



**BEACONHOUSE
INTERNATIONAL COLLEGE**

— TRULY GLOBAL —



**LIVERPOOL
JOHN MOORES
UNIVERSITY**

School Of
ENGINEERING 



www.bic.edu.pk



ELECTRICAL AND ELECTRONIC ENGINEERING

BEng (HONS)

The products and services we use in everyday life would not exist unless an electrical and electronic engineer had designed the relevant parts. Electrical and electronic engineers are concerned with making our products faster, cheaper, smaller and better.

OVERVIEW

- Available as BEng qualification
- Design-led engineering curriculum emphasises, with design projects supplied by industrial partners.
- State-of-the-art labs and excellent technical support.
- Accredited by the Institution of Engineering and Technology, UK.
- Regular contributions from professional engineers and industrial professionals.

PROGRAMME STRUCTURE

Level 4

Engineering Principles, Microprocessors and Software, Electrical Circuit Principles, Digital and Analogue Electronics, Electrical Engineering Practice, Engineering Mathematics 1a, Engineering Mathematics 1b

Level 5

Digital and Embedded Systems, Electric Machines, Linear Electronics,

Control System Design and Analysis, Electrical Engineering Practice, Applied Instrumentation, Engineering Mathematics 2

Placement Year

Placement year helps students prepare for the upcoming demand of the industry. It can help you to explore potential career paths and provide you with valuable work experience, whilst developing transferable skills for the future. Key features of the placement year are:

- Enhance your career prospects.
- Expand your network.
- Discover the real working world.
- Improve your academic Performance.
- Develops skills and builds confidence

Level 6

Automation, Signal Processing, Power Electronics, Drives and Systems, Process Control, Engineering Project, Industrial Management

ELIGIBILITY

- Age 17+ by 30 November in the year of registration.
- A' Level 112 UCAS points with minimum grade C in Mathematics and one of the following subjects ((Physics, Chemistry, Computing, Further Maths, Engineering)
or
- BTEC Award (provided grade DMM or above is achieved) in an Engineering discipline with a distinction grade in the Further Mathematics unit.
or
- Any other relevant high school qualifications
or
- HSSC at 75% overall marks with 70% marks in Mathematics
- Provide proof of competence in English and Mathematics by having UK GCSE/GCE 'O' level at grade C. Otherwise a test of proficiency may be required.

The Electrical and Electronic Engineering course has exceeded my expectations. It has delivered more than I anticipated and I have been left with a promise of greater things to come.

Shaheer Tausif Current Student

95%
OF STUDENTS IN WORK
OR FURTHER STUDY
WITHIN 6 MONTHS OF
GRADUATION
DLHE 2016/17

MECHANICAL ENGINEERING



BEng (HONS)

In a rapidly changing world, mechanical engineers are in demand more than ever before to design and build the new generation of engines, power plants, structures and vehicles that keep the world running.

OVERVIEW

- Available as BEng qualification.
- Professionally-accredited, designed engineering curriculum.
- Teaching is supported by well-equipped laboratories and workshops.
- Industrial visits provide insights into careers in professional engineering.

PROGRAMME STRUCTURE

Level 4

Engineering Mathematics 1a; Engineering Mathematics 1b; Applied Mechanics 1; Thermodynamics and Fluid Mechanics 1; Materials; Engineering Practice 1; Electrical and Electronic Engineering

Level 5

Engineering Mathematics 2; Materials and Processes; Applied Mechanics; Thermodynamics and Fluid Mechanics; Mechanical Engineering Design 2; Engineering Practice 2; Mechatronics

Placement Year

Placement year helps students prepare for the upcoming demand of the industry. It can help you explore potential career paths and provides a valuable work experience, whilst developing transferable skills for the future. Key features of the placement year.

- Enhances career prospects.
- Expands networking opportunities.
- Discover the real working world.
- Improve your academic performance.
- Develops skills and builds confidence.

Level 6 (core)

Engineering Project; Engineering Analysis; Mechanical Engineering Design 3; Industrial Management.

ELIGIBILITY

- Age 17+ by 30 November in the year of registration.
- A' Level 112 UCAS points with minimum grade C in Mathematics and one of the following subjects ((Physics, Chemistry, Computing, Further Maths, Engineering)

or

- BTEC Award (provided grade DMM or above is achieved) in an Engineering discipline with a distinction grade in the Further Mathematics unit.

or

- HSSC at 75% overall marks with 70% marks in Mathematics

or

- Any other relevant high school qualifications
- Provide proof of competence in English and Mathematics by having UK GCSE/GCE 'O' level at grade C. Otherwise a test of proficiency may be required.

“ Outstanding faculty, state-of-the-art campus, well-equipped laboratories and a variety of industry-demanding course offerings are the key elements that categorize the LJMU Department of Electronics as one the best-in-class schools in the region. ”

Baleegha Fatima Current Student

84%

**OF STUDENTS
SURVEYED SAID THEY
WERE SATISFIED WITH
THEIR OVERALL LJMU
STUDENT EXPERIENCE**

National Student Survey (NSS) 2018**

SOFTWARE ENGINEERING

BSc (HONS)



Software engineering is the art/technique of developing and maintaining software systems that are reliable, efficient, maintainable and affordable.

OVERVIEW

- BSc (Hons) Software Engineering is a practical hands-on qualification, encouraged to boost employment prospects as it enhances proficiency in programming languages and equipping learners to apply it to a variety of problems.
- State-of-the-art computing facilities, including dedicated labs, available to students.
- Excellent career prospects.

PROGRAMME STRUCTURE

Level 4

Programming, Computer Systems, Professional Practice, Data Modelling, Software Engineering Principles, Software Engineering Workshop, Web Development

Level 5

Database Systems, Object-Oriented Systems, Data Structures, Automate, Languages and Computation, Mobile and Web Development

Level 6

User Experience Design, Virtualisation and Cloud Computing, Embedded Systems, Applied Data Science, Individual Project

EXPLORE THE WORLD

Did you know that LJMU students have the opportunity to discover more about the world by studying, working or volunteering abroad? Whether you are looking to enhance your degree, improve your employability or want to have a life-changing experience, LJMU opens the pathways for you

ELIGIBILITY

A/AS Level

Applicants should have 112 UCAS tariff points including a minimum of 64 points from Maths and one of the following: Physics, Chemistry, Computing, Further Maths, Electronics or Engineering

BTEC National Diploma

BTEC National Diploma BTEC Extended Diploma - DMM / Engineering discipline required with a Distinction grade in Further Mathematics unit.

International Baccalaureate

Overall 26 points

Local Qualifications

Entry to level 4 requires a 75% overall award mark mathematics passed at 70% or above in final year, passes in physics and chemistry.



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