
[MODULE] 6500ELEMM Automation Approved 2022.01 - 10 credit points	
[MODULE] 6501ELEMM Signal Processing Approved 2022.01 - 20 credit points	
[MODULE] 6505ELEMM Power Electronics, Drives and Systems Approved 2022.01 - 20 credit points	
[MODULE] 6512ELEMM Process Control Approved 2022.01 - 20 credit points	
[MODULE] 6555ELEMM Engineering Project Approved 2022.01 - 30 credit points	
[MODULE] 6565ELEMM Industrial Management Approved 2022.01 - 20 credit points	

Module specifications may be accessed at https://proformas.ljmu.ac.uk/Default.aspx

### Approved variance from Academic Framework Regulations

#### Variance

The following criteria will apply for students at Level 5 and Level 6: Where a module comprises two or more assessment elements (e.g. examination and coursework), successful completion of the module should require a mark of greater than 10% less than the module pass mark in each element, as well as the overall module mark being above the normal pass mark (normally 40%). This requirement only applies to assessment elements that contribute more than 30% towards the final module mark.

## 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.

### **Entry Requirements**

Туре	Description
Other international requirements	Applicants with the following qualifications may be admitted to the programme: - Auston Higher Diploma in Engineering Technology; - Auston Higher Diploma in Mechanical Engineering (with appropriate electives); - Higher National Diploma in a relevant field such as Electrical & Electronic Engineering, Mechanical Engineering, Mechatronics, or similar; - Other recognized local qualifications that will be individually assessed in consultation with the Link tutors