

FACULTY OF SCIENCE

MODULES TO BE OFFERED IN August 2021 (SEM 1)

Major: Applied Physics

Module Code	Module Name	MC
SP-1204	Classical Mechanics	4
SP-1205	Experimental and Mathematical Skills in Physics	4
SP-2201	Experiments in Physics	4
SP-2202	Concepts in Modern Physics	4
SP-2302	Electronics: Analogue and Digital	4
SP-2307	Introduction to Computational Physics	4
SP-4290	Project	8
SP-4301	Characterisation and Evaluation of Materials	4
SP-4308	Nuclear and Particle Physics	4
SP-4310	The Physics of Solar Cells	4
SP-4311	Polymer Physics	4

Major: Mathematics

Module Code	Module Name	MC
SM-1201	Mathematical Methods for Sciences	4
SM-1401	Basic Calculus	2
SM-2201	Ordinary Differential Equations	4
SM-2203	Linear Algebra and its Applications	4
SM-2207	Complex Analysis	4
SM-2301	Combinatorics and Graph Theory	4
SM-2311	Engineering Mathematics	4
SM-4290	Research project	8
SM-4311	Applied Mathematical Method I	4
SM-4312	Mathematical Modelling	4

SM-4313	Mechanics	4
SM-4327	Real Analysis	4
SM-4332	Operations Research I	4
SM-4335	Advanced Probability	4
SM-4336	Operations Research II	4

Major: Geological Sciences

Module Code	Module Name	MC
SG-1203	Introduction To Crystallography And Mineralogy	4
SG-1205	Introduction to geology	4
SG-2201	Structural geology	4
SG-2202	Petrography of igneous metamorphic rocks	4
SG-2203	Geochemistry	4
SG-4201	Final year project	8
SG-4302	Petroleum geology	4
SG-4305	Micropaleontology and biostratigraphy	4
SG-4306	Seismic methods	4
SG-4312	Igneous and metamorphic petrogenesis	4
SG-4314	Engineering geology	4
SG-5101	Petroleum geochemistry	4
SG-5102	Seismic interpretation	4
SG-5103	Graduate research project	4

SG-5301	Petroleum sedimentology	4
SG-5302	Petroleum structural geology	4

Major: Biology

Module Code	Module Name	MC
SB-1201	Diversity of Life	4
SB-1203	Skills in Biological Science	4
SB-2201	Plant Form and Function	4
SB-2203	Animal Form and Function	4
SB-2211	Genetics	4
SB-2332	Marine Ecosystems	4
SB-2343	Introduction to Biochemistry	4
SB-2401	Plants and People	4
SB-2404	Current Trends in Life Sciences	4
SB-4201	Population Genetics, Systematics and Evolution	4
SB-4232	Marine Ecosystems	4
SB-4301	Conservation and Management of Living Resources	4
SB-4309	Molecular Genetics	4
SB-4317	Climate Change Biology	4
SB-4319	Tropical Parasitology	4
SB-4332	Principles of Oceanography	4
SB-4340	Nutritional Biochemistry	4

Major: Chemical Sciences

Module Code	Module Name	MC
SC-1221	Fundamentals of Organic Chemistry	4
SC-1281	Computer Skills for Chemistry	4
SC-1483	Chemistry in Everyday Life	4
SC-2212	Transition Metal Chemistry	4
SC-2222	Functional Groups in Organic Chemistry	4
SC-2242	Chemical Thermodynamics and Applications	4
SC-2261	Principles of Analytical Chemistry	4
SC-2401	Chemistry of the Environment	4
SC-4290	Chemistry Project (2 semesters)	8
SC-4311	Semiconductors as Photocatalysts	2
SC-4319	Inorganic Materials Chemistry	2
SC-4325	Reactive Intermediates in Organic Syntheses	2
SC-4345	Equilibrium Electrochemistry and Ion Transport	2
SC-4346	Quantum Mechanics and Molecular Spectroscopy	2
SC-4363	Modern Analytical Techniques	2
SC-4365	Environmental Chemistry	4

Major: Computer Science/Digital Science

Module Code	Module Name	MC
SS-2208	System And Software Development	4
SS-4301	Software engineering	4
SS-4303	Computer graphics	4
SS-4311	Robot programming	4
SS-4313	Machine perception	4
ZZ-1101	Mathematical methods for the sciences	4
ZZ-1102	Programming fundamentals	4
ZC-1201	Computer architecture and organisation	4
ZZ-1103	Introduction to digital transformation	4
ZC-2203	Computer networks	4
ZC-2205	Data structures and algorithms	4
ZA-2201	Artificial intelligence	4
ZS-2201	Digital forensics	4