TUMAINI UNIVERSITY MAKUMIRA

FACULTY OF EDUCATION, HUMANITIES AND SCIENCE

DEPARTMENT OF SCIENCE AND TECHNOLOGY

ACADEMIC YEAR 2026/2027

FIRST YEAR SEMESTER 1 COURSES ON OFFER

1. CHEMISTRY & BIOLOGY

Course Code	Course Name	Core or Elective	Credits (52+6)
EDU 8111	Philosophy of Education	Core	8
EDU 8112	Education Psychology	Core	8
CHM 8111	Basic Analytical and Physical Chemistry	Core	9
CHM 8112	Organic Chemistry 1	Core	9
CHM 8113	Introduction to Computational Chemistry	Elective	6
BIO 8111	Cell biology	Core	9
BIO 8112	Introduction to Zoology	Core	9
BIO 8113	Aquatic Biology	Elective	6
HRM 8111	Human Resource Management in Education	Elective	6
DEV 8111	Development Studies	Elective	6
DIV 8113	Foundations of Faith	Elective	6
ENG 8113	English for Business	Elective	6
Total			**58**

***Candidate selects one (1) ELECTIVE course**

2. CHEMISTRY & MATHEMATICS

Course Code	Course Name	Core or Elective	Credits (52+6)
EDU 8111	Philosophy of Education	Core	8
EDU 8112	Education Psychology	Core	8
CHM 8111	Basic Analytical and Physical Chemistry	Core	9
CHM 8112	Organic Chemistry 1	Core	9
CHM 8113	Introduction to Computational Chemistry	Elective	6
MTH 8111	Probability and Statistics	Core	9
MTH 8112	Foundation of Analysis	Core	9
MTH 8113	Mathematical Logic and Formal Semantics	Elective	6
HRM 8111	Human Resource Management in Education	Elective	6
DEV 8111	Development Studies	Elective	6
DIV 8113	Foundations of Faith	Elective	6
ENG 8113	English for Business	Elective	6
Total			58

***Candidate selects one ELECTIVE course**

3. CHEMISTRY & GEOGRAPHY

Course Code	Course Name	Core or Elective	Credits (52+6)
EDU 8111	Philosophy of Education	Core	8
EDU 8112	Education Psychology	Core	8
CHM 8111	Basic Analytical and Physical Chemistry	Core	9
CHM 8112	Organic Chemistry 1	Core	9
CHM 8113	Introduction to Computational Chemistry	Elective	6
GEO 8111	Introduction to Physical Geography	Core	9
GEO 8112	Climatology	Core	9
GEO 8113	Geography of Tanzania	Elective	6
HRM 8111	Human Resource Management in Education	Elective	6
DEV 8111	Development Studies	Elective	6
DIV 8113	Foundations of Faith	Elective	6
ENG 8113	English for Business	Elective	6
Total			58

4. BIOLOGY AND GEOGRAPHY

Semester 1, Year 1

Course Code	Course Name	Core or Elective	Credits (54 +6)
EDU 8111	Philosophy of Education	Core	9
EDU 8112	Education Psychology	Core	9
GEO 8111	Introduction to Physical Geography	Core	9
GEO 8112	Climatology	Core	9
GEO 8113	Geography of Tanzania	Elective	6
BIO 8111	Cell biology	Core	9
BIO 8112	Introduction to zoology	Core	9
BIO 8113	Aquatic Biology	Elective	6
HRM 8111	Human Resource Management in Education	Elective	6
DEV 8111	Development Studies	Elective	6
DIV 8123	Foundations of Faith	Elective	6
ENG 8113	English for Business	Elective	6
Total			60

***Candidate selects one ELECTIVE course**

2ND YEAR - SEMESER 1 COURSESCHEM/BIOL

Semester 1, Year 2

Course Code	Course Name	Core or Elective	Credits
EDU 8231	Curriculum and Teaching	Core	9
EDU 8232	Professional Communication for Teachers	Core	9
EDU 8233	Assessment and Evaluation	Core	9
EDU 8234	Instructional Leadership	Core	9
CHM 8231	Chemical Thermodynamics	Core	9
CHM 8123	Chemistry of Natural Products	Elective	6
BIO 8121	Vertebrate Anatomy and Physiology	Core	9
BIO 8223	Entomology	Elective	6
LBA 8231	The Law of Business Association	Elective	6
DIV 8232	The Bible and Gender	Elective	6
ENG 8233	The Discourse of Advertising and Public Speaking	Elective	6
EDU 8235	Introduction to Guidance and Counselling	Elective	6
Total			60

***Candidate selects one ELECTIVE course**

CHEMISTRY/GEOG

Semester 1, Year 2

Course Code	Course Name	Core or Elective	Credits
EDU 8231	Curriculum and Teaching	Core	9
EDU 8232	Professional Communication for Teachers	Core	9
EDU 8233	Assessment and Evaluation	Core	9
EDU 8234	Instructional Leadership	Core	9
CHM 8231	Chemical Thermodynamics	Core	9
CHM 8233	Introduction to Medicinal Chemistry	Elective	6
CHM 8123	Chemistry of Natural Products	Elective	9
GEO 8232	Soil and Vegetation	Core	6
GEO 8233	Environment and Food Security	Elective	6
LBA 8231	The Law of Business Association	Elective	6
DIV 8232	The Bible and Gender	Elective	6
ENG 8233	The Discourse of Advertising and Public Speaking	Elective	6
EDU 8235	Introduction to Guidance and Counselling	Elective	6
Total			60

***Candidate selects one ELECTIVE course**