

What is Materials Science and Engineering?

Materials Science or Materials Engineering is the study of all of the materials we see around us everyday. From simple things we take for granted like the can holding our fizzy drink or the pen we write with, to materials pushing the boundaries of technology such as those used in aerospace, sport or medicine.



Materials Science or Engineering forms a bridge between the sciences and engineering. It allows theory to be put into practice in a way which benefits every body, since everything we do everyday involves materials. Materials Scientists or Engineers look at all of the different groups of materials, metals & alloys, polymers & rubbers, ceramics and composites. They develop new materials for new applications, improve existing materials to give improved performance and look at ways in which different materials can be used together. For example all of these groups are used in the manufacture of the space shuttle.

Materials experts need a thorough understanding of how materials work. This means they are able to control the structure of a material, often on an atomic level, so that its properties, for example strength, can be tailored to suit a particular application. It is also important to understand how materials can be processed to the shape required and materials scientists and engineers have developed many novel ways of making things. A good example is the silicon microchip found in our computers.



If you would like to know more about the materials around you and find out where materials has taken other young people have a look at the web-site below.

www.materials-careers.org.uk

The following Universities (*) run accredited materials related degree programmes. This means that you go on to become a Chartered Engineer. Other universities run courses on which you will learn about materials. You can also study materials at college. Why not get in touch with your nearest department and go and see materials in action.

University / College	Telephone	E-mail address
University of Aberdeen	01224 272090	sras@abdn.ac.uk
University of Bath	01225 386196	Eas-admit@bath.ac.uk
University of Birmingham*	0121 414 2841	m.j.jenkins@bham.ac.uk
Bradford College	01274 753333	Admissions@bilk.ac.uk
Brunel University	01895 203341	Me-ug-admissions@brunel.ac.uk
Burton-on-Trent College	01283 494400	Pscan1@burton-college.ac.uk
University of Cambridge*	01223 334300	Web-replies@msm.cam.ac.uk
Doncaster College	0800 358 7575	infocentre@don.ac.uk
Herriot-Watt University	0131 449 5111	enquiries@hw.ac.uk
Imperial College*	020 7594 6728	r.grimes@ic.ac.uk
University of Leeds*	0113 343 2369	Materials@leeds.ac.uk
University of Liverpool*	0151 794 4313	Admis.ug.mat@liv.ac.uk
London Metropolitan University	020 7753 5128	Polymers@londonmet.ac.uk
Loughborough University*	01509 223161	IPTME@lboro.ac.uk
University of Manchester	0161 200 5982	Materials@manchester.ac.uk
Napier University	0500 353570	info@napier.ac.uk
University of Newcastle *	0191 222 7906	ugceam@ncl.ac.uk
University of Nottingham*	0115 951 3785	mmm- undergraduate@nottingham.ac.uk
University of Oxford*	01865 283227	Enquiries@materials.ox.ac.uk
University of Plymouth	01752 233322	Technology@plymouth.ac.uk
University of Portsmouth	023 9284 2555	Technology-admissions@port.ac.uk
Queen Mary, University of London*	020 7882 5160	materials@qmul.ac.uk
Rotherham College	0808 722777	info@rotherham.ac.uk
University of St Andrews	01334 463808	chemug@standrews.ac.uk
Sheffield Hallam University	0114 225 4569	Eng-marketing@shu.ac.uk
University of Sheffield*	0114 222 5999	r.thackray@sheffield.ac.uk
University of Strathclyde	0141 552 4400	Contact-mecheng@strath.ac.uk
University of Wales, Swansea*	01792 295676	Eng.recruitment@swan.ac.uk

For more information about materials please contact:

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You can find out more about University courses at www.ucas.co.uk