

## **INTAKE: SEPTEMBER FOR ALL PROGRAMMES**

(Course applications will be done in May)

### **Certificate in Geographical Information System**

Duration : 3 terms

**Minimum entry qualifications:** Diploma in Land Surveying, Cartography, Photogrammetry, Environmental or related Certificate in GIS

**Tuition Fees:** Kshs 19,200/=per term

### **Fiber Optics Communication**

**Duration:** 2 weeks

**Minimum entry qualifications:** Diploma OR Certificate in Electrical Eng

**Tuition Fees:** Kshs 20,000/=

### **Programmable Logic Control and Industrial Automation (PLC)**

**Duration:** 3 weeks

**Minimum entry qualifications:** Diploma OR Certificate in Electrical Eng

**Tuition Fees:** Kshs 35,000/=

### **Advanced Programmable Logic Control and Industrial Automation**

**Duration:** 3 weeks

**Minimum entry qualifications:** Pass in Programmable Logic Control and Industrial Automation

**Tuition Fees:** Kshs 35,000/=

### **Certificate in AUTOCAD**

Duration: 4 weeks

**Minimum entry qualifications:** KCSE Mean grade D+. Professionals in Building and Civil Engineering fields.

**Tuition Fees:** Kshs 14,000/=per term

## **PLEASE NOTE:**

**Applications for courses are available only when courses have been advertised in the daily newspapers and should be made during the official application period following the course advertisement. Application for courses, made on or before the course application deadline, addressed to the Senior Assistant Registrar-Student Recruitment and Admissions, should be made on **official course application coupons** available at the University & in the newspaper advertisement accompanied by copies of **ACADEMIC and/or PROFESSIONAL CERTIFICATES**; copy of **NATIONAL IDENTITY CARD or WAITING SLIP or PASSPORT**; and a **BANK DEPOSIT SLIP**; or a **BANKERS' CHEQUE**; or a **POSTAL MONEY ORDER** made payable to the University College of a **NON-REFUNDABLE COURSE APPLICATION FEE of Kshs 2,000/=****

**Fee payments made by cash; credit cards; and personal and/or company cheques; WILL NOT be accepted at the University.**

Successful students shall pay **TUITION FEES** plus the **STATUTORY FEES** listed below **ONLY THROUGH** the following ways:

1. The university fee collection accounts at any branch of **Equity Bank AC. NO 0540 290 597 366 or Co-operative Bank of Kenya AC. NO 0112 906 234 900**
2. A bankers' cheque.
3. Any form of money transfer such as RTGS or EFT accompanied by a corresponding advice slip bearing the particulars of the beneficiary.

Registration fee (paid per academic year) Kshs 2,000/=;  
Medical fee (paid per academic year) Kshs 2,000/=;  
Caution money (paid once (refundable) Kshs 2,000/=;  
Industrial Attachment fee for diploma students taking regular courses (paid once) Kshs. 1,350/=; Computer fee (paid per academic year) Kshs 2,000/=; Maintenance fee (paid per academic year) Kshs 400/=; Library fee (paid per academic year) Kshs 2,000/=; Student Union fee (paid per academic year) Kshs 500/=; Sports fee (paid per academic year) Kshs 500/=; Insurance fee (paid per academic year) Kshs 500/=; Activity fee (for degree students-paid per academic year) Kshs. 1,000/=; and Examination fee (paid per academic year) Kshs. 5,000/=

**An academic year is equivalent to two (2) semesters.**



## **TECHNICAL UNIVERSITY OF KENYA**

### **FACULTY OF ENGINEERING AND THE BUILT ENVIRONMENT (FEBE)**

### **SCHOOL OF ENGINEERING SCIENCE AND TECHNOLOGY (SEST)**

### **COURSE BROCHURE 2013/2014**

### **LOCATION: N-BLOCK GROUND FLOOR**

Technical University of Kenya  
P. O. Box 52428-00200 Nairobi  
Haile Selassie Avenue  
Telephone: +254 (020) 343 672; 341 639; 224 9974; 251 300; 251 822; 225 0522; 0732 388 704; 0732 388 765.  
Fax: +254 (020)221 9689  
Website:www.tukenya.ac.ke

