FACULTY OF ENGINEERING & THE BUILT ENVIRONMENT
STRATEGIC PLAN (2017 – 2020)

After consultation within the various stakeholders, five primary goals of the university were set by the leadership within the university. They are:

Goal 1: To forge a new inclusive identity that reflects demographically more representative student and staff profiles and the cultures, values, heritage and epistemologies of the diversity and of UCT's staff and students.

Goal 2: To promote UCT as an academic meeting point of choice between South Africa, the rest of Africa and the world and to advance the status and distinctiveness of scholarship in Africa.

Goal 3: To advance UCT as a research-intensive university that makes a distinctive contribution to knowledge, locally and globally.

Goal 4: To renew and innovate in teaching and learning - improving student success rates and well-being, broadening academic perspectives, stimulating social consciousness and cultivating critical citizens.

Goal 5: To enhance the scope, quality and impact of engaged scholarship with an emphasis on addressing development and social justice.

In this document, we outline the Faculty of Engineering and the Built Environment's strategic plan, drawing from the goals set out by the university.

Goal 1: To forge a new inclusive identity that reflects demographically more representative student and staff profiles and the cultures, values, heritage and epistemologies of the diversity and of UCT's staff and students.

The core of our strategy is to forge a new and inclusive EBE, one in which students and staff feel that they have ownership and to which they belong. We have already started and will continue to have a zero-tolerance approach to any form of unfair discrimination and harassment.

Strategy 1: Creating an inclusive EBE

Our aspiration to create an inclusive EBE will be realised through the following initiatives:

- Creating inclusive, non-hierarchical spaces for the co-creation of knowledge
- Workshops and sessions for staff on "Creating an Inclusive Classroom": guidance on how to create inclusive, open spaces that encourage all voices to be heard
- Curriculum development that explicitly addresses issues of inclusivity
- Enhancing student leadership through:
  - Appointing PG and UG student council members to relevant faculty committees
  - Regular meetings with the deanery and undergraduate and postgraduate student councils
  - Workshops for student leaders on leadership, engagement, planning, communication and conflict management
  - Celebrating, encouraging and supporting EBE student initiatives such as the LEAD programme
- Regular engagements within the Faculty on the themes of institutional transformation and topical issues such as decolonisation and fee-free education,
- Multilingual Faculty building signage and letterheads
- Engaging with CHED offerings of isiXhosa classes for staff
- Involving staff and students in proposals around artworks and naming of EBE buildings

Strategy 2: Attain our Employment Equity targets

Attaining our employment equity targets will be realised through the following actions:

- The Transformation Committee will keep the EE plan and targets for departments in the faculty updated. These will be used in monitoring the profile of academic and PASS staff at all levels to know whether our EE targets are being met
- The faculty Employment Equity working group will receive training on employment equity and labour relations policies
- We will actively seek more NGAP-type of appointments in the faculty, and specifically propose **faculty-based** NGAP appointments

Strategy 3: Growing the Future of EBE

*In order to produce both knowledge and professional graduates who make a positive impact in South Africa, as well as globally, we need to attract and develop the best, most passionate, committed and diverse students and staff into our faculty. **Growing the Future of EBE** is our strategy to support the development of diversity and excellence in the academic profession.*

Our key Interventions are focussed on:

- Encouraging undergraduate students to embark on postgraduate studies.
  - Working with organisations such as Black Young and Gifted in Civil Engineering
  - Dinner with the Dean: exposing undergraduate students (Black South Africans) to postgraduate study and careers in academia
  - Encourage final year students to pursue academic careers and provide part-time teaching opportunities during the course of postgraduate study to foster interest in academia
  - Encouraging more women to enter the EBE faculty
  - Partnering with the Schools Improvement Initiative and SA WomEng to encourage more female students to consider studies in EBE and thereby recruit more women into the faculty

- Postgraduate Bursaries/ Scholarships
  - Embarking on a fundraising campaign to secure funding to attract Black South African students into postgraduate studies
  - Targeting Alumni to create scholarships to attract black and female South African students into postgraduate study

- Recruit, retain and develop black South African academics and professional support staff
  - Embarking on a fundraising campaign to attract exiting graduates to the academic profession
  - Ensuring that we can retain and develop our young academics through mentoring and support in the faculty, as well as staff development and retention programmes run by the university
  - Making use of Adjunct staff appointments to contribute to diversity in the faculty and as professional role models who can inspire future academics,
  - Encourage PASS staff development through publicising and supporting staff development opportunities

Goal 2: To promote UCT as an academic meeting point of choice between South Africa, the rest of Africa and the world and to advance the status and distinctiveness of scholarship in Africa

As a faculty, one of our core aims is to make an impact in South Africa, Africa and the world through our innovative and relevant research. We continuously strengthen this aim by recruiting talented South Africans and International students, as well as by collaborating in South Africa , across the African continent and the world.

