

## University expertise

### Putting world-class expertise to work in your business

The University of Birmingham offers a very wide range of research expertise to industry and the public sector. We are recognised for world class research and cutting edge impact in five areas which are critical in today's world.

#### Low carbon energy

Our main strengths in Low Carbon Energy are in bio-fuels, biowaste to energy, supercritical fluids, [hydrogen fuel cell development \(http://www.fuelcells.bham.ac.uk/\)](http://www.fuelcells.bham.ac.uk/), and hydrogen storage. Birmingham is one of three Universities chosen by government to establish the Energy Technologies Institute (ETI) to speed up the deployment of new low carbon energy technologies in pursuit of the UK's energy and climate change goals. The ETI is expected to leverage £0.6-1 billion of funding from government and major energy companies over the next 10 years. [Find out more about Low Carbon Energy \(/partners/business-services/university-expertise/low-carbon-energy.aspx\)](/partners/business-services/university-expertise/low-carbon-energy.aspx)

The College of Engineering and Physical Sciences also offers a wide range of business support across engineering and science related issues.

#### Health and medical technology

Our main strengths in Health and Medical Technology are cancer, hormones and genes, and immunity and infection. However, we are internationally recognised also as a world leader in translational medicine, particularly in clinical trials. Our total active research funding in health and medical technology exceeds £200 million. We are working in partnership with several of the world's top 20 pharma companies and with many leading biotechnology and medical device companies. [Find out more about Health and medical technology \(/partners/business-services/university-expertise/health-and-medicine.aspx\)](/partners/business-services/university-expertise/health-and-medicine.aspx)

#### Advanced materials and nanotechnology

The University has strength in depth and breadth in Advanced Materials. We have expertise which covers materials synthesis, processing, analysis and characterisation for both nanomaterials and bulk functional materials. The expertise applies to metals, ceramics, composites, coatings and powders. The University has received substantial government funding for equipment and facilities to enhance its capability to work with industry. [Find out more about Advanced materials and nanotechnology \(/partners/business-services/university-expertise/advanced-materials.aspx\)](/partners/business-services/university-expertise/advanced-materials.aspx)

#### Environment

Our main strengths in Environment research are sustainable energy, environment and health, environmental impact of nanotechnologies, management of water resources, and sustainable urban environments. Staff from all five Colleges of the University of Birmingham are involved in this research but their efforts are focussed and co-ordinated through our Centre for Environmental Research and Training. [Find out more about Environment \(/partners/business-services/university-expertise/environment.aspx\)](/partners/business-services/university-expertise/environment.aspx)

#### Social sciences

Our work in Social Policy centres on global communities, families, social justice, health and social care, and wealth, welfare and well-being. We are committed to applying the outcome of our research to span the divide between academia and social practice. We have a long track record of working with a wide range of public sector organisations. [Find out more about Social sciences \(/partners/business-services/university-expertise/social-sciences.aspx\)](/partners/business-services/university-expertise/social-sciences.aspx).