Research in the Department of Civil & Environmental Engineering is highly interdisciplinary and combines the expertise of civil engineers, environmental engineers, scientists, mathematicians, economists and social scientists. Our world-class research portfolio includes leadership of international multi-institutional research consortia in close collaboration with end-users from industry and government.

WHY CHOOSE STRATHCLYDE FOR A PhD?
The Department has a vibrant postgraduate research community, with currently around 70 research students. We offer research training in a diverse, international setting and all of our PhD students have the support of two supervisors to guide them through their research. Students receive credited training in complementary skills such as presentation, external engagement, writing and project-specific skills. Our research students have opportunities to attend specialist classes and training course across the University as well as the Department’s weekly research seminar series.

WHAT CAN I RESEARCH?
Our research is organised under three broad themes:

Infrastructure:
- Water distribution systems
- Urban drainage and wastewater systems
- Novel computational methods for optimal design and control of complex infrastructure systems
- Innovative materials for structural engineering
- Advanced micro to nano-scale techniques for monitoring the degradation and deformation of structural and geo materials
- Transport planning

Geomechanics & Geosciences:
- Assessment of flood defences
- Investigation of coupled hydro-mechanical-chemical-microbiological processes in soils and rocks
- Understanding deep flow systems for carbon sequestration, hydrocarbon exploitation and radioactive waste disposal

Environment:
- Environmental health
- Biotechnology (phytoplankton & algae)
- Environmental forensics
- Contaminant fate, transport, and remediation,
- Environmental impact assessment Ecological engineering & pathogen detection

Recent, highly-prestigious staff achievements include:
- Prof. Kalin: Brownfield Briefing Award (2012) for research in Environmental forensic methods for the characterisation of coal tar contamination.
- Prof. Lunn: Geological Society of London Aberconway Medal (2011) for distinction in the practice of geology with special reference to work in industry
- Prof. Shipton: Geological Society of London William Smith Fund (2010) for excellence in contributions to applied and economic aspects of geoscience
- Dr. Switzer: Lord Ezra Award (2009) for innovation by the Combustion Engineering Association
- Dr. Knapp: Best environmental science research paper (2009) in Environmental Science & Technology

The Department supports a wide range of international research collaborations, including recent activity in: Malawi, Kenya, Swaziland, Thailand, Cuba, Brazil, United States and Canada.

Some examples of national/international consortium projects led by the Department include:
- GEO-INSTALL Modelling Installation Effects in Geotechnical Engineering, €1.28M, European Commission (EC)
- AMGISS (Advanced Modelling of Ground Improvement on Soft Soils), €0.35M, EC
- BAND-D, Biogeochemical Applications in Nuclear Decommissioning and Waste Disposal, £1.9M, UK Engineering and Physical Sciences Research Council (EPSRC)
- SAFE Barriers – a Systems Approach For Engineered Barriers, £1.3M, UK EPSRC

WHAT FACILITIES ARE AVAILABLE?
The University has made a £6M investment in the Department’s research laboratories resulting in new state-of-the-art labs due for completion in April 2013. The Department’s excellent research facilities include:
- Geomechanics Laboratory
- Environmental Chemistry Laboratory
- Microbiology Laboratory
- Structures Laboratory
- Constitutive & Numerical Modelling of Geomaterials
- Field Investigation Capabilities
- Advanced Materials Research Laboratory

HOW DO I APPLY AND/OR FIND OUT FURTHER INFORMATION?
Please email contact-civeng@strath.ac.uk for further information. We welcome applications from prospective students of all backgrounds.