Strategy 1: To use our research initiatives as the means to collaborate in Africa and beyond
- Leveraging our initiatives such as African Centre for Cities; Energy Research Centre, Association of African Planning Schools, Future Water, Future Energy, Minerals to Metals and the Nedbank Urban Real Estate Research Unit (URERU) to focus on global issues with a particular focus on African context
- Each initiative to define their top 3 to 5 important and clearly defined research focus areas relevant to Africa
- Developing CPD courses and online courses for wider exposure in Africa and globally
- Exploring co-badged PhDs with suitable partner institutions

Goal 3: To advance UCT as a research-intensive university that makes a distinctive contribution to knowledge, locally and globally

Our research vision aims to make an impact by developing innovative and relevant world class engineering and built environment solutions. We aim to develop innovative solutions for socio-economic development. We pursue impactful innovations and technological advances through multi-disciplinary teams engaged in fundamental and applied research.

Strategy 1: Leverage the momentum, critical mass and excitement of our research initiatives to stimulate leading edge research in the faculty
- Maintain a strong faculty focus on interdisciplinary groups (African Centre for Cities, Future Water, Minerals to Metals, Future Energy)
- Foster critical mass research groupings in departments
- Encourage research groupings to become University-accredited
- Recognise and reward the contribution of soft-funded researchers through the SFARS incentive funding scheme.
- Recognise interdisciplinary teaching and research (inter-department and inter-faculty); streamline interdisciplinary supervision approaches and establish rules of engagement for interdisciplinary research

Strategy 2: Focus on innovation
- Renew the focus on research and **innovation** in the faculty
- Identify new and emerging areas for research
- Use White Papers and other resources to determine how to prioritise innovation in the faculty's research activities
- Encourage and develop Industrial partnerships
- Use our workshops and fabrication facilities to ensure that we have the ability to translate research ideas into hardware and to experiment with innovation
- Identify, encourage and celebrate budding entrepreneurs in the faculty

Goal 4: To renew and innovate in teaching and learning - improving student success rates and well-being, broadening academic perspectives, stimulating social consciousness and cultivating critical citizens

Our aim is to enhance existing strategies and to promote the importance of teaching & learning culture within the Faculty. We intend to critically reflect on our current curricula, in order to propose a way forward on curriculum transformation which is inclusive, relevant and contextual. We prioritise Access and Success within all EBE programmes.

Strategy 1: Enhance the teaching & learning culture within the Faculty and continue our strong focus on Access and Success.
- Infuse ADL activities into the mainstream teaching and learning culture of the faculty;
- Access:
  - Offer differential entry requirements
- Success:
  - Mentor programme
  - Student advisors
  - Early warning system
  - Bootcamps and Tutor Reassessment Programme for core courses
  - Academic Development lecturers
  - ASPECT
  - Track the impact of the curriculum changes

Strategy 2: Critically reflect on and develop curricula which are inclusive, relevant and contextual;
- Continue with collaborative staff-student curriculum think-tanks that reflect on current curricula and develop new ideas around EBE specific curricula
- Set interdisciplinary topics in the final year project
- Ensure that the Social Infrastructures course continues to be offered in EBE

Goal 5: To enhance the scope, quality and impact of engaged scholarships with an emphasis on addressing development and social justice

Our aim is to build our Social Responsiveness (SR) through different forms of engagement with external, non-academic constituencies for the purpose of contributing to the university's development and social justice aims, as evidenced by contributions to industry or one's profession; contributions to the formulation of state policies and frameworks; contributions to the provision of services for the public sector and/or civil society and/or industry (including innovations, systems development or community outreach); engaged scholarship with the public sector, industry or civil society constituencies for the purpose of coproducing knowledge and information dissemination in the public domain.

Strategy 1: The faculty strategy is to build UCT's social responsiveness through interaction and engagements with industry, the state and civil society.

- Support and increase the number of staff and students who engage with SR activities through faculty SR workshops.
- Promote the integration of SR activities with teaching/research activities. (Examples of integrated SR and teaching activities include: Social Infrastructure; Global Citizenship; APG's IY project, etc.)
- Expand the provision of CPD courses, as well as learning opportunities for non-traditional students
- Continue to build relationships and engagement with a broad spectrum of external stakeholders through the EBE's Advisory Board