



JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY (JKUAT)

POSTGRADUATE PROGRAMMES

COLLEGE OF ENGINEERING AND TECHNOLOGY (COETEC)

DEPARTMENT OF CIVIL, CONSTRUCTION AND ENVIRONMENTAL ENGINEERING

S/NO	PROGRAMME	ENTRY REQUIREMENTS
1.	M.Sc. in Civil Engineering in the following options: <ul style="list-style-type: none"> – Global Environment and ASAL Engineering – Water Engineering – Transportation Engineering – Structural Engineering 	<ul style="list-style-type: none"> – A holder of at least 2nd class honours (Upper Division), B.Sc. degree in the relevant field from JKUAT or any other institution recognized by the University senate. – A holder of at least 2nd class honours (Upper Division) Bachelor of Science degree from other institutions recognized by the University senate in a discipline closely related to the selected Master of Science option who has in addition to relevant practical experience. – A holder of 2nd class honours (Lower Division), B.Sc. degree in Civil Engineering from JKUAT or any other institution, which is recognized by the university senate as being of equivalent academic status and who in addition must show proof of either two years relevant experience and professional development or academic advancement through research and publication since graduation with the bachelors degree or a postgraduate Diploma in the relevant field.
2.	P h.D. in Civil Engineering in the following options: <ul style="list-style-type: none"> – Global Environment and ASAL Engineering – Water Engineering – Transportation Engineering – Structural Engineering 	<ul style="list-style-type: none"> – A holder of a Master’s Degree in Civil Engineering or equivalent in the relevant discipline recognized by JKUAT senate and must have a research proposal.

M.SC. CIVIL ENGINEERING COURSE UNITS

M. Sc. in Global Environment & ASAL Engineering

FIRST YEAR:

Semester I

Irrigation and Drainage Engineering
ASAL Management
Water Resources in ASAL
Global Environmental Pollution and Monitoring
Project Management

Semester II

Core:

Solid Waste Management
Renewable Energy Resources

OPTIONS:

(A candidate to select any *three* units)

Applied Environmental Engineering
Natural Disaster Management
Industrial Waste Treatment
Global Environmental Conservation
Engineering Management

SECOND YEAR:

Semester I & II

Research Project and Thesis

M. Sc. in Water Engineering

FIRST YEAR:

Semester I

Water Resources Engineering
Water and Wastewater Treatment
Statistical and Probabilistic Models
Applied Hydraulics and Hydrology
Project Management

Semester II

Core:

Irrigation and Drainage Engineering
River Engineering
Wastewater Treatment in the Tropics
Advanced Hydraulic Structures
Groundwater Engineering

OPTIONS:

(A candidate to select *any three* units)

Applied Environmental Engineering

Natural Disaster Management

Industrial Waste Treatment

Global Environmental Conservation

Engineering Management

SECOND YEAR:

Semester I & II

Research Project and Thesis

M. Sc. in Transportation Engineering

FIRST YEAR:

Semester I

Transport Planning

Transport Engineering

Highway Design

Pavement Design

Project Management

Semester II

Highway Engineering Materials

Statistics for Transport Engineering

Soil and Rock Mechanics

Ground and Surface Water

Advanced Engineering Surveying

Labour-Based Technology in Road Construction

Engineering Management

SECOND YEAR:

Semester I & II

Research Project and Thesis

M. Sc. in Structural Engineering

FIRST YEAR:

Semester I

Advanced Structural Analysis
Advanced Structural Design
Finite Element Methods
Experimental Methods in Structures
Project Management

Semester II

Advanced Reinforced and Prestressed Concrete Design
Advanced Steel Structures
Structural Materials
Analysis and Design of Composite Structures
Structural Dynamics
Marine Structures
Timber Engineering
Foundation Engineering
Labour Based Technology in Structural Works

SECOND YEAR:

Semester I & II

Research Project and Thesis

MODE OF APPLICATION

Applications should be made on prescribed forms obtainable from JKUAT office of the Director, Board of Postgraduate Studies upon payment of a non-refundable application fee of **Kshs.1,500/-**. The application form may also be downloaded from the JKUAT website at www.jkuat.ac.ke.

For more information contact:

The Director, BPS, JKUAT, Tel: 067-52711 Ext. 6114

Email: director@bps.jkuat.ac.ke OR Chairman at civil@eng.jkuat.ac.ke