

ELECTRONIC ENGINEERING MSc

OVERVIEW

Accredited by the Institution of Engineering and Technology (IET), the Electronic Engineering MSc will build your knowledge of core aspects of electronics, and provide you with an understanding of the context of engineering in the 21st century.

On completion of this course, you will have established a good balance between theory and practice, enabling you to solve real engineering problems.

MODULES

First semester

- Digital Signal Processing
- Physics of Semiconductor Devices
- Engineering Business Environment and Energy Studies
- Control and Instrumentation

Second semester

- Embedded Systems
- Study Skills and Research Methods
- Electromagnetic Compatibility
- Power Electronics

Third semester

- Individual project

TEACHING AND ASSESSMENT

Members of academic staff teaching on this course are part of the School's Engineering and Physical Sciences Institute. They carry out research in a number of areas, including emerging memory devices, growth nano-structures, photovoltaic power systems, communications cabling and video communication systems, often in consultation with industry. You will also have the opportunity to boost your career prospects through an optional one-year placement, which will allow you to gain industrial work experience in your area of interest.

You will be taught through a mixture of lectures, tutorials and laboratories. The methodology ensures a good balance between theory and practice so that real engineering problems are better understood, using strong theoretical and analytical knowledge translated into practical skills.

You will normally attend 4 hours of timetabled taught sessions each week for each module undertaken during term time. For full time study this would be 16 hours per week during term time.

You will have flexible access to our laboratories which include electrical and electronic experimental facilities in general electronics, digital electronics and microprocessor engineering, power electronics, control systems and communications engineering.

EMPLOYABILITY

Upon graduation, you will be equipped to take up responsible positions within a wide range of industries worldwide. Recent graduates have progressed into various roles within electronic design and embedded systems engineering. Opportunities also exist for further academic study towards a doctorate degree and a career in research.

KEY INFORMATION

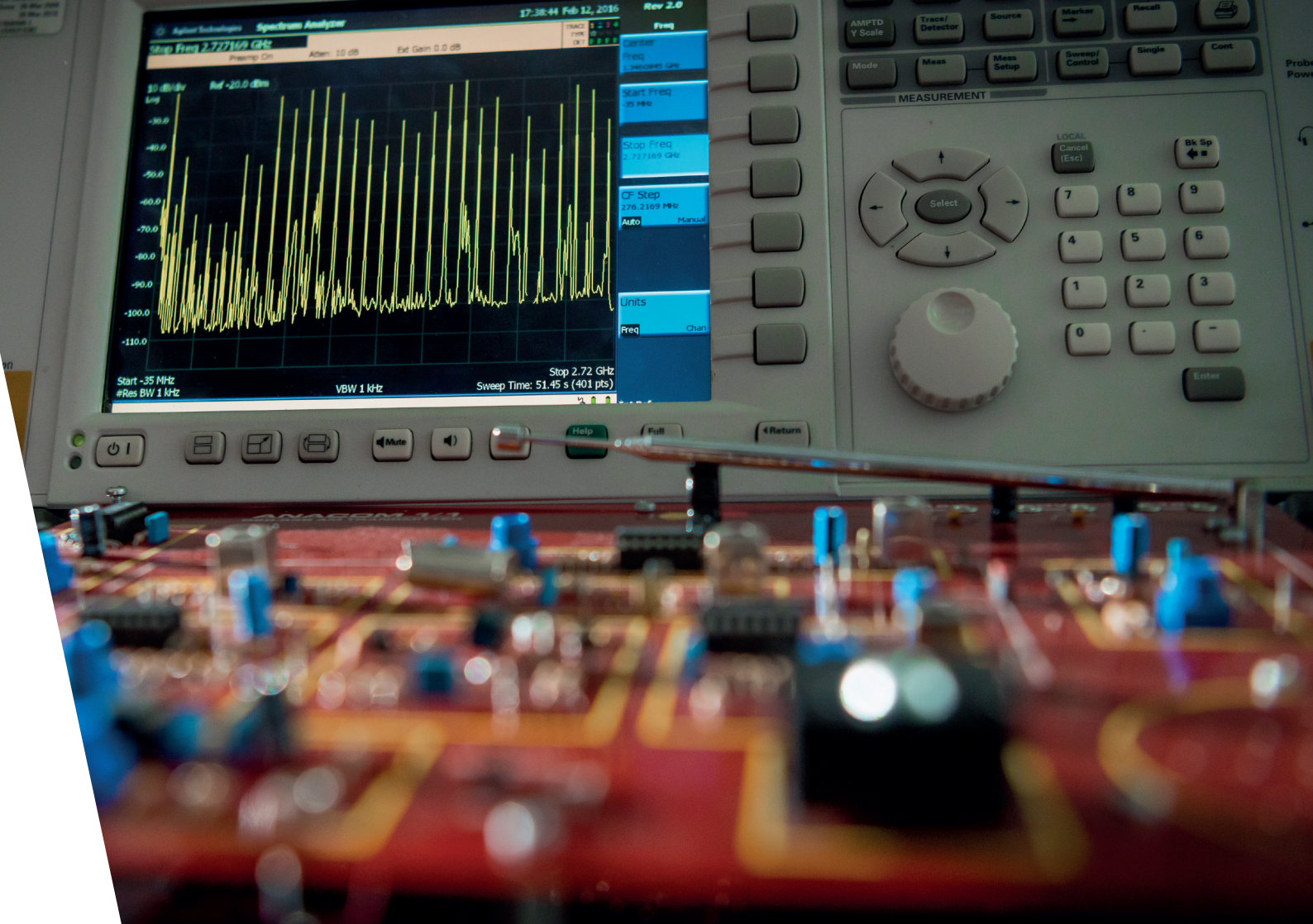
Duration: September start: One year full-time.
January start: 18 months full-time, two to six years part-time.