**Bachelor of Engineering in Aeronautical and Aviation Engineering in the following options:**

- **Airframes and Engines**
- **Avionics**

**Duration:** 13 semesters (5 years)

**Minimum entry qualifications:** KCSE mean grade C + with C+ in Mathematics, Physics, Chemistry/Biology

**Tuition Fees:** Kshs 90,000/= per semester

**Bachelor of Technology (Land Surveying)**

**Duration:** 4 years

**Duration:** 3 years for Diploma and 2 years for Higher Diploma

**Minimum entry qualifications:** Diploma in Land Surveying or equivalent

**Tuition Fees:** Kshs 90,200/=per semester,

**Bachelor of Technology (Geoinformatics)**

**Duration:** 4 years

**Duration:** 3 years for Diploma and 2 years for Higher Diploma

**Minimum entry qualifications:** Diploma in Technology in Geoinformatics or equivalent

**Tuition Fees:** Kshs 90,200/=per semester,

**Bachelor of Engineering (B.Eng) in the following options:**

- Power Systems Engineering
- Telecommunication Systems Engineering
- Instrumentation and Control Engineering
- Computer Systems Engineering

**Duration:** 5 years (10 semesters)

**Minimum entry qualifications:** KCSE mean grade of C+ including C+ in the cluster subjects, A-Level, Diploma (TEP), Diploma in Technology, Higher Diploma and Bachelor in Technology.

**Tuition Fees:** Kshs 90,200/=per semester

**Bachelor of Technology (B.Tech) in the following options:**

- Power Systems Engineering
- Telecommunication Systems Engineering
- Instrumentation and Control Engineering
- Computer Systems Engineering

**Duration:** 4 years (8 semesters)

**Minimum entry qualifications:** KCSE mean grade of C+ including C+ in the cluster subjects, A-Level, Diploma (TEP), Diploma in Technology, Higher Diploma.

**Tuition Fees:** Kshs 90,200/=per semester

**Bachelor of Philosophy in Technology (Land Surveying/ Geoinformatics)**

**Duration:** 4 semesters

**Minimum entry qualifications:** Higher Diploma in Land Surveying or Geoinformatics or equivalent

**Tuition Fees:** Kshs 90,200/=per semester

**Bachelor of Philosophy in Technology (Electrical & Electronic Engineering Technology)**

**Duration:** 4 semesters

**Minimum entry qualifications:** Higher Diploma in Electrical & Electronic Engineering

**Tuition Fees:** Kshs 90,200/=per semester

**Bachelor of Philosophy in Civil Engineering**

**Duration:** 2 years (4 semesters)

**Minimum entry qualifications:** Higher Diploma in Construction (Structures; Building & Civil Engineering; Highway or Water engineering options)

**Tuition Fees:** Kshs 90,200/=per semester

**Bachelor of Technology in Chemical and Process Engineering**

**Duration:** 2 years (4 semesters sandwich)

**Minimum entry qualifications:** Diploma in Chemical Engineering or any other equivalent Qualification from a recognized institution of higher learning

**Tuition Fees:** Kshs 90,200/=per semester

**Diploma in Technology in Aeronautical and Aviation Engineering (Evening mode) in the following options:**

- **Airframes and Engines**
- **Avionics**

**Duration :** 3 years (9 semesters)

**Minimum entry qualifications:** KCSE mean grade C plain including C plain in Mathematics, C plain and Physics/Physical Science

**Tuition Fees:** Kshs 24,200/=per semester for evening

**Diploma in Technology in Aerospace and Aviation Technology (Airframes and Engines option)**

**Duration:** 3 years (9 semesters)

**Minimum entry qualifications:** KCSE mean grade C+ including C+ in Mathematics, C plain in English and Physics/Physical Science

**Tuition Fees:** Kshs 24,200/=per semester for evening

- **Diploma in Land Surveying (KNEC)**
- **Diploma in Cartography (KNEC)**

**Duration:** 6 semesters

**Minimum entry qualifications:** KCSE mean grade C and C in Mathematics, English, Physics or Physical Sciences & Geography or a Craft Certificate in related subject

**Tuition Fees:** Kshs 24,200/=per semester for evening.

**Diploma in Geospatial Engineering (Evening mode)**

**Duration:** 6 semesters

**Minimum entry qualifications:** KCSE mean grade C plain and C plain in Mathematics, English, Physics or Physical Sciences & Geography or a Craft Certificate in related subject

**Tuition Fees:** Kshs 24,200/=per semester for evening.

**Diploma in Geo-informatics (Evening mode)**

**Duration:** 6 semesters

**Minimum entry qualifications:** KCSE mean grade C plain with C plain in Mathematics; Physics or Physical Sciences & Geography or a Craft Certificate in related subject

