

SCHOOL OF ENGINEERING

REGULATIONS FOR THE DEGREE OF BACHELOR OF SCIENCE IN THE SCHOOL OF ENGINEERING

Entry Requirements

F1 Candidates shall be eligible for admission into the Bachelor of Science degree in the School of Engineering in the following categories.

a) **KCSE Candidates**

The basic admission requirement shall be the minimum requirement set for entry into Public Universities which is a mean grade of at least C+ in Kenya Certificate of Secondary Education (KCSE). In addition, candidates shall have obtained at least C+ in each of the four cluster subjects from any of the following alternative clusters. However, a cut-off grade higher than C+ in each cluster subject shall be preferred if limitations of the number of places available for each degree programme versus the number of qualified candidates so demand. The said cut-off grades shall be determined and implemented by the School Board.

Alternative A:

Physics Biology or Geography or any Group IV Subject

Chemistry

Mathematics

Alternative B:

Physical Sciences Geography or any Group IV Subject

Biological Sciences

Mathematics

Group IV Subjects:

Home Science Building Construction

Art and Design Power Mechanics

Agriculture Electricity

Woodwork Drawing and Design
Metalwork Aviation Technology

b) A-Level Candidates

Candidates with a minimum entry requirement of principal C passes in Mathematics and Physics and a Subsidiary level pass in Chemistry with a credit pass in English at 'O' level, except that for Geospatial Engineering, a subsidiary level pass in Geography shall also be accepted in lieu of Chemistry.

c) KNEC Higher National Diploma (HND) or Equivalent

Candidates with Higher National Diploma in the following broad areas of study:

- i) Agricultural Engineering
- ii) Civil engineering
- iii) Electrical engineering
- iv) Mechanical engineering
- v) Geospatial Engineering
- vi) Any other approved subject area.

d) Ordinary KNEC Diploma or equivalent (with credit pass)

- i) Agricultural Engineering
- ii) Civil engineering
- iii) Electrical engineering
- iv) Mechanical engineering
- v) Geospatial Engineering
- vi) Any other approved subject area.

e) Diploma from Science/Technical Teacher Training Colleges

Candidates with a Diploma in Mathematics and Physics from recognized teacher training colleges.

f) BSc/BEd (Science) degrees from Universities or any other relevant degrees

Candidates with a Bachelor of Science or Education degree in Physics and Mathematics from recognized institutions or any other relevant degree from a recognized institution.

Exemption from any Courses in the Programme

- a) The point of entry into the programme for candidates with a KNEC higher national diploma or its equivalent in accordance with F1 (c) shall be in the second year of study.
- b) The point of entry into the programme for candidates with an ordinary KNEC diploma or its equivalent in accordance with F1 (d) shall be in the first year of study.
- c) The point of entry into the programme for candidates with qualification other than those outlined in F1 (a), F1 (b), F1 (c) and F1 (d) shall be approved by Senate on the recommendations of the School Board of Engineering and the College Academic Board and shall be based on the qualifications of the applicant.
- d) Where a candidate wishes to be exempted from any course or courses, he/she shall send a formal application to the Academic Registrar justifying his/her request and attaching evidence of the credentials which support such request. Such a candidate may be required to sit and pass an exemption examination set and administered by the School, and approved under the authority of the Senate after payment of a prescribed fee.
- e) Based on the assessment of the exemption examination, the School Board of Engineering shall make its recommendations to the Senate. The Academic Registrar shall communicate to the candidate, the Senate's decision.

Course Structure and Duration

- F2** a) Every Curriculum for the degree shall extend over not less than five academic years.
- b) A candidate enrolled for the degree shall satisfactorily complete such curriculum in a period of not more than twice the minimum period for which he/she was registered for the degree.
- F3** Each curriculum shall consist of an approved scheme of study.

- F4** The choice of options within an approved scheme of study shall, in all cases, be subject to the approval of the Department.
- F5** (a) A candidate for the degree shall satisfactorily complete such course work/practical assignments as may be required for each scheme of study. Satisfactory completion of any such requirements shall be a condition for admission to the examination at the end of that semester of study.
- (b) A candidate who fails to satisfy the condition set in F5 (a) above with good cause shall be required to repeat the course unit, otherwise the candidate shall be discontinued.
- F6** Attendance of not less than two-thirds of the total lecture hours of all prescribed courses shall be a condition for admission to the examination at the end of that semester of study.
- A candidate who does not satisfy this condition with good cause in any semester, shall on the recommendation of the School Board of Examiners and approval by Senate, be allowed to repeat all the affected units in that semester.
- A candidate who does not satisfy this condition without good cause in any semester, shall on the recommendation of the School Board of Examiners and approval by Senate, be discontinued from the course of study.
- F7** Each academic year shall be divided into two semesters while there may also be a third practical semester or industrial attachment semester as may be provided for in the specific degree programme.

