Structural Engineering

Description

The structural engineering thematic area deals with training of civil engineering aspects of safety and economical construction of structures. This is achieved by imparting design and construction aspects of civil engineering structures at undergraduate level. Our BSc in Civil engineering graduate students are able to design and supervise construction of the whole spectrum of engineering structures.

Head of Thematic Area

DR.MUMENYA SIPHILA WANJIKU

List of staff under Structural Engineering Thematic Area

- Dr Mumenya Siphila Wanjiku View Profile
- Dr Abuodha Silvester O View Profile
- Dr Mwero John Nyiro View Profile
- Mrs Wokabi Monica G View Profile
- Mr Maimba Patrick P View Profile
- Mr Miringu Samuel S View Profile
- Mr Koteng David Otieno View Profile
- Mr Goro Evans Collie View Profile
- Mr Mutua Solomon K View Profile
- Mr Barrack Omondi Okoya View Profile

NEWS

Dr.John Nyiro Mwero (in graduation regalia)shortly after graduating with a Ph.D. in Civil Engineering (structrural engineering option).He is with the Chairman of Civil and Constr. Dept.Prof.S.K.Mwea,Second Right.Dr.Mumenya,third right who was one of his supervisors.On left is Mrs. Wokabi and Dr. Osano.On the extreme right is Mr. Maimba

Projects under thematic area, both past and on going with links to content

1. Performance of Pozzolanic Materials

Degree courses offered

- Bachelor of Science in Civil engineering
- Master of Science in Civil Engineering (Structural Engineering)
- Doctor of Philosophy (in Civil Engineering)

Our master's course is designed for engineers and managers responsible for planning, developing and implementing structural engineering projects and programmes. Students admitted to the course need to have a good grounding in theory of structures at undergraduate level and/or exposure to structural engineering applications in the field.

The course is intended to enable candidates to advance the application of skills gained in the undergraduate course or equivalent degree courses. Upon graduation the graduate students have an understanding of the physical structural systems and their applications. Additionally they are able to apply structural analytical methods in the determination of stresses caused by dead loads, loads arising from usage, wind, earthquake loads, and uneven deformation of structure; and are develop computer programmes to analyze simple structural problems besides being able to use commercial computer packages in analysis, design and drafting.

Courses in theThematic Area

FIRST YEAR OF STUDY

SEMESTER I

FCE 165 - Computer Science I 45

SEMESTER II

FCE 142 - Engineering Drawing 45

FCE 166 - Computer Science II 45

SECOND YEAR OF STUDY

SEMESTER I

FCE 265 - Computer Science III

SEMESTER II

FCE 266 - Computer Science IV 45

THIRD YEAR OF STUDY - SEMESTER I

SEMESTER I

FCE 345 - Civil Engineering Materials II 45

FCE 351 - Engineering Surveying II 45

SEMESTER II

FCE 342 - Engineering Drawing & Design II 45

FCE 346 - Transportation Engineering I 45

FOURTH YEAR OF STUDY

SEMESTER I

FCE 451 - Engineering Surveying III 45

FCE 461 - Statistics 45

SEMESTER II

FCE 446 - Transportation Engineering II 45

FIFTH YEAR OF STUDY

SEMESTER I

FCE 545 - Transportation Engineering IIIA 45

SEMESTER II (COMPULSORY UNITS)

FCE 590 - Civil Engineering Project 45

SEMESTER II (OPTIONAL UNITS) (a minimum of 4 to be taken)

FCE 546 - Transportation Engineering IIIB 45

FCE 552 - Engineering Surveying IV 45

POSSIBLE CAREER OPPORTUNITIES

1. Civil Engineering Consulting Firms
2. Ministry of Lands and Housing
3. Ministry of Transport and Infrastructure
4. Civil Engineering Contractors
5. County Governments