

# Course Structure

## Bachelor of Science (Physics)

Faculty of Engineering, Science and Technology



### Semester 1

Type	Code	Name	Prerequisites	Credit Points	Fee (MVR)
CORE	SCI107	Scientific and Analytical Skills	Nil	15	1,725
CORE	MAT131	Mathematics for Scientists	Nil	15	1,725
CORE	BIO121	Biology of Cell and Organism	Nil	15	1,725
CORE	PHY113	Principles of Physics	Nil	15	1,725
Semester Total				60	6,900

### Semester 2

Type	Code	Name	Prerequisites	Credit Points	Fee (MVR)
CORE	CHE109	Inorganic and Physical Chemistry I	Nil	15	1,725
CORE	CHE111	Organic Chemistry I	Nil	15	1,725
CORE	BIO123	Life on Earth	Nil	15	1,725
CORE	PHY115	Thermodynamics and Modern Physics	Nil	15	1,725
Semester Total				60	6,900

### Semester 3

Type	Code	Name	Prerequisites	Credit Points	Fee (MVR)
CORE	SCI205	Research Methods and Experimental Design	Nil	15	1,725
CORE	MAT213	Mathematics for Physicist	MAT131	15	1,725
CORE	ENV219	Green Buildings and Sustainability	Nil	15	1,725
CORE	ENV221	Earth System Science	Nil	15	1,725
Semester Total				60	6,900

## Semester 4

Type	Code	Name	Prerequisites	Credit Points	Fee (MVR)
CORE	PHY211	Electrical Technology	PHY113	15	1,725
CORE	PHY209	Electronics and Electrical Principles	Nil	15	1,725
CORE	PHY213	Power Generation	Nil	15	1,725
CORE	PHY207	Quantum Physics	PHY115	15	1,725
Semester Total				60	6,900

## Semester 5

Type	Code	Name	Prerequisites	Credit Points	Fee (MVR)
CORE	SCI319	Science Communication	Nil	15	1,725
CORE	SCI321	Research Project	SCI205	15	1,725
ELECTIVE		Elective	Nil	15	1,725
ELECTIVE		Elective	Nil	15	1,725 - 2,400
Semester Total				60	6,900 - 7,575

## Semester 6

Type	Code	Name	Prerequisites	Credit Points	Fee (MVR)
CORE	SCI323	Science and Society	Nil	15	1,725
CORE	SCI321	Research Project (continuing)	Nil	15	1,725
ELECTIVE		Elective	Nil	15	1,725
ELECTIVE		Elective	Nil	15	1,725 - 2,400
Semester Total				60	6,900 - 7,575

## Elective

Type	Code	Name	Prerequisites	Credit Points	Fee (MVR)
ELECTIVE	BIO219	Biochemistry and Molecular Biology	BIO121	15	1,725
ELECTIVE	BIO221	Human Anatomy, Physiology and Pharmacology	BIO121	15	1,725
ELECTIVE	ENV223	Ecology and Environmental Systems	Nil	15	1,725
ELECTIVE	BIO223	Marine Biology	Nil	15	1,725
ELECTIVE	BIO225	Microbiology	Nil	15	1,725
ELECTIVE	BIO2XX	Human Health and Disease	BIO121	15	1,725
ELECTIVE	BIO303	Concepts of Forensic Biology	BIO121	15	1,725
ELECTIVE	BIO305	Applied Ecology	Nil	15	1,725
ELECTIVE	BIO307	Marine Ecosystems	Nil	15	1,725
ELECTIVE	BIO309	Biodiversity and Conservation	Nil	15	1,725
ELECTIVE	BIO3XX	Resource Security and Sustainability	Nil	15	1,725
ELECTIVE	BIO311	Food and Environmental Microbiology	BIO225	15	1,725
ELECTIVE	BIO313	Applied Molecular Biology and Bioinformatics	BIO219	15	1,725
ELECTIVE	BIO3XX	Infectious Disease Control	BIO225	15	1,725
ELECTIVE	PUB321	Health Promotion and Public Health	Nil	15	2,400
ELECTIVE	BIO315	Blood and Tissue Science	BIO221	15	1,725
ELECTIVE	BIO317	Pharmacology and Toxicology	BIO221	15	1,725
ELECTIVE	CHE207	Instrumental Analysis	SCI107	15	1,725
ELECTIVE	CHE209	Organic Chemistry II	CHE111	15	1,725
ELECTIVE	CHE211	Environmental Chemistry	Nil	15	1,725
ELECTIVE	CHE213	Fundamentals of Analytical Chemistry	Nil	15	1,725
ELECTIVE	CHE219	Material Science	Nil	15	1,725
ELECTIVE	CHE215	Medicinal Chemistry	CHE111	15	1,725

ELECTIVE	CHE217	Inorganic and Physical Chemistry II	CHE109	15	1,725
ELECTIVE	CHE301	Plant and Soil Science	Nil	15	1,725
ELECTIVE	CHE303	Forensic Chemistry	CHE207	15	1,725
ELECTIVE	CHE305	Food Chemistry and Analysis	Nil	15	1,725
ELECTIVE	CHE307	Analytical Chemistry	Nil	15	1,725
ELECTIVE	ENV219	Green Buildings and Sustainability	Nil	15	1,725
ELECTIVE	ENV221	Earth System Science	Nil	15	1,725
ELECTIVE	PHY211	Electrical Technology	PHY113	15	1,725
ELECTIVE	PHY209	Electronics and Electrical Principals	Nil	15	1,725
ELECTIVE	PHY213	Power Generation	Nil	15	1,725
ELECTIVE	PHY207	Quantum Physics	PHY115	15	1,725
ELECTIVE	PHY301	Simulations	Nil	15	1,725
ELECTIVE	PHY303	Atmosphere and Oceans	PHY2XX	15	1,725
ELECTIVE	PHY305	Medical Physics	PHY113	15	1,725
ELECTIVE	PHY311	Electronics	PHY2XX	15	1,725
ELECTIVE	PHY303	Mechatronics	PHY113	15	1,725
ELECTIVE	PHY313	Telecommunication Systems	PHY113	15	1,725
ELECTIVE	PHY307	Renewable Energy	Nil	15	1,725
ELECTIVE	PHY309	Digital Circuits	Nil	15	1,725
ELECTIVE	ENV319	Earth System Science	Nil	15	1,725
ELECTIVE	ENV321	Fisheries Management and Agriculture	Nil	15	1,725
ELECTIVE	ENV323	Pollution Prevention and Control	Nil	15	1,725
ELECTIVE	ENV325	Meteorology	Nil	15	1,725
ELECTIVE	ENV221	Geographic Information System (GIS) and Remote Sensing	Nil	15	1,725
<b>Course Total</b>				<b>360</b>	<b>41,400 - 42,750</b>

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Fees stated above are tuition fees for local students. Fees for international students is twice the stated fees. All fees are quoted in MVR.

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