

Water Resources and Waste Engineering

Description

The water sector continues to face challenges due to increased demand on declining surface water resources. The climate change factor has compounded the water stress scenario, requiring water managers across the world to provide sector leaders able to plan, develop and implement water resources projects and programmes.

Waste water is water that has been affected in quality by anthropogenic influence. Waste water is treated at a waste water treatment plant or a septic tank. Treated waste water is discharged into receiving water. Sewage is wastewater that is contaminated with faeces and or urine sewerage is the physical infrastructure including pipes, pumps screens channels etc

Head of Thematic Area

[DR.OONGE ZABLON N.I.](#)

List of Staff under Thematic Area

- [Prof Eng B N K Njoroge View Profile](#)
- [Prof Odira Patts M Akumu View Profile](#)
- [Prof Nyangeri Ezekiel E N View Profile](#)
- [Dr Oonge Zablon N I View Profile](#)
- [Dr Ndiba Peter Kuria View Profile](#)
- [Dr Dulo Simeon O View Profile](#)
- [Mr Ngari Samuel K View Profile](#)
- [Mr Wanjau Dionysius M View Profile](#)
- [Mr Gitonga Joseph N View Profile](#)
- [Mr Kandie Mathew Kipkoros View Profile](#)

NEWS

Dr.Oonge Zablon N.I. attended the recently held mini-launch of the Rapid Results Initiative on the role of the UoN in implementation of the new constitution.He was there as one of the department's representatives in his capacity as the head of the Water Resources and Waste water Engineering thematic area.The event was being hosted by College of Architecture and Engineering at the Civil Engineering Lecture Theatre.

Ongoing Projects under thematic area

- Solid Waste Management
- Water Quality Management

Degree courses and/or units with links to content

- Bachelor of Science in Civil engineering
- Master of Science in Civil Engineering (Water Engineering Resources)
- Master of Science in Civil Engineering (Environmental Health Engineering)
- Doctor of Philosophy (in Civil Engineering)

Courses in Thematic area

SYLLABUS FOR 8-4-5 BSc. DEGREE

FIRST YEAR OF STUDY

SEMESTER II

- FCE 142 - Engineering Drawing 45
- FCE 182 - Chemistry IB 45

SECOND YEAR OF STUDY

SEMESTER I

- FCE 211 - Engineering Geology 45

SEMESTER II

- FCE 222 - Fluid Mechanics IA 45
- FCE 242 - Engineering Drawing & Design I 45
- FCE 246 - Civil Engineering Materials 45

THIRD YEAR OF STUDY - SEMESTER I

SEMESTER I

- FCE 321 - Fluid Mechanics IIA 45
- FCE 322 - Fluid Mechanics IIB 45
- FCE 342 - Engineering Drawing & Design II 45

FOURTH YEAR OF STUDY

SEMESTER I

- FCE 421 - Fluid Mechanics IIB 45
- FCE 425 - Hydrology I 45
- FCE 461 - Statistics 45
- FCE 481 - Public Health Engineering IA 45

SEMESTER II

- FCE 422 - Fluid Mechanics IIIA 45
- FCE 426 - Hydrology II 45
- FCE 482 - Public Health Engineering IB 45

FIFTH YEAR OF STUDY

SEMESTER I

- FCE 525 - Water Resources Engineering I 45
- FCE 581 - Public Health Engineering II 45
- FCE 590 - Civil Engineering Project 45

SEMESTER II (COMPULSORY UNITS)

- FCE 590 - Civil Engineering Project 45

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

- FCE 526 - Water Resources Engineering II 45
- FCE 564 - Operations Research 45
- FCE 582 - Public Health Engineering III 45

POSSIBLE CAREER OPPORTUNITIES

- Civil Engineering Consulting Firms
- Ministry of Transport and Infrastructure
- Civil Engineering Contractors
- County Governments