Examinations

- F8** Courses shall be evaluated in terms of course units. A course unit shall be as defined in the approved course syllabus.
- F9** Courses that are spread over two semesters shall be examined at the end of the second semester.
- F10** All courses taken in a given semester shall be examined by Ordinary examinations at the end of that semester unless otherwise specified.
- F11** A written ordinary Examination for a course unit, where it applies, shall have a minimum duration of two hours. A course with more than or less than 45 contact hours shall generally be examined for a duration proportional to the 2 hours for one course unit, such as:

45 contact hours - 2.0 hour examination

60 contact hours - 2.5 hour examination

F12 The pass mark in each course unit shall be 40% of the maximum mark possible in the course unit.

F13 a) Each course unit covered in a semester shall be graded independently out of a maximum of 100 marks.

b) The complete assessment of a course unit shall consist of continuous assessment tests, course/laboratory/field assignments and end of semester written examinations, with the three components ordinarily carrying 10, 20, and 70 marks out of 100 respectively.

c) Where a course unit does not have any laboratory/field assignments, or coursework, the continuous assessment test and semester written examinations shall carry 30 and 70 marks out of 100 respectively.

d) Where a course unit is examined entirely by coursework, or laboratory/field assignments, such course unit shall carry all 100 marks.

e) Where distribution of the marks for a course does not conform to (b), (c) or (d) above, the distribution of the marks for the course unit as approved by the Senate shall be followed.

f) The final year project shall be considered as two course units.

F14 In order to be allowed to proceed to the next year of study a candidate shall have obtained an aggregated mark of not less than 40% and passed all course units or satisfied F16(a).

F15 (a) A candidate who fails an accumulated number of not more than four units and attains an aggregate mark of not less than 30% in any academic year of study shall be allowed to sit for supplementary examinations within three months.

(b) A candidate who fails the project in the final year of study shall be allowed to resubmit the revised project within three months' time. A candidate who fails the re-submitted project shall repeat the project unit during the next academic year.

(c) A candidate who fails a course unit examined entirely by coursework shall be allowed to resubmit the coursework within

three months' time. A candidate who fails the re-submitted coursework shall repeat the unit during the next academic year.

F16 A candidate who fails to satisfy the examiners in the supplementary examinations:

a) In not more than two units in any one academic year, shall on recommendation of the School Board of examiners and approval by Senate, be allowed to proceed to the next year of study and sit the examinations in the failed course units at the next Ordinary University Examinations, subject to the provision of regulation F18. A pass obtained in such examination shall be adopted as 40% and will be entered as such in the candidate's academic record.

b) In more than two units shall on recommendation of the Board of examiners and approval by Senate, be allowed to repeat the year and sit the examinations in the failed course units at the next Ordinary University Examination, subject to the provision of regulation F18.

F17 A candidate who obtains an aggregate mark of not less than 30% and has failed in more than an equivalent of 4 course units but in not more than an equivalent of 8, shall on the recommendation of the School Board of Examiners and approval by the Senate, be required to repeat the year of study and attend classes in the failed units and take the examination in the failed course units at the next Ordinary University Examinations. Marks obtained in such examination shall be adopted fully and will be entered as such in the candidate's academic record.

F18 A candidate who:

- a) Obtains an aggregate mark of less than 30% or
- b) Has failed in more than an equivalent of eight (8) course units, or
- c) Has failed the same course unit four times or
- d) Has failed to take prescribed examinations without good cause,

Shall on the recommendation of the School Board of Examiners and approval by senate, be discontinued from the course of study.

F19 (a) A candidate who fails to take prescribed examinations with good cause shall be allowed by Senate on the recommendation of

the School Board of Examiners to take Special Examinations at the next Ordinary University Examination/Supplementary Examinations.

b) Examinations taken under clause F19 (a) shall be treated in accordance with clause F13 and shall be graded in full.

F20 Compensation may be allowed in a maximum of two failed course units only for any year of study, provided the mark for the failed unit is between 35% and 39% inclusive and the average mark for the candidate is 50% or above and shall be applied by taking two marks from the highest scores to make up for each mark failed. The compensation shall not apply to Final Year Project.

Award of Degree

F21 The final award of the degree shall be based on the assessment of the performance of the candidate in the last three years of study by computing an aggregated score using relative weights of 1:2:3 for the third, fourth and fifth years of study respectively.

F22 A candidate who repeats in accordance with F17 in the fifth year of study, or fails supplementary examinations according to F16 in the fifth year of study shall not be eligible for the award of First Class Honours degree.

F23 A candidate who qualifies for the award of the degree shall be placed in one of the classes to be described as First, Second (Upper Division and Lower Division) and pass. Honours degrees shall be awarded to candidates who have been awarded First Class and Second Class (Upper Division and Lower Division).

F24 The classification of the final degree award stipulated in F23 shall be based on the aggregated score calculated according to clause F21 as follows:

First Class Honours	70% and above
Second Class Honours (Upper Division)	60% - 69%
Second Class Honours (Lower Division)	50% - 59%
Pass	40% - 49%