Entry requirements: You should have the equivalent of a British Honours degree (2:2 minimum) in a relevant subject. If you have no formal academic qualifications but do have extensive industry experience we will consider your application on an individual basis.

English requirements: If English is not your first language, an IELTS score of 6.0 or equivalent when you start the course is essential.

Tuition fees: Please visit dmu.ac.uk/pgfees for information.

For a full range of core and optional modules please visit: dmu.ac.uk/electronic-engineering-msc



Agilent Technologies Spectrum Analyzer

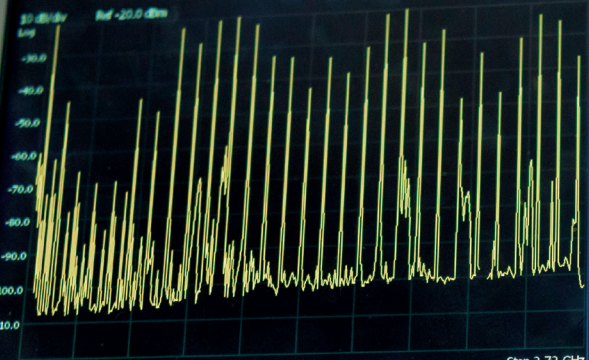
17-Jul-11 Feb 12, 2016

Rev 2.0

Stop Freq 2.722169 GHz

Attenu: 10 dB

Ext Gain 0.0 dB



Start -35 MHz
#Res BW 1 kHz

VBW 1 kHz

Stop 2.72 GHz
Sweep Time: 51.45 s (401 pts)

