

PROGRAM MODULES STRUCTURE

Year I: MATHEMATICS AND GEOGRAPHY WITH EDUCATION

Module Code	Module title	Units	Credits
MAN 113	Mathematical Analysis I	- Mathematical Logic - Differential and Integral Calculus	15
LAG 113	Linear Algebra and Geometry I	- Linear Algebra I - Analytical Geometry I	15
STP 111	Statistics and Probability I	- Descriptive Statistics - Probability I	15
PHG 113	Physical Geography	- Physical Geography 1 - Physical Geography 2	20
HUG 123	Human Geography	- Human Geography 1 - Human Geography 2	15
GEN 213	Environmental Geography	- Principles of Environmental Conservation and Management - The East African Environment - Rwandan Environment	10
GEP 122	General Educational Psychology	- Introduction to psychology - Development Psychology - Learning Psychology	20
GPM 122	General Pedagogy and Methodology	- General Pedagogy - Principles of Teaching - Taxonomy	15
SSI 121	Study Skills and ICT	- Study skills - ICT	10
ERE 121	Introduction to educational research and Evaluation Methods	- Introduction to Educational Research - Evaluation Methods	15
SPF 121	Sociological and Philosophical Foundations of Education	- Philosophy of education - Sociology of Education	10

Total			160
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Award: Certificate of Education in Mathematics and Geography

Year II: MATHEMATICS AND GEOGRAPHY WITH EDUCATION

Module Code	Module title	Units	Credits
MAN 212	Mathematical Analysis II	- Calculus of Several Variables Functions - Ordinary Differential Equations	10
LAG 213	Linear Algebra and Geometry II	- Linear Algebra II - Analytical Geometry II	10
TEG 223	Techniques in Geography	- Map and Aerial Photo Interpretation - Surveying and Cartography	20
MAN 211	Mathematical Analysis III	- Calculus of Complex Variable Functions	10
STP 212	Statistics and Probability II	- Inferential Statistics - Probability II	10
PDE 212	Partial Differential Equations	Partial Differential Equations	10
ENT 211	Entrepreneurship	Entrepreneurship	10
MGM 223	Mathematics and Geography Teaching Methods	- Mathematics Teaching Methods - Geography Teaching Methods	20
REM 211	Scientific Research Methodology	Scientific Research Methodology	10
ISE 211	Inclusive and Special Education	- Special need Education - Inclusive Education	10
EDT 211	Education Technology	- Education Technology - Improvisation in Education	10
DMA 211	Didactics of Mathematics	Didactics of Mathematics	10
CD 111	Curriculum Development	- Curriculum Development - Competence Based curriculum	10
Total			160

Award: Diploma of Education in Mathematics and Geography

Year III: MATHEMATICS WITH EDUCATION

Module Code	Module title	Units	Credits
NAP 313	Numerical Analysis and Linear Programming	- Numerical Analysis - Linear Programming	10
FAN 312	Functional Analysis	Functional Analysis	10
STP 312	Stochastic Processes	Stochastic Processes	10
MUA 311	Multivariate Analysis	Multivariate Analysis	10
GTH 311	Group theory	Group Theory	10
DAN 312	Data Analysis	Data Analysis	15
OPR 312	Operations Research	Operations Research	15
PEE 311	Professional Ethics in Education	- Professional ethics in teaching profession - Professional ethics in educational management	10
SML 311	School Management and Legislation	- School Management - School Legislation	10
INT 314	Internship		30
REP	Research project		30
Total			160

Award: Bachelor's Degree with Honours of Education in Mathematics