

DEPARTMENT OF ENGINEERING AND ENVIRONMENT

PROGRAM AND COURSE LIST

BACHELOR OF ENVIRONMENTAL SCIENCES (BES)

BES_1

S/n	SEMESTER I	COURSE CODE	SEMESTER II	COURSE CODE
1.	Understanding the Old Testament	FS1103	Introductory Calculus	ENV1201
2.	Writing and Study Skills	FS1101	Practical Geography	ENV1202
3.	Environmental Economics I	ENV1102	General Biology	ENV1203
4.	Introduction to Information Technology	ENV1103	<i>Information Technology</i>	ENV1204
5.	Mathematical Methods	ENV1101	<i>Environmental Economics II</i>	ENV1205
6.	Environmental Science Fundamentals	ENV1104	<i>New Testament Survey</i>	FS1104

BES_2

S/n	SEMESTER I	COURSE CODE	SEMESTER II	COURSE CODE
1.	Health and Wholeness	FS2104	<i>Environmental Policy, Law & Ethics</i>	ENV2201
2.	Understanding Worldviews	FS2101	<i>Waste Management</i>	ENV2204
3.	Probability and Statistics	ENV2102	<i>Database Systems</i>	ENV2204
4.	Principles of Programming	ENV2104	<i>Environmental Chemistry I</i>	ENV2204
5.	General Chemistry	ENV2103	<i>Mathematical Modelling</i>	ENV2205
6.	Calculus	ENV2101	<i>Understanding Ethics</i>	FS2202

BES_3

S/n	SEMESTER I	COURSE CODE	SEMESTER II	COURSE CODE
1.	Project Planning and Management (Elective)	ENV3106	<i>EIA and Environmental Auditing</i>	ENV3201
2.	Climatology	ENV3101	<i>Environmental Chemistry II</i>	ENV3202
3.	Geographical Information Systems (Elective)	ENV3105	<i>Environmental Science Project</i>	ENV3203

4.	Environmental Microbiology	ENV3102	Environmental Modelling (Elective)	ENV3204
5.	Research Methods and Data Analysis	ENV3103	Climate Change Adaptation (Elective)	ENV3205
6.	Water Resources Management (Elective)	ENV3108	Environmental Health (Elective)	ENV3208
7.	Environmental Economics (Elective)	ENV3104	Soil Science (Elective)	ENV3209
8.	Urban Planning I (Elective)		Petroleum & the Environment (Elective)	ENV3109

BACHELOR OF SCIENCE IN CIVIL AND ENVIRONMENTAL ENGINEERING (BSCEE)

BSCEE_1

S/n	SEMESTER I	COURSE CODE	SEMESTER II	COURSE CODE
1.	Understanding the Old Testament	FS1103	Engineering Mathematics II	BCEE1201
2.	Writing and Study Skills 1	FS1101	Engineering Drawing	BCEE1202
3.	Computing for Engineers	CEE1103	Communication Skills for Engineers and Scientists	BCEE1203
4.	Thermodynamics for Civil and Environment Eng.	CEE1104	Engineering Geology	BCEE1204
5.	Introduction to Civil and Environmental Engineering	CEE1102	Concrete Basics	BCEE1205
6.	Engineering Mathematics I	CEE1101	Electricity for Civil & Environmental Engineers	CEE1206
7.	Strength of Materials		New Testament Survey	FS1104

BSCEE_2

S/n	SEMESTER I	COURSE CODE	SEMESTER II	COURSE CODE
1.	Health and Wholeness	FS2104	Environmental Policy, Law & Ethics	CEE2201
2.	Understanding Worldviews	FS2101	Hydraulics	CEE2202
3.	Environmental Science and Engineering Fundamentals	CEE2103	Engineering Geology	CEE2203
4.	Engineering Mathematics III	CEE2101	Environmental Chemistry I	CEE2204
5.	Fluid Mechanics	CEE2104	Mathematical Modelling	CEE2205
6.	Strength of Materials	CEE2102	Understanding Ethics	FS2202

BSCEE_3

S/n	SEMESTER I	COURSE CODE	SEMESTER II	COURSE CODE
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1.	Soil Mechanics	CEE3105	Environmental Chemistry II	CEE3201
2.	Engineering Surveying	CEE3104	Research Methods & Data Analysis	CEE3202
3.	Hydrology	CEE3106	Waste Management and Sanitation	CEE3203
4.	Environmental Microbiology	CEE3101	Highway Engineering I	CEE3204
5.	Structures Theory (Statics and Dynamic)	CEE3103	Foundation Engineering	CEE3205
6.	Water Resources Management	CEE3102	Project & Construction, Planning and Management	CEE3206

BSCEE_4

S/n	SEMESTER I	COURSE CODE	SEMESTER II	COURSE CODE
1.	Final Year Research and Design Project I	CEE4101	Final Year Research and Design Project	CEE4105
2.	Urban Planning I	CEE4102	EIA and Environmental Auditing	CEE4102
3.	Water Supply, Treatment and Distribution	CEE4103	Wastewater Treatment and Disposal	CEE4103
4.	Geographical Information Systems and Remote Sensing	CEE4106	Environmental Modelling	CEE4104
5.	Engineering Economics	CEE4105	Quantity Surveying (Elective)	CEE4101
6.	Structures Design I	CEE4104	Structures Design III (Timber, Masonry) (Elective)	CEE4106
7.	Structures Design II (Elective)	CEE4107	Environmental Health (Elective)	CEE4107
8.	Highway Engineering II (Elective)	CEE4204	Petroleum & the Environment (Elective)	CEE4204

MASTER OF SCIENCE IN WATER AND SANITATION (MSWATSAN)

MSWATSAN_1

S/n	MODULE I	COURSE CODE	MODULE II	COURSE CODE
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1.	Waste Management & Sanitation	MSWS3101	Project Planning & Management	MSWS1101
2.	Water Supply, Treatment & Distribution	MSWS3102	Research Methods & Data Analysis	MSWS1102
3.	Integrated Water Resources Management	MSWS3103	Management of Water & Sanitation Services	MSWS1103
4.	Water Quality Management	MSWS4101	Management of Water & Sewerage Utilities	MSWS2101
5.	Wastewater Management	MSWS4102	Operation & Maintenance of WTP and WWTP	MSWS2102
6.	EIA & Environmental Auditing	MSWS4103	Project Monitoring & Evaluation	MSWS2103
7.	Climate Change Adaptation	MSWS4104	Decision Support Systems	MSWS2104

**MASTER OF SCIENCE IN ENVIRONMENTAL SCIENCE BY RESEARCH (MSENVSC)
PROGRAMME: MSENVSC 1**

S/n	SEMESTER I	COURSE CODE	SEMESTER II	COURSE CODE
1.	Biostatistics	MSES5105	Natural Resources Conservation and Management	MSES 5107
2.	Project Planning & Implementation	MSES5104	Land Use Planning and Development	MSES 5111
3.	Research Methods & Data Analysis	MSES5101	Wetland Resources Management	MSES 5112
4.	Macroeconomics & Policy Design	MSES5100	Forestry and Rangelands Management	MSES 5113
5.	Research Ethics & Professionalism	MSES5106	Water Quality Management	MSES 5117
6.	Scientific Communication Skills	MSES5102	GIS and its Applications	MSES 5119
7.	Graduate Seminar	MSES5103	Integrated Water Resources Management	MSES 5124
8.			Soil Chemistry	MSES 5126
9.			Soil Microbiology	MSES 5127
10.			Water Chemistry	MSES 5128
11.			Integrated Soil Fertility Management	MSES 5129
12.			Environmental Toxicology	MSES 5132