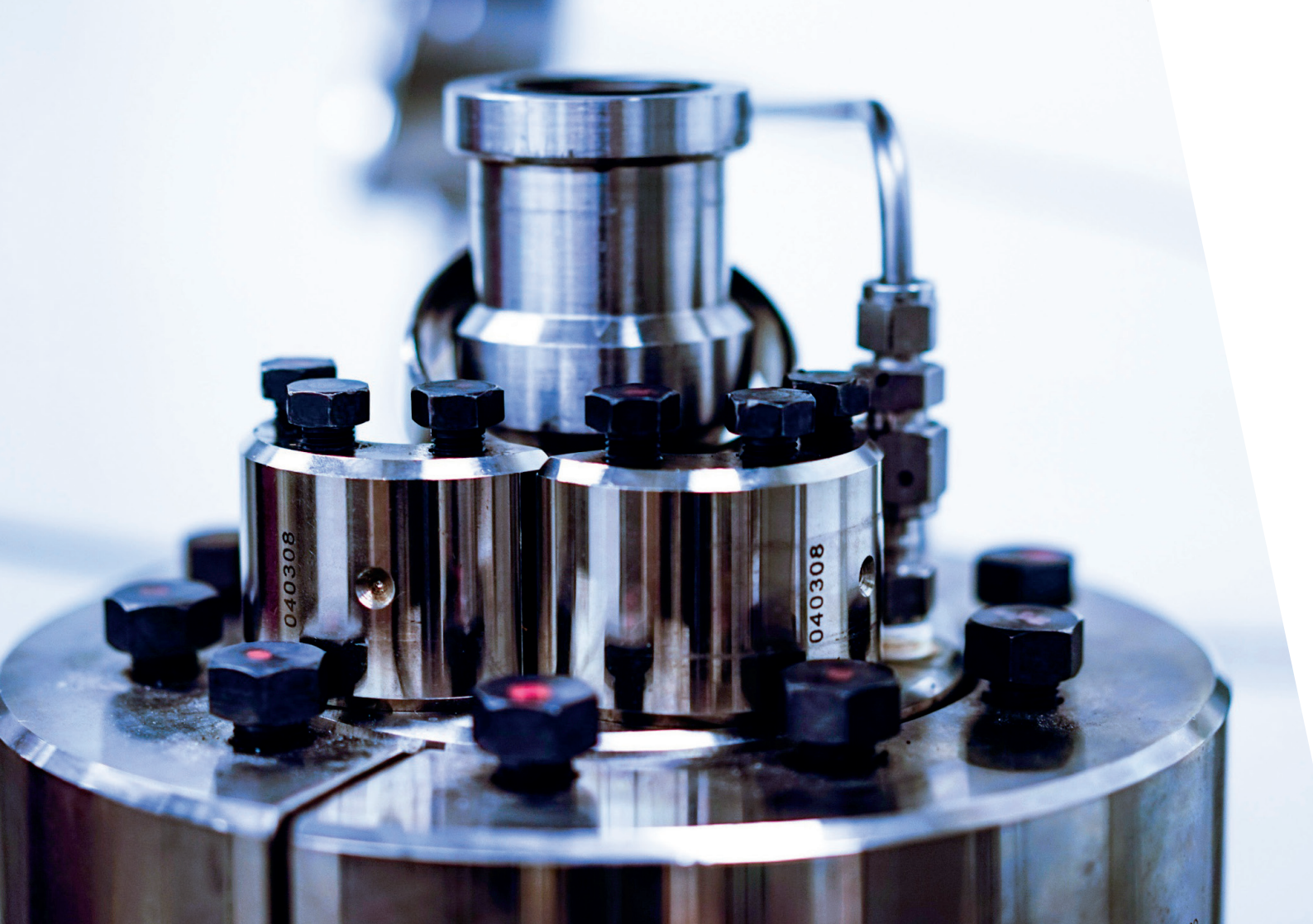
- Center Freq 2.722169 GHz
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- CF Step 276.2169 MHz
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AMPTD Y Scale Trace/Detector Source Marker Recall
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LOCAL Cancel (Esc) Bk Sp
7 8 9
4 5 6
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ENGINEERING MANAGEMENT MSc

OVERVIEW

Engineering Management MSc places an emphasis on those key areas of modern management required by engineers entering their first management role, and also offers opportunities for technical advancement through a choice of elective modules in specialist areas of engineering.

The course is designed for ambitious engineers who aspire to a senior role involving technical and strategic management responsibilities. It is ideal for recent graduates hoping to make their first move into engineering management, or for established professional engineers who wish to make a switch into a management role and must extend their knowledge beyond their specific technical field into management and business.

MODULES

First semester

- Critical Management in a Global Context
- Management of Information Systems
- Study Skills and Research Methods

Optional Modules (you will choose one)

- Electrical Engineering/Electronics
- Mechanical Engineering
- Sustainability in the Business Context
- Computer Networks and E-commerce Systems

Second semester

- Low Impact Manufacturing
- People Management and Organisation
- Optional Module 2
- Project Management

Third semester

- Dissertation Project

TEACHING AND ASSESSMENT

Modules are taught by expert research and teaching staff from across the university, including the School of Engineering and Sustainable Development and the Leicester Business School, reflecting the multidisciplinary nature of the course.