**Tuition Fees:** Kshs 24,200/=per semester for evening.

**Diploma in Technology in Civil Engineering**

**Duration:** 9 semesters

**Minimum Entry qualifications:** KCSE mean grade C plain with C plain in Mathematics; Physics and English

**Tuition Fees:** Kshs 36,000/=per semester

**Diploma in Technology (D.Tech)**

in the following options:

- Power Systems Engineering
- Telecommunication Systems Engineering
- Instrumentation and Control Engineering
- Computer Systems Engineering

**Duration:** 3 years (9 terms)

**Minimum entry qualifications:** KCSE mean grade C plain including C plain Mathematics, English and Physics, A-levels.

**Diploma in Technology in Mechanical Engineering in the following options:**

- Manufacturing Engineering
- Industrial Plant Engineering
- Automotive and Autotronic Engineering
- Air-Conditioning and Energy Engineering
- Structural Fabrication and Materials Engineering
- Metallurgical and Materials Engineering

**Duration:** 3 years (9 semesters)

**Minimum entry qualifications:** KCSE mean grade C plain and C plain in Mathematics, English, Physics/Physical Sciences and Chemistry

**Tuition Fees:** Kshs 24,200/=per semester for evening

**Diploma in Technology in Chemical and Process Engineering (Evening mode)**

**Duration:** 3 years (6 semesters)

**Minimum entry qualifications:** KCSE Mean grade C+ including C+ in Mathematics, English, Chemistry & Physics/Physical Science

**Tuition Fees:** Kshs 24,200/=per term for evening, Exam Kshs 4,000/=

**Diploma in Technology (Refrigeration and Air Conditioning Engineering) (Evening mode)**

**Duration:** 3 years (9 semesters)

**Minimum entry qualifications:** KCSE mean grade C plain with C plain in Mathematics, Physics/Physical Science, Chemistry and English  
**Tuition Fees:** Kshs 24,200/=per semester for evening

**Certificate in Electrical Installation Electrician I (TUK)**

**Duration:** 2 terms

**Minimum entry qualifications:** Pass in EIT II or Electrical Installation Craft final (KNEC) or equivalent KPUC  
**Tuition Fees:** Kshs 19,200/=per term

**Certificate in Electrical Installation Technician II**

**Duration:** 3 terms

**Minimum entry qualifications:** Pass in Certificate in Electrical Installation Technician I  
**Tuition Fees:** Kshs 19,200/=per term

**Certificate in Civil Engineering (Evening mode)**

**Duration:** 3 terms

**Minimum entry qualifications:** KCSE mean grade D+ with D+ in Mathematics, English and Physics  
**Tuition Fees:** Kshs 19,200/=per term

**Technician Certificate in Electrical & Electronic Engineering**

**Duration:** 3 Terms

**Minimum entry qualifications:** KCSE mean grade D+  
**Tuition Fees:** Kshs 19,200/=per term

**Advanced Computer Servicing and Maintenance**

**Duration:** 2 Terms

**Minimum entry qualifications:** Pass in Computer Servicing and Maintenance  
**Tuition Fees:** Kshs 19,200/=per term

**Certificate in Electrical Installation Electrician III (TUK)**

**Duration:** 2 Terms

**Minimum entry qualifications:** KCSE Mean grade D+  
**Tuition Fees:** Kshs 19,200/=per term

**Certificate in Electrical Installation Electrician II (TUK)**

**Duration:** 3 Terms

**Minimum entry qualifications:** Pass in Electrical Installation Electrician III OR Grade Test III  
**Tuition Fees:** Kshs 19,200/=per term

**Certificate in Electrical Installation Technician I (TUK)**

**Duration:** 3 terms

**Minimum entry qualifications:** KCSE Mean grade C-  
**Tuition Fees:** Kshs 19,200/=per term

**Bachelor of Engineering in Electrical and Electronic Engineering**

**Duration:** 13 semesters

**Minimum entry qualifications:** KSCE mean grade C + with C+ in Mathematics, Physics, Chemistry/Biology or group III, IV, V subject  
**Tuition Fees:** Kshs 90,000/=per semester

**Bachelor of Technology in Electrical and Electronic Engineering Technology**

**Duration:** 11 semesters

**Minimum entry qualifications:** KSCE mean grade C + with C+ in Mathematics, Physics, Chemistry/Biology or group III, IV, V subject  
**Tuition Fees:** Kshs 90,000/=per semester

