

GRM 2107	Genesis of Gemstones and their Significance	2
GRM 2108	Photo Geology	2
<b>Year II: Semester II</b>		
GRM 2201	Natural Hazards and Their Mitigation I	3
GRM 2202	Materials for Construction and Building	2
GRM 2203	Applied Geophysics	3
GRM 2204	Minerals of Uganda	2
GRM 2205	Environmental Geochemistry I	3
GRM 2206	Groundwater Exploration	3
GRM 2207	Special Map Interpretation	2
GRM 2208	Principal Methods of Gemstone Identification	2
<b>Year II: Recess Term</b>		
GRM 3104	Industrial Field Attachment	
<b>Year III: Semester I</b>		
GLO 3101	Igneous Petrology	2.5
GRM 3102	Seminar	2
GRM 3103	Scientific Project Proposal and Report Writing	4
GLO 3104	Industrial Field Attachment	3
GLO 3105	Sedimentology	2.5
GLO 3106	Prospecting and Mining Geology	3
GRM 3104	Environmental Geochemistry II	3
GRM 3155	Project Proposal	1
<b>Year III: Semester II</b>		
GRM 3201	Transportation Routes, Tunnels, Dams and Reservoirs	3
GRM 3203	Water Quality and Instrumentation	2
GRM 3204	Introduction to Economic Indices of Management	2

GRM 3205	Research Project	2
GRM 3206	Sources of Waste and Investigations around Disposal Sites	2
GRM 3258	Stratigraphy	3

### Combining Courses From Different Years

<b>Year I: Semester I</b>		
Course Code	Course	CU
GRM 2251	Natural Hazards and their Mitigation I	3
GRM 3257	Natural Hazards and their Mitigation II	4
<b>Year II: Semester II</b>		
GRM 2201	Natural Hazards and their Mitigation	3
<b>Courses Swapping Semester</b>		
<b>Year III: Semester I</b>		
GRM 3101	Well Construction and Monitoring	4
GRM 3102	Seminar	2
GRM 3103	Scientific Project Proposal and Report Writing	3
GRM 3106	Remote Sensing	3
<b>Semester II</b>		
GRM 3203	Water Quality and Instrumentation	2
GRM 3204	Introduction to Economic Indices of Management of Geological Resources	2
GRM 3202	Remote Sensing	3

## DEPARTMENT OF MATHEMATICS

### Introduction

The Department of Mathematics has taught University Mathematics over the last 70 years. The Department teaches Mathematics in Faculties of Science, Education, Arts, Social Sciences; the Department of Pharmacy, Medical School, and the Institute of Statistics and Applied Economics. The Department offers courses in both Pure and Applied Mathematics as indicated below.

<b>Year I: Semester I</b>		
Course Code	Course	CU
MTH 1101	Calculus	3
MTH 1102	Elements of Probability and Statistics	3
<b>Semester II</b>		
MTH 1201	Calculus II	3
MTH 1202	Elements of Probability and Statistics	3
MTH 1255	Vector Calculus	3
MTH 1256	Classical Mechanics	3

Year II: Semester I		
MTH 2101	Real Analysis I	3
MTH 2102	Probability Theory	3
MTH 2103	Differential Equations	3
MTH 2104	Linear Algebra II	3
TH 2105	Classical Mechanics I	3
Semester II		
MTH 2201	Abstract Algebra	3
MTH 2202	Complex Variables I	3
MTH 2203	Numerical Analysis I	3
MTH 2204	Statistical Inference I	3
MTH 2206	Mathematical Logic	3

Year III: Semester I		
MTH 3101	Functional Analysis	3
MTH 3102	Numerical Analysis II	3
MTH 3103	Biomathematics	3
MTH 3104	Dynamical Systems	3
MTH 3105	Discrete Mathematics	3
MTH 3106	Stochastic Processes	3
Semester II		
MTH 3201	Real Analysis II	3
MTH 3202	Differential Equations II	3
MTH 3203	Linear Programming I	3
MTH 3204	Classical Mechanics II	3
MTH 3205	Topography	3
MTH 3206	Advanced Statistics	3

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## DEPARTMENT OF PHYSICS

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### Introduction

The Department of Physics offers courses in Physics leading to the award of Bachelor of Science, Master of Science and Doctor of Philosophy. The undergraduate courses are arranged such that a student may take Physics as major or minor. The Department teaches Physics to students from the School of Education, the School of Librarianship and Information Science and any other faculty which may wish to take some courses in Physics.

### Program Structure

#### Physics Major

Year I: Semester I		
Course Code	Course	CU
PHY1101	Physics Practicals	2
PHY1103	Properties of Matter	2
PHY 1102	Classical Mechanics I	3
Semester II (Core Courses)		
PHY 1201	Physics Practical	2
PHY 1205	Electricity and Magnetism	3
PHY 1206	Heat and Thermodynamics	2
Service Courses:		
Semester I:		

PHY 1105	Electricity	3
PHY 1106	Optics	2
Semester II:		
PHY 1206	Heat and Thermodynamics	2
Year II : Semester I (Core Courses)		
PHY 2101	Physics Practicals	2
PHY 2102	Classical Mechanics II	2
PHY 2103	Solid State Physics I	
PHY 2105	Electromagnetism	3
*PHY 2108	Introduction to Computer Science	2
Electives: (At least one elective from the following)		
*PHY 2104	Evolution of Physics	2
*PHY 2106	Elements of Astronomy and Astrophysics	2
PHY 2107	Elements of Environmental Physics	2
Semester II: Core Courses		
PHY 2201	Physics Practicals	2
PHY 2206	Waves and Optics	3
PHY 2207	Quantum Mechanics I	3
PHY 2208	Electronics	3
Electives: (One elective from the following)		
PHY 2202	Geophysics I	2
*PHY 2203	Fluid Physics	2