You will have the opportunity to boost your career prospects through an optional one-year placement; the placement will allow you to gain industrial work experience in your area of interest related to the course and increase your future employability.

EMPLOYABILITY

Upon graduating you will be one step closer to becoming a qualified manager within engineering fields, and extend your knowledge beyond your specific technical field. Throughout the course you will benefit from guest lectures delivered by practitioners from industry providing real-life examples and case studies. This course brings together expertise from across the Faculty of Technology and the Faculty of Business and Law to deliver a unique learning experience. You will be equipped with a broad range of knowledge and the ability to solve problems in an interdisciplinary context.

KEY INFORMATION

Duration: September start: One year full-time
January start: 18 months full-time (with optional one year placement available), two years part-time.

Entry requirements: You should have the equivalent of a British Honours degree (2:2 minimum) in a relevant subject.

English requirements: If English is not your first language an IELTS score of 6.0 or equivalent when you start the course is essential.

Tuition fees: Please visit dmu.ac.uk/pgfees for information.

For a full range of core and optional modules please visit: dmu.ac.uk/EngMan

MECHANICAL ENGINEERING MSc

OVERVIEW

Mechanical Engineering MSc is accredited by the Institution of Engineering and Technology, this ensures you will benefit from the highest quality teaching, and graduate with a recognised qualification. The content of this course has been developed in consultation with industry and is continually developed to ensure you graduate with relevant skills.

MODULES

First semester

- Electromechanics
- Business Environment and Energy Studies
- Numerical Methods Techniques in Engineering
- Advanced Thermodynamics and Heat Transfer

Second semester

- Advanced Solid Mechanics
- Engineering Systems Dynamics and Control
- Advanced Materials and Design
- Research Methods

Third semester

- Individual Project

TEACHING AND ASSESSMENT

Our teaching staff are actively involved in research areas including; combustion modelling and energy conversion, computational theology and surface

engineering. You will also have the opportunity to boost your career prospects through an optional one-year placement; the placement will allow you to gain industrial work experience in your area of interest related to the course and increase your future employability.

You will normally attend four hours of timetabled taught sessions each week for each module undertaken during term time; for full-time study this would be 16 hours per week during term time. You can expect to also undertake around 24 further hours of independent study and assignments as required per week.

You will have access to a range of facilities including; the main mechanical laboratory, which is a large open-plan space designed to accommodate the study of thermo-fluids, solid mechanics and dynamics. The Energy Laboratory is also available to conduct thermo-fluid experiments relevant to mechanical engineering. This is also a dedicated laboratory for the study of dynamics and control, equipment in this laboratory allows you to study gyroscope theory, vibration theory, no-linear control and inertia bending.

You will have access to Electrical and Electronic experimental facilities in general electronics and assembly, digital electronics and microprocessor engineering, power electronics, control systems and communications engineering. Each area is equipped with latest experimental equipment appropriate to the corresponding areas of study and research. An additional CAD design suite shared with the Mechanical and Design programmes provides access to computing facilities with specialist electronics CAD tools including Microsoft Office, OrCAD and PSpice.

EMPLOYABILITY

Upon graduating from this course you could progress in a wide range of industries including robotics and automation, machine vision, manufacturing, automotive, aerospace, consumer products, material processing, energy and power.

You will gain an understanding of the methodology used in research and an awareness of the numerical techniques underpinning the tools employed in mechanical and thermal analysis.

You will study a number of modules in business and electro mechanics, providing you with an insight into the engineering business environment and broadening your understanding of other engineering disciplines.

KEY INFORMATION

Duration: September start: One year full-time January start: 18 months full-time (with optional one year placement available), two years part-time.

Entry requirements: You should have the equivalent of a British Honours degree (2:2 minimum) in a relevant subject.

English requirements: If English is not your first language an IELTS score of 6.0 or equivalent when you start the course is essential.

Tuition fees: Please visit dmu.ac.uk/pgfees

For a full range of core and optional modules please visit: dmu.ac.uk/mechanical-engineering-msc



