

# **BEng (Hons) Automotive Engineering**



Description Course Outline Minimum Entry Requirements Career Prospects

This honours degree has been designed for the automotive industry in response to the shortfall of mechanical engineers. It is for those who have a strong interest in mechanical engineering and a clear desire to develop their knowledge and skills in automotive engineering.

The course fully explores the engineering, design, analysis and development of modern cars using various race cars as support for teaching. It also puts emphasis on learning transferable skills applicable to many other industries.

A broad range of assessment methods are used; these include task-based exercises, oral and poster presentations, essays and laboratory reports, and written exams. Each module is assessed by a variety of methods, enabling students to display their full potential. A project dissertation will form one of the final parts of your assessment.

Independent learning is an important aspect of all modules, as it enables students to develop both their subject-specific and key skills. Independent learning is promoted through guided study or feedbacks given to students.

- ENG419 Materials & Manufacturing
- CC 2101 Engineering Maths
- CC 2010 E-Commerce
- ENG480 Automotive Systems
- ENG417 Engineering Design Practice
- CC 2011 Thermodynamics
- MPU 3411-3481 Co-curriculum
- ENG458 Mechanical Science
- ENG52G Engineering Mechanics & Design
- MPU 3113 Hubungan Etnik
- ENG537 Further Engineering Maths
- ENG52J Structures Analysis

- ENG52M Internal Combustion Engine Systems
- CC 2003 Research Methodology
- ENG692 Automotive Dynamics & Powertrain Analysis
- ENG685 Engineering Modelling & Simulation
- ENG687 Aerodynamics
- CC 2001 Professional English
- ENG459 Electrical Science
- CC 2013 Strength of Materials
- CC 2012 Fluid Mechanics
- MPU 3323 Career Skills Development
- MPU 3123 Tamadun Islam & Tamadun Asia
- ENG690/ENG691 Structural Vibration/Composite Materials
- ENG557 Automotive Design
- ENG52F Business, Research & Professional Development
- ENG 684 Dissertation 1
- MPU 3223 Entrepreneurship
- ENG684 Dissertation 2
- Internship

#### REMARKS

\*\* MPU 3123 Tamadun Islam & Tamadun Asia for Malaysian student only/International student will undergo Bahasa Melayu Komunikasi MPU 3142

\*\* Hubungan Etnik is for Malaysian students only/ International students will undergo Pengajian Malaysia MPU 3172

- STPM or equivalent with at least CGPA 2.00 and credit in Mathematics and related Science subject.
- Unified Examination Certificate (UEC) with minimum 5Bs including Mathematics and related one (1) Science subject.
- Pass in Matriculation/ Foundation with minimum CGPA 2.00.
- Diploma in Engineering/ Engineering Technology (Level 4, MQF) with minimum CGPA 2.00.
- Other equivalent qualifications as recognised by Malaysia Government.

\*Local student shall obtain Malaysian University English Test (MUET) Band 2 or equivalent.

The exciting range of career options open to you when you graduate includes working with car manufacturers and their supply network, in automotive research and development, in consultancy, engineering management, automotive design and in the motorsport industry.

There's a national shortage of fully-qualified engineers in the automotive industry; with a degree in automotive technology you'll stand out from the crowd when it comes to finding employment.

Opportunities include (but are not limited to):

- Race car dynamics
- Motorsport electronics

- Chassis engineering
- Performance car structures
- Electronic technologies
- Performance engine
- Project engineering
- CAD design engineering
- Technical manager

[I want to know more about BEng \(Hons\) Automotive Engineering](#)