BSc. in Geospatial Engineering encompasses the following core areas of Geospatial Engineering:

- Geodesy and Geodynamics
- Land and Infrastructure Management
- Positioning and Navigation
- Topometry and Measurement Systems
- Geodynamics
- Environmental Engineering
- Process and Food Engineering
- Irrigation and Water Resources Engineering
- Power and Machinery Engineering
- Structures Engineering

Degree Programmes Offered

- BSc. in Geospatial Engineering
- M.Sc. in Geospatial Engineering
- PhD

Other Specialized Programmes Offered

- M.Sc. Geographical Information Systems
- PGD. Geographical Information Systems

Fee Structure for Postgraduate Diploma in Energy Management

<table>
<thead>
<tr>
<th>Year</th>
<th>1st Sem.</th>
<th>2nd Sem.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>110,000</td>
<td>117,500</td>
<td>227,500</td>
</tr>
</tbody>
</table>

Career Opportunities

- Cadastral surveying and digital cadastre
- Cartography
- GIS and GPS applications
- Land planning
- Business mapping
- Planning and urban development
- Remote sensing
- Spatial data management
- Educational institutions

Degree Programmes Offered

- BSc. in Geospatial Engineering
- M.Sc. in Geospatial Engineering
- PhD

Other Specialized Programmes Offered

- M.Sc. Geospatial Information Systems
- PGD. Geospatial Information Systems

Fee Structure for Master of Geospatial Information Systems

<table>
<thead>
<tr>
<th>Year</th>
<th>1st Sem.</th>
<th>2nd Sem.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>115,000</td>
<td>117,500</td>
<td>232,500</td>
</tr>
</tbody>
</table>

Career Opportunities

- Geospatial Engineering is a professional discipline concerned with the measurement, analysis and graphic representation of dimensional geo-spatial relationships, as well as with design, construction, maintenance, and the use of geospatial databases.

Degree Programmes Offered

- BSc. in Geospatial Engineering
- M.Sc. in Geospatial Engineering
- PhD

Other Specialized Programmes Offered

- M.Sc. Geospatial Information Systems
- PGD. Geospatial Information Systems

Fee Structure for Master of Geospatial Information Systems

<table>
<thead>
<tr>
<th>Year</th>
<th>1st Sem.</th>
<th>2nd Sem.</th>
<th>Project</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>135,000</td>
<td>98,500</td>
<td>105,500</td>
<td>339,000</td>
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<tr>
<td></td>
<td>101,500</td>
<td>64,000</td>
<td></td>
<td>165,500</td>
</tr>
<tr>
<td></td>
<td>155,500</td>
<td>125,000</td>
<td>105,500</td>
<td>386,000</td>
</tr>
</tbody>
</table>

Career Opportunities

- Geospatial Engineering prepares its graduates for careers requiring application of physical, biological, and engineering sciences to problems that involve environmental and living systems. The scope of Environmental and Biosystems Engineering is broader and encompasses agriculture, the environment, food, forestry, aquaculture and bio-based production and processing systems in industries and rural development.

Degree Programmes Offered

- BSc. in Environmental and Biosystems Engineering
- M.Sc. in Environmental and Biosystems Engineering
- PhD

Other Specialized Programmes Offered

- M.Sc. Environmental Information Systems
- PGD. Environmental Information Systems

Fee Structure for Master of Science Environmental and Biosystems Engineering

<table>
<thead>
<tr>
<th>Year</th>
<th>1st Sem.</th>
<th>2nd Sem.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>101,500</td>
<td>81,000</td>
<td>182,500</td>
</tr>
</tbody>
</table>

Career Opportunities

- The programme produces graduates who are able to pursue careers in Processing Industries, Government Institutions (Ministries e.g. public works, Energy, Water, Transport, and Agriculture etc), Parastatal Organizations, Academic Institutions, International Organizations (ICRF, World Vision etc) and Private Sector as Engineering Consultants.
Academic Programmes

All the five departments offer a five-year undergraduate study program leading to a Bachelor of Science degree in the respective fields of study. They also offer a Master of Science degree running for two years, as well as PhD programmes. The School has been running a self-sponsored programme since 1998 which runs concurrently with the government-sponsored programme.

The academic year runs from October to July with a graduation ceremony taking place every October.

Admission Requirements into undergraduate program

The following will be eligible to apply for a course in any of the five departments: K.C.E.S.E. Applicants or Equivalent. For KCSE holders a minimum aggregate of C+ (plus). Additionally a grade of C+ in each of the cluster subjects, as follows.

- Mathematics
- Physics
- Chemistry
- Biology/Geography/any Group M Subject.*

Group IV Subjects

- Home Science
- Building Construction
- Art and Design
- Power Mechanics
- Agriculture

Woodwork
- Drawing and Design
- Metalwork
- Aeronautics
- Aviation Technology

Computer Studies

- Electronic Course
- A professional engineering discipline that deals with the study and application of electricity, electronics, and electromagnetism. The field first became an identifiable occupation in the late nineteenth century with the commercialization of the electric telegraph and electrical power supply.

- Optoelectronics
- Power electronics
- Signal processing
- Telecommunications.

Degree Programmes Offered

- BSc. in Electrical and Electronic Engineering
- MSc. in Electrical and Electronic Engineering

Fee Structure for Master of science in Electrical and Electronic Engineering BSc.

<table>
<thead>
<tr>
<th>Year</th>
<th>1st Sem</th>
<th>2nd Sem</th>
<th>Other Charges</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>80,000</td>
<td>80,000</td>
<td>24,700</td>
<td>184,700</td>
</tr>
<tr>
<td>Year 2-5</td>
<td>80,000</td>
<td>80,000</td>
<td>19,500</td>
<td>219,500</td>
</tr>
</tbody>
</table>

*Home Science is no longer acceptable for admission

Degree Programmes Offered

- BSc. in Civil Engineering
- MSc. in Civil Engineering

Fee Structure for Master of science in Civil Engineering BSc.

<table>
<thead>
<tr>
<th>Year</th>
<th>1st Sem</th>
<th>2nd Sem</th>
<th>Project</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>80,000</td>
<td>80,000</td>
<td>155,500</td>
<td>215,500</td>
</tr>
<tr>
<td>Year 2</td>
<td>125,000</td>
<td>125,000</td>
<td>105,500</td>
<td>355,500</td>
</tr>
</tbody>
</table>

Career Opportunities

- Civil engineering can be applied in any of the diverse aspects of their profession, such as: Construction, Environment, Transportation planning, Water Resources Engineering, Environmental analysis, Design and Transport planning.

Private Sector

- All departments and public corporations dealing with civil engineering infrastructure and buildings viz: Ministry of Roads, Works, Water, and Local Government.

Public Sector

- Engineering firms, Consulting Companies, Management Companies, Banks.