Welcome to EBE

The Faculty of Engineering & the Built Environment (EBE) takes pride in its people – most especially its students, who become sought-after architects, planners, quantity surveyors, land surveyors, Geographic Information Systems (GIS) specialists, property valuers and professional engineers in a variety of areas, whether electrical, chemical, mechanical, civil, computer engineering or mechatronics.



The faculty launched EBE Talks, a website designed to promote the visibility and relevance of research conducted by both individuals and groups in EBE, both locally and internationally.

The Department of Chemical Engineering's Catalysis Institute is collaborating on a joint project between South Africa and Germany, which is funded by the Bundesministerium für Bildung und Forschung (BMBF). The project aims to examine the technical, social, and environmental implications of introducing a new cooking fuel for low-income households in sub-Saharan Africa.

The Centre for Higher Education Development's (CHED) Multilingualism Education Project (MEP) launched the isiXhosa Mechanical Engineering Glossary in 2023. The glossary presently includes more than 300 terms.

The faculty has partnered with Global Digital Heritage Afrika (GDHA), a research group committed to digitally documenting heritage. GDHA is focused on documenting heritage landscapes, sites, monuments, and museum collections digitally, to use the records for research, preservation, and interpretation purposes.

In the 2023 QS World University Rankings for engineering and technology, UCT was ranked as the top engineering university in South Africa.



"At the heart of our vision is the desire to foster strong analytical skills, practical ingenuity and creativity, good communication and high ethical standards and professionalism, as well as the ability to be lifelong learners.

One of the core aspects of our vision as a faculty is to develop outstanding graduates and scholars, who contribute to society and address socioeconomic challenges through their work.

I believe that UCT graduate engineers and professionals of the built environment are ideally equipped to rise to the complex challenges and global problems of the 21st century."

PROFESSOR ALISON LEWIS

Dean of Engineering & the Built Environment







4000+ people

A diverse student body

- 2 891 undergraduates (70%)
- 1 013 postgraduates (25%)
- 223 PhD students (5%)



World-renowned teaching staff

214

academic staff (52%)

176

professional, administrative support and service staff (48%)





State-of-the-art facilities

EBE laboratories make use of the latest industry standards to support modern teaching and learning.



Internationally recognised research

EBE research is recognised for its relevance to the needs of industry, and offers great opportunities for postgraduate students.



52 National Research Foundation-rated staff members



*The Department of Science and Technology and the National Research Foundation fund research positions (called SARChI chairs) at universities across South Africa in order to strengthen the country's ability to produce high-quality research, innovation and students.

*Last updated in April 2024.

Six departments



Architecture, Planning and Geomatics offers degrees that give graduates access to career opportunities in architecture, landscape architecture and urban planning. Geomatics involves the integrated measurement, analysis and management of spatial data.



Chemical Engineering prepares students for lifelong professional growth and a dynamic range of careers. The fundamentals of science and the principles of process engineering are integrated into multidisciplinary teaching and research programmes aimed at producing world-class graduates and internationally competitive research.



Civil Engineering prepares graduates for the planning, design, construction and development of building and infrastructure projects, the management and distribution of water resources, the optimisation of traffic and transport services and the creation of sustainable and energy-efficient cities and communities.



Construction Economics and Management aims to produce graduates with theoretical, entrepreneurial and business skills that will ensure their leadership positions within the construction, property and built environment industries.



Electrical Engineering offers three creative and stimulating degree programmes where students learn to solve known problems and conceive responses to challenges that have not yet been recognised. New technologies and applications, once unimaginable and achieving what once seemed impossible, are emerging every day.



Mechanical Engineering offers two well-recognised degrees, excellent research facilities and collaboration with world-class departments. A wide range of research opportunities that are addressing global challenges are available - from bioengineering and energy efficiency to robotics, computational fluid dynamics and many more.

Research

The complex challenges facing Africa and the global community – water scarcity, alternative energy, urbanisation and sustainability – demand collaborative solutions. The faculty houses a number of interdisciplinary research units concentrating on these challenges.





"I chose engineering because I wanted to be a part of creating Afrocentric technology solutions that help make technology more accessible in our country."

KHAYA MXENGE

Mechatronics graduate