Master of Science in Sustainable Energy Transitions

Strathmore University
School of Computing and Engineering Sciences
Access to affordable and reliable energy is a requirement for socio-economic development. As such, universal energy access by the year 2030 has been prioritised globally through Sustainable Development Goal 7. To attain this goal, multi-lateral banks and development agencies such as The African Development Bank, World Bank and the United Nations have initiated various projects in developing countries with the aim of improving energy access by 2030. These projects include Kenya Off-Grid Solar Access Project jointly implemented by the Kenyan Government and the World Bank and the Program for Infrastructure Development in Africa implemented by the African Union. Kenya has adopted this goal nationally through Vision 2030.

Currently, Kenya reports that households particularly in rural areas are unable to afford the cost of grid connection despite heavy subsidies received through initiatives like the Last Mile Connectivity Project. Further, despite numerous projects being implemented to promote a transition to clean cooking fuels and technologies, the Stockholm Environment Institute indicates that 67,000 people in Africa perish annually because of respiratory illnesses associated with indoor air pollution from ‘dirty’ fuels such as charcoal and firewood.

Multi-disciplinary education is therefore an opportunity to equip individuals with capacity to solve such complex problems. Strathmore University therefore introduces the MSc. in Sustainable Energy Transitions to equip students with key technical skills required to develop and implement energy systems as well as a clear understanding of the ecosystem in which they operate and understanding of key concepts from other academic disciplines which are important for the energy sector. Graduates from this program will be able to utilise their skills and collaborate with other professionals from different academic backgrounds to address complex societal challenges.
Why the MSc. SET Programme?

This is the first multi-disciplinary program in the energy sector that seeks to equip students with technical skills such as energy systems design and implementation, research and data analytics, energy systems auditing, entrepreneurship and innovation, decentralization and digitalization of the energy systems, as well as the necessary skills in policy, project management, economics, ethics, communication and others that will contribute to their development as well-rounded professionals. This program will also provide industry exposure through the internship and capstone project thereby exposing students to practical challenges and solutions existing in the sector.

Students seeking a program with strong multi-disciplinary elements typically must travel to other countries and deal with additional costs such as travel and accommodation which could be avoided if they studied locally. They also must deal with having to leave their jobs and sometimes loose preestablished networks because of the long duration spent away. This program will provide a solution for this by its local presence and part time nature thereby allowing students to work, reside in the country and pursue their Masters degrees.

The programme will also provide international exposure by allowing students to receive guest lectures from renowned academics. Some of these academics are currently partners of the Strathmore Energy Research Centre who are working on research projects locally. Students may also therefore take advantage of the opportunity to undertake their Masters thesis from research projects jointly being undertaken by SERC and international partners.
Who Should Attend?

This program should be attended by individuals seeking to work towards the development of the energy sector through development and implementation of relevant policies, technology systems and entrepreneurial solutions.

The course has been designed for students who have completed a degree in Engineering, Computer Science, Information Technology, Environmental Science, or a science related discipline from recognized universities.

Duration

MSc. SET is a two (2) year program divided into four semesters with an average of four units per semester and offered on a part-time basis. Classes will be held Monday to Friday from 5.30 – 8.30 p.m. EAT

Entry Requirements

01 Holders of First Class (or GPA of 3.45 – 4) or Upper Second Class (or GPA of 2.85 – 3.44) degrees in Engineering, Computer Science, Information Technology, Environmental Science, or a science related discipline from recognized universities; or

02 Holders of Lower Second Class degrees in Engineering, Computer Science, Information Technology, Environmental Science, or a science related discipline from recognized universities or at least 2.5 GPA plus Postgraduate Diplomas or Certificates in relevant fields of study; or with at least two years working experience in the energy sector or research environment.

03 Holders of other related qualifications from recognised universities considered by the Academic Council as equivalent to the criteria in (i) or (ii).
Application and Admission Process

Upon meeting the entry requirements above, applicants should begin the application process by filling the online application at: https://strathmore.edu/msc-sustainable-energy-transitions-launch/

The applicant should upload the following documents:

i) Dully filled in Graduate Application Form (Downloaded on the university website).

ii) Two (2) completed Reference Forms from your professional background or from former professors particularly qualified to attest to the applicant’s qualification for graduate study (Download reference form from the university website).

iii) Certified copies of undergraduate degree certificate and transcript of records (TOR) in English giving full details of subjects studied and grades/marks obtained.

iv) Certified copy of the Kenya Certificate of Secondary Education (KCSE) – certificate (Secondary or high school certificate or its equivalent).


vi) Digital passport photo

vii) A copy of a National Identity Card (ID) or Passport (bio-data page).

viii) Interview fee of KES 2,500/- (Paid through the application portal).

NB: Copies of the degree certificate and transcripts should be certified by the awarding institution or an advocate of the High Court of Kenya.

After submission of the application, the applicant will be contacted by the University to take the Graduate Entrance Exam (GEE), which can be done in person or online. The GEE consists of English comprehension and grammar, arithmetic and an essay. Once the applicant has completed and passed the written exam they will be scheduled for an oral interview.
1. **Global exposure and international outlook:** Strathmore's international faculty and partners, global alumni network and diverse student body connect you with a world of opportunities.

2. **A Pioneer in Standards:** Strathmore University, its alumni and its partners have always been at the forefront of business education and standards. It is the first university in Kenya to become ISO 9001:2000 certified.

3. **World-class facilities:** Strathmore has avant-garde architecture that has been designed and built uniquely and in compliance with energy conservation requirements ensuring a holistic learning experience for students.

4. **People-oriented:** Strathmore believes that people matter. They are the heart of any organization and key to sustaining any organization. People are always our main focus in all we do. We give you personalized education, with special emphasis on human and ethical values.

5. **Teaching staff:** Our dedicated teaching staff are active professionals bring you up to speed with real-life situations through innovative teaching and individualised attention and guidance.
Our Partners