

## MASTER OF SCIENCE IN RENEWABLE ENERGY

### Admission Requirements

Applicants must hold at least second class lower Bachelor's degree in Engineering or Bachelor of Science in any of the three subjects: Physics, Chemistry and Mathematics.

Code	Subject Description	CU
<b>Year 1</b>		
RET7101	Electrical Energy Systems	3
RET7102	Hydropower	3
RET7103	Bio-Energy	3
RET7104	Solar Energy	3
RET7105	Statistics and Research Methods	3
RET7201	Other Forms Of Renewable Energy	3
RET7202	Entrepreneurship Development	3
RET7203	Project Management	3
RET7204	Energy Policy Planning And Sustainable Dev't	3
RET7205	Optimization of Energy Systems	3

<b>Year 2</b>		
RET8101	Thermo-chemical Conversion Processes and Application	3
RET8102	Biochemical Conversion Processes and Applications	3
RET8103	Design And Modeling Of Thermal Power Systems	3
RET8104	Solar Cell Technology	3
RET8105	Electrical Energy Conversion in PV Systems	3
RET8106	Solar Thermal Technology	3
RET8107	Design and Maintenance Of Hydropower Electro-Mechanical Equipment	3
RET8108	Hydraulic Structures In Hydropower	3
RET8109	Development of Small Hydropower	3
RET8110	Heat Transfer and Thermal Insulation In Build	3
RET8111	Low Energy Architecture	3
RET8112	Energy Comfort In Buildings	3
RET8201	Thesis	10

## DOCTOR OF PHILOSOPHY (Ph.D)

### Admission Requirements

To qualify for admission, candidates must:-  
Be holders of Master of Science degree in Civil, Electrical or Mechanical Engineering or its equivalent from a recognized university.

### Type of Programme

The doctoral programme shall be conducted by non examinable course work and dissertation.

### Programme Structure

<b>Year 1 Compulsory courses</b>		
701	Advanced Research Methods	
702	Advanced Computer Skills	
<b>Elective courses</b>		
Students should choose at least two courses but not more than three courses.		
703	Advanced Mathematics	

704	Environmental Engineering	
705	Environmental Engineering Design	
706	Environmental Aqueous Geochemistry	
707	Environmental Law and Policy	
708	Water Resources Analysis	
709	Water Treatment Engineering	
710	Hazardous and Industrial Waste Treatment	
711	Air Quality Engineering	
712	Environmental Fluid Mechanics	
713	Applied Aquatic Ecology	
714	Environmental Microbiology	
<b>Year II &amp; III</b>		
800	Thesis Work	