Civil engineering involves the planning, design and construction of the built environment and the provision of essential services and infrastructure. These include structures such as buildings, bridges and tunnels, as well as transport systems, water supply, drainage systems, ports and harbours. Civil engineers use their sophisticated understanding of planning, design and construction to provide the most effective way of interacting with the natural environment, and to create solutions to improve quality of life.

Civil engineering is about community service, development, and improvement. Civil engineers are problem solvers, meeting the challenges of pollution, traffic congestion, drinking water and energy needs, urban redevelopment and community planning.

This major leads directly to the Master of Engineering (Civil) and the Master of Engineering (Structural), and professional registration as an engineer.

What careers can this major lead to?
This course acts as a pathway to a career in civil engineering. Civil engineers may specialise in structural engineering, geotechnical engineering, water resources engineering, transport and land use planning or project management.

Today’s civil engineers are at the forefront of technology. They are the leading users of sophisticated high-tech products, applying the very latest concepts in computer-aided design (CAD) in design, construction, project scheduling, and cost control.

Employment opportunities are available with a wide range of organisations including manufacturing companies, research organisations, academic institutions, mining companies, energy agencies, as well as local, state and federal governments.

What graduate courses does Civil Systems lead to?
Graduates who major in Civil Systems will be eligible to continue on to the Master of Civil Engineering or a Master of Structural Engineering. You will also be well-placed to apply for:
• Professionally focused graduate degrees in the sciences and technology, including biotechnology, environmental systems, informatics, management science, and nanotechnology
• Graduate degrees preparing for a wide range of professions including engineering, law, medicine and other health sciences and teaching
• Masters and Honours pathways to research higher degrees in the sciences and technology within the Melbourne Graduate School of Science, Graduate School of Humanities and Social Sciences, Melbourne School of Engineering, Melbourne School of Land and Environment, and the Faculty of Medicine, Dentistry and Health Sciences