Programme Specification Document

Approved, 2022.03

Overview

Programme Code	35988
Programme Title	Electronic and Electrical Engineering
Awarding Institution	Liverpool John Moores University
Programme Type	Top-up
Programme Leader	
Link Tutor(s)	Karl Jones

Partner Name	Partnership Type
SLIIT Academy (Pvt) Ltd	Franchised

Awards

Award Type	Award Description	Award Learning Outcomes
Alternative Exit	Bachelor of Engineering - BG	Demonstrate a broad and comparative knowledge of the general scope of the subject, its different areas and applications, and its interactions with related subjects. A detailed knowledge of a defined subject or a more limited coverage of a specialist area balanced by a wider range of study. In each case, specialised study will be informed by current developments in the subject. Demonstrate a critical understanding of the essential theories, principles and concepts of the subject(s) and of the ways in which these are developed through the main methods of enquiry in the subject.
Target Award	Bachelor of Engineering with Honours - BGH	See Learning Outcomes Below

Alternate Award Names	

External Benchmarks

Subject Benchmark Statement	UG-Engineering (2019)

Programme Offering(s)

Mode of Study, Mode of Delivery	Intake Month	Teaching Institution	Programme Length
Full-Time, Face to Face	February	SLIIT Academy (Pvt) Ltd	1 Years

Aims and Outcomes

Educational Aims of the Programme

The BEng. programme in Electronic and 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 accreditation requirements of AHEP-4 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.

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.
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.

Code	Description
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

Programme Structure Description

Programme Structure - 120 credit points	
Level 6 - 120 credit points	
Level 6 Core - 120 credit points	CORE
[MODULE] 6600SLT Automation and IoT Approved 2022.01 - 20 credit points	
[MODULE] 6665SLT Engineering Management Approved 2022.01 - 10 credit points	
[MODULE] 6606SLT Further Electronic Design Approved 2022.01 - 20 credit points	
[MODULE] 6655SLT Engineering Project Approved 2022.01 - 40 credit points	
[MODULE] 6601SLT Signals and Systems with Real World Applications Approved 2022.01 - 10 credit points	
[MODULE] 6605SLT Power Electronics and Energy Efficient Drives 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 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 of 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.

Opportunities for work related learning

SLIIT have links with many industries in the area and offer project supervision by industrial supervisors as well as summer placements.

Entry Requirements

Type	Description
Other international requirements	SLIIT will operate in accordance with the LJMU Admissions Policy.
Alternative qualifications considered	Students with an HD in Electrical and Electronic Engineering awarded by SLIIT will be eligible for progression onto the top up programme. Students with a HD/HND in a relevant subject area will be considered via individual RP(E)L applications for entry onto the top up programme. English Language Requirements All applicants must provide evidence of competence in English. The level of English language required should be equivalent to 6.0 for IELTS within the previous 24 months. Equivalents to this score are: 1. UK GCSE English grade C or above 2. Test of English as a Foreign Language (TOEFL) score of 550 or above. 3. Cambridge Examination Board: Advanced Certificate of English, grade C or above