**Bachelor of Technology in Electrical and Electronic Engineering Technology**

**Duration:** 7 semesters

**Minimum entry qualifications:** Diploma (TEP) or equivalent  
**Tuition Fees:** Kshs 90,000/=per semester

**Bachelor of Technology in Mechanical Engineering Technology**

**Duration:** 11 semesters

**Minimum entry qualifications:** KSCE mean grade C + with C+ in Mathematics, Physics, Chemistry/Biology or group III, IV, V subject  
**Tuition Fees:** Kshs 90,000/=per semester

**Bachelor of Engineering in Mechanical Engineering**

**Duration:** 13 semesters

**Minimum entry qualifications:** KSCE mean grade C + with C+ in Mathematics, Physics, Chemistry/Biology or group III, IV, V subject  
**Tuition Fees:** Kshs 90,000/=per semester

**Bachelor of Philosophy in Technology in Mechanical Engineering**

**Duration:** 4 semesters

**Minimum entry qualifications:** Higher Diploma in Mechanical Engineering or equivalent  
**Tuition Fees:** Kshs 90,000/=per semester for evening, Kshs 130,000/=per semester for E-module

**Bachelor of Technology in Mechanical Engineering Technology**

**Duration:** 7 semesters

**Minimum entry qualifications:** Diploma (TEP) or Equivalent  
**Tuition Fees:** Kshs 90,000/=per semester

**Advanced Diploma in Telecommunication Systems**

**Duration:** 4 terms

**Minimum entry qualifications:** Pass in Diploma in Telecommunication Systems  
**Tuition Fees:** Kshs 24,000/=per term

**Diploma in Technology in Chemical Engineering**

**Duration :** 9 semesters

**Minimum entry qualifications:** KCSE mean grade C plain including C plain in Mathematics, Physics, Chemistry/Physical Science  
**Tuition Fees:** Kshs 32,000/=per semester for evening

**Diploma in Technology in Civil Engineering**

**Duration:** 9 semesters

**Minimum Entry qualifications:** KCSE mean grade C plain with C plain in Mathematics; Physics and English  
**Tuition Fees:** Kshs 36,000/=per semester

**Diploma in Aeronautical Engineering**

**Duration :** 9 semesters

**Minimum entry qualifications:** KCSE mean grade C plain including C plain in Mathematics, Physics, and Chemistry/Physical Science  
**Tuition Fees:** Kshs 32,000/=per semester for evening

**Diploma in Petroleum Management**

**Duration:** 3 years (6 semesters)

**Minimum entry qualifications:** KCSE mean grade C+ including C+ in Mathematics, Physics/ Physical Science, Chemistry and English  
**Tuition Fees:** Kshs 24,200/=per semester for evening

**Diploma in Telecommunications Systems (C & G)**

**Duration:** 5 Terms

**Minimum entry qualifications:** KCSE mean grade C minus including C minus in Maths, English and Physics.  
**Tuition Fees:** Kshs 24,000/=per term

**Advanced Servicing and Maintenance of Electrical and Electronic Equipment**

**Duration:** 2 Terms

**Minimum entry qualifications:** Pass in Basic Servicing and Maintenance of Electrical and Electronic Equipment  
**Tuition Fees:** Kshs 19,200/=per term

**Craft Certificate in Applied Electronics (TUK)**

**Duration:** 3 Terms

**Minimum entry qualifications:** KCSE Mean grade D+  
**Tuition Fees:** Kshs 19,200/=per term

**Certificate in Electrical Installation Technician III (TUK)**

**Duration:** 2 Terms

**Minimum entry qualifications:** Pass in Certificate in Electrical Installation Technician II  
**Tuition Fees:** Kshs 19,200/=per term

### Certificate in Electronics Technician III (TUK)

Duration: 2 Terms  
**Minimum entry qualifications:** Pass in Certificate in Electronics Technician II  
**Tuition Fees:** Kshs 19,200/=per term,

### Certificate in Electronics Technician II (TUK)

Duration: 3 Terms  
**Minimum entry qualifications:** Pass in Certificate in Electronics Technician I  
**Tuition Fees:** Kshs 19,200/=per term,

### Certificate in Electronics Technician I (TUK)

Duration: 3 terms  
**Minimum entry qualifications:** KCSE Mean grade C- with pass in Mathematics, Physics and D+ in English  
**Tuition Fees:** Kshs 19,200/=per term

### Certificate in Land Surveying and Cartography (TUK)

Duration: 3 terms  
**Minimum entry qualifications:** KCSE mean grade D+ and D+ in Mathematics, English, Physics and Geography or KCE Div III  
**Tuition Fees:** Kshs 19,200/=per term.

