

### The Faculty of Engineering and Physical Sciences



# The Faculty of Engineering and Physical Sciences (EPS)

- The origins of the University have been linked to Science and Engineering since 1824
- Largest and most diverse faculty of its kind in UK
- Significant investments have been made to facilities
- It has a world-class reputation for research



## **Faculty of EPS**

- 7,000 undergraduates
- 1,500 taught postgraduates
- 1,400 research postgraduates
- 3,000 international students
- International or National excellence in the Research Assessment Exercise (RAE)





# Study opportunities within EPS



- Science & Engineering Foundation (1 year)
- Bachelor's degrees (3 years)
- Integrated Masters e.g. MEng (4 years)
- Taught Masters e.g. MSc (1 year)
- MPhil and PhD (1-2 years and 3-4 years)
- Post-Doctoral Research
- Year in Industry/Year Abroad



## **Typical Course Structure**

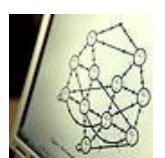
- Degrees are mostly 3 or 4 years in length
- BSc/BEng (3 years)
- MPhys, MMath, MEng, MChem (4 years)
- Typical University year runs from middle/end September to mid June - 30 weeks in total
- Teaching is split over 2 equal length Semesters
  - 12 weeks teaching + 3 weeks revision + exams
- Assessment is by a mixture of coursework/continual assessment and exams
- Opportunities to work in industry or study abroad



## Schools in Faculty of EPS

- Chemical Engineering & Analytical Science
- Chemistry
- Computer Science
- Earth, Atmospheric & Environmental Sciences
- Electrical & Electronic Engineering
- Materials
- Mathematics
- Mechanical, Aerospace & Civil Engineering
- Physics & Astronomy

















# **Chemical Engineering & Analytical Science**

#### **Key Facts**

- Birthplace of Chemical Engineering Professor George E Davis in 1887
- World-class facilities incl. pilot plant
- Links with UK and international industry
- Diverse range of programmes

### **Key Subject Areas**

Chemical Engineering







# **Chemical Engineering & Analytical Science**



### **UG** Programmes:

**Chemical Engineering** 

Chemical Engineering (Business Management)

Chemical Engineering with

- Biotechnology
- Chemistry
- Environmental Technology
- Industrial Experience
- Study in Europe





## Chemistry



#### **Key Facts**

- Substantial investment in facilities, including refurbished teaching laboratories
- One of the most internationally competitive Schools in the UK
- History of Nobel Prize success

- Analytical Chemistry
- Chemistry
- Medicinal Chemistry



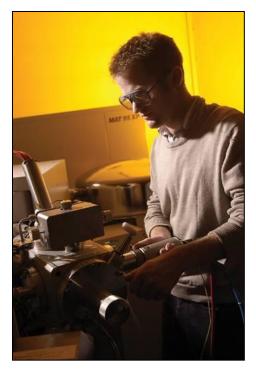


## Chemistry

## **UG Programmes:**

Chemistry (BSc/MChem)
Medicinal Chemistry (BSc/MChem)
Chemistry with

- Forensic and Analytical Science
- Industrial Experience
- Study in Europe
- International Study







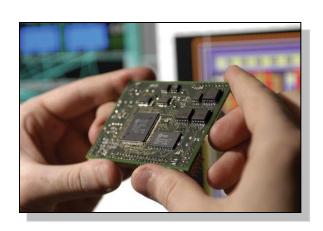
## **Computer Science**



#### **Key Facts**

- The first Computer Science department in the UK
- Home of first stored programmable computer
- Teaching Quality Assessment: Excellent
- World Class Facilities

- Artificial Intelligence
- Computer Engineering
- Computer Science
- Software Engineering





## **Computer Science**

## **UG Programmes:**

Computer Science(BSc/MEng)

Artificial Intelligence (BSc/MEng)

Computer Systems Engineering (BSc/MEng)

Computing for Business Applications (BSc)

Computer Science and Mathematics (BSc)

Software Engineering (BSc/MEng) Programmes with:

- Business and Management
- Industrial Experience





# Earth, Atmospheric and Environmental Sciences



#### **Key Facts**

- Refurbished teaching laboratories
- Practical and field-based study
- Geology & related Earth Sciences at Manchester since 1851

### **Key Subject Areas**

- Environmental Science/Studies
- Geochemistry
- Geology
- Planetary Science



"Earth Science covers a number of areas of study. We go on lots of field trips which help me to understand what we have been taught. The School's resources are fantastic and the academic staff are always approachable."



# Earth, Atmospheric and Environmental Sciences

## **UG Programmes:**

Earth Sciences (MEarthSci)

Environmental and Resource Geology (BSc)

**Environmental Science (BSc)** 

Geology and Planetary Science (BSc/MEarthSci)

Geology (BSc)

Geochemistry (BSc)

Petroleum Engineering (BSc/MEng)





# Electrical & Electronic Engineering



#### **Key Facts**

- Fully accredited by Institution of Electrical Engineering
- State-of-the-art facilities
- Excellent Employability record
- Origins of Electrical Engineering in 1905

- Electrical and Electronic Engineering
- Electronic Engineering
- Mechatronic Engineering





# **Electrical and Electronic Engineering**

## **UG Programmes:**

Electrical and Electronic Engineering (BEng/MEng)
Electronic Engineering (BSc/MEng)
Mechatronic Engineering (BEng/MEng)
Programmes with:

Industrial Experience







### **Materials and Textiles**



"I was attracted by the reputation of the centre, not only in the UK, but internationally. I decided to pursue my studies in a big city in the UK, and I chose The University of Manchester due to its tradition of having the biggest student community. I am able to enjoy life in a great UK city whilst learning at the same time.

- Biomedical Materials
- Materials Science and Engineering
- Textile Management and Technology
- Fashion Retailing



### **Materials and Textiles**



### **UG** Programmes:

Materials Science and Engineering (BSc/MEng) Biomaterials & Tissue Engineering (BSc/MEng) Programmes with:

Industrial Experience
 Management and Marketing of Fashion Textiles (BSc)
 Textile Design and Design Management (BSc)
 Fashion and Textile Retailing (BSc)
 Textile Science and Technology (BSc)



### **Mathematics**

#### **Key Facts**

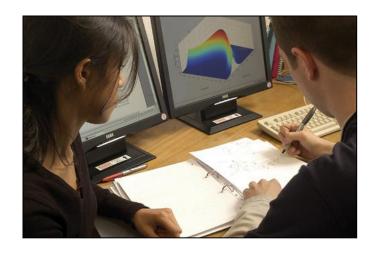
- Long tradition of Mathematics at Manchester
- One of the biggest schools in the country
- Investment programme in purpose-built new facilities



- Mathematics
- Statistics
- Mathematics and Finance
- Operational Research
- Actuarial Science and Mathematics



### **Mathematics**



## **UG Single Honours Programmes:**

Mathematics (BSc/MMath)

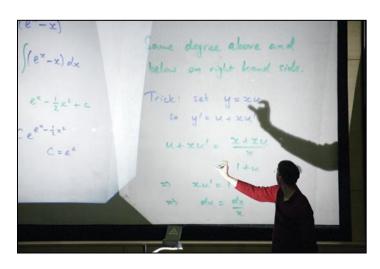
Mathematics and Statistics (BSc/MMath)

Mathematics with Financial Mathematics (BSc/MMath)

Actuarial Science and Mathematics (BSc)



### **Mathematics**



## **UG Joint Honours Programmes:**

Mathematics with Business and Management (BSc)

Mathematics with Finance (BSc)

Computer Science and Mathematics (BSc)

Mathematics and Physics (BSc/MMath & Phys)

Mathematics with a Modern Language (BSc)

Mathematics and Philosophy (BSc)









# Mechanical, Aerospace & Civil Engineering

#### **Key Facts**

- Exceptional research facilities
- Strong links with industry
- One of the largest engineering schools in Europe

"Manchester is a new and modern city. I love it here. Manchester is multiracial and there are so many students from different backgrounds that you won't feel homesick. I chose this university because of the reputation it holds worldwide for educational

excellence."



# Mechanical, Aerospace & Civil Engineering



## **UG** Programmes:

Aerospace Engineering (BEng/MEng)

Aerospace Engineering with Management (MEng)

Mechanical Engineering (BEng/MEng)

Mechanical Engineering with Management (BEng/MEng)

Mechanical Engineering with Nuclear Eng (BEng/MEng)

Civil Engineering (BEng/MEng)

Civil and Structural Engineering (MEng)

Civil Engineering (Enterprise) (MEng)

### Programmes with Industrial Experience

Higher Education Institution of the Year (The Times Higher Awards 2005)
The Sunday Times University of the Year 2006



## **Physics & Astronomy**

#### **Key Facts**

- Awarded 24/24 in Teaching Quality Assessment
- World leading facilities e.g. Jodrell Bank Observatory
- Where Rutherford split the atom; Geiger worked in his research team; Now where graphene was produced
- The University has a dedicated Physics library



- Astrophysics
- Photonics
- Theoretical Physics





## **Physics & Astronomy**

## **UG Programmes:**

Physics (BSc/MPhys)

Physics with Astrophysics (BSc/MPhys)

Physics with Theoretical Physics (BSc/MPhys)

Physics with Philosophy (BSc/MPhys)

Mathematics and Physics (BSc/MMath & MPhys)



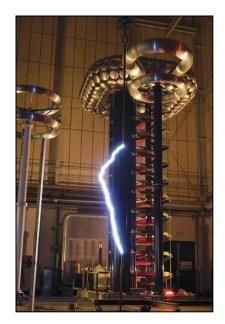




### **Research Facilities**

- Morton Pilot Plant Laboratory
- Interdisciplinary Biocentre
- Goldstein Aeronautical Laboratory
- Jodrell Bank Observatory
- Manchester Bobber & Flume
- Laser Processing research centre
- Molecular Beam Epitaxy
- High Voltage Research Lab
- Williamson Research Centre (for Molecular Environmental Science)







### **Contact**



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