### Certificate in Geographical Information System (GIS) (Evening)

Duration: 3 terms  
**Minimum entry qualifications:** KCSE mean grade D+ and D+ in Mathematics, English, Physics and Geography or KCE Div III  
**Tuition Fees:** Kshs 19,200/=per term

### Certificate in Technology in the following options:

- **Airframes & Engines**
- **Avionics**
- **Helicopters Maintenance**

**Duration:** 1 year  
**Minimum entry qualifications:** KCSE mean grade D+  
**Tuition Fees:** Kshs. 17,350/= per term

### Computer Servicing and Maintenance (KPUC)

Duration: 3 terms  
**Minimum entry qualifications:** KCSE Mean grade D+  
**Tuition Fees:** Kshs 19,200/=per term

### Mechanical Engineering Technician Stage II (Plant)

**Duration:** 4 Terms  
**Minimum entry qualifications:** Pass in Stage I  
**Tuition Fees:** Kshs 24,000/=per term

### Auto-Electrician II

**Duration:** 4 months  
**Minimum entry qualifications:** Auto-Electrician Stage I  
**Tuition Fees:** Kshs 24,000/=

### Bachelor of Technology in Civil Engineering

**Duration:** 4 years  
**Duration:** 3 years for Diploma holders and 2 years for Higher Diploma holders  
**Minimum entry qualifications:** KSCE mean grade C + with C+ in Mathematics, C plain in English and Physics  
**Tuition Fees:** Kshs 90,200/=per semester

### Technical Diploma in Electrical and Electronic Engineering

**Duration:** 5 terms  
**Minimum entry qualifications:** KCSE mean grade C- with D plain in Physics, Mathematics and English  
**Tuition Fees:** Kshs 24,000/=per term

- **Diploma in Technology (Mechatronics Engineering)**
- **Diploma in Technology (Industrial Plant Engineering)**

**Duration:** 3 years (9 semesters)  
**Minimum entry qualifications:** KCSE mean grade C minus with C minus in Mathematics, Physics/Physical Science, Chemistry and English  
**Tuition Fees:** Kshs 30,000/=per semester for evening

- **Diploma in Aeronautical Information Technology**
- **Diploma in Aircraft Maintenance & Airworthiness Management**

**Duration :** 9 semesters  
**Minimum entry qualifications:** KCSE mean grade C plain including C plain in Maths, Physics, Chemistry/Physical Science or Aviation Science  
**Tuition Fees:** Kshs 32,000/=per semester for evening; exam Kshs. 3,000/= per semester

### Certificate in Aircraft Maintenance (Fixed and Rotary wing)

Duration: 3 terms  
**Minimum entry qualifications:** KCSE mean grade D+ including a pass in Mathematics, English, Physics/Physical Science  
**Tuition Fees:** Kshs 19,200/=per term

### Certificate in Fabrication and Welding

**Duration:** 4 terms  
**Minimum entry qualifications:** **KCSE** Mean grade D+  
**Tuition Fees:** Kshs 19,200/=per term

### Certificate in Fire Engineering

Duration: 3 terms  
**Minimum entry qualifications:** KCSE Mean grade D+ including Mathematics, English and Physics; or KCE Div III  
**Tuition Fees:** Kshs 19,200/=per term

### Certificate in Refrigeration and Air Conditioning Engineering

Duration: 3 terms  
**Minimum entry qualifications:** KCSE Mean grade D+  
**Tuition Fees:** Kshs 19,200/=per term

1. **Motor Vehicle Mechanic I**
2. **Auto-Electrician I**

**Duration:** 4 months  
**Minimum entry qualifications:** KCSE level of education  
**Tuition Fees:** Kshs 19,100/=per term

### Basic Servicing and Maintenance of Electrical and Electronic Equipment (KPUC)

Duration: 4 Terms  
**Minimum entry qualifications:** KCSE Mean grade D+  
**Tuition Fees:** Kshs 19,200/=per term

### Certificate in Technology in the following options:

- **Airframes & Engines**
- **Avionics**
- **Helicopters Maintenance**

**Duration:** 1 year  
**Minimum entry qualifications:** KCSE mean grade D+  
**Tuition Fees:** Kshs. 17,350/= per term

### Motor Vehicle Mechanic II

**Duration:** 4 months  
**Minimum entry qualifications:** Motor Vehicle Mechanic I  
**Tuition Fees:** Kshs 24,000/=

### Mechanical Engineering Technician Stage I (Plant)

**Duration:** 4 terms  
**Minimum entry qualifications:** **KCSE** mean grade D+ including passes in Maths, English & Physics/Physical Sciences  
**Tuition Fees:** Kshs 19,200/=per term