

**Master of Science (MS) Programme
Sustainability Science
Courses of study applicable from Academic Session 2025-26**

Semester 1

Sl. No.	Course Code	Course Name	Type	Category	Credits			Course Credit
					L	T	P	
1	CH4122	Fundamentals of Sustainability Science	Theory	Core	3	1	0	4
2	CS3102	Programming in python	Laboratory	Core	1	0	3	4
3		Open Elective I*	Theory	Elective	3	1	0	4
4		Open Elective II*	Theory	Elective	3	1	0	4
5		Open Elective III*	Theory	Elective	3	1	0	4
6	CH4123	Environmental Sustainability Laboratory	Laboratory	Core	1	0	3	4
Total Credits								24

A student has to choose an Elective in consultation with the Department UGAC Convener, provided the pre-requisite requirement is satisfied.

* Open Electives I, II and III need to be chosen from the following courses

Sl. No.	Course Code	Course Name	Type	Category	Credits			Course Credit
					L	T	P	
1	CH4105	Organic Functional materials	Theory	Elective	3	0	1	4
2	CH4109	Polymer Chemistry	Theory	Elective	3	0	1	4
3	CH4115	Chemistry for Alternative Energy Solutions	Theory	Elective	3	0	1	4
4	LS4101	Plant Biology	Theory	Elective	3	0	1	4
5	LS4103	Developmental Biology	Theory	Elective	3	0	1	4
6	LS4107	Epigenetics	Theory	Elective	3	0	1	4
7	ES4105	Geology of Natural Resources	Theory	Elective	3	0	1	4
8	ES4108	Geotechnical Engineering	Theory	Elective	3	0	1	4

Semester 2

Sl. No.	Course Code	Course Name	Type	Category	Credits			Course Credit
					L	T	P	
1	LS3202	Biostatistics	Theory	Core	3	0	1	4
2	HU3201	Introduction to Economics	Theory	Core	3	1	0	4
3	LS3209	Introduction to Ecology, Chemical & Environmental Toxicology	Theory	Core	3	1	0	4
4	ES3208	Science of Human-induced climate change	Theory	Core	3	1	0	4
5		Open Elective IV*	Theory	Elective	3	1	0	4
6	CH4225	Sustainability Project I	Project	Elective	0	0	0	4
Total Credits								24

A student has to choose an Elective in consultation with the Department UGAC Convener, provided the pre-requisite requirement is satisfied.

* Open Elective IV needs to be chosen from the following courses

Sl. No.	Course Code	Course Name	Type	Category	Credits			Course Credit
					L	T	P	
1	LS4211	Chemical Ecology	Theory	Elective	3	0	1	4
2	LS4208	Plant Stress Biology	Theory	Elective	3	0	1	4
3	LS4207	Marine Biology	Theory	Elective	3	0	1	4
4	LS4206	Bioinformatics	Theory	Elective	3	0	1	4
5	ES4201	Geochemistry	Theory	Elective	3	0	1	4
6	ES4203	Istotope Biology	Theory	Elective	3	0	1	4
7	CH4207	Chemistry of Materials	Theory	Elective	3	0	1	4
8	CH4206	Physical Methods of Structue Elucidation	Theory	Elective	3	0	1	4

Semester 3

Sl. No.	Course Code	Course Name	Type	Category	Credits			Course Credit
					L	T	P	
1	ES4106	Environmental Science Fieldwork	Laboratory	Core	1	0	3	4
2	LS4115	One Health	Theory	Core	2	1	2	4
3	CH4125	Chemistry of Sustainable Materials	Theory	Core	3	1	0	4
4	CH4126	Low Carbon Energy Systems	Theory	Core	3	1	0	4
5	CH4127	Sustainability Project II	Project	Core	0	0	0	4
6	CH4128	Quantitative Assessment of Sustainability	Theory	Core	3	1	0	4
Total Credits								24

Semester 4

Sl. No.	Course Code	Course Name	Type	Category	Credits			Course Credit
					L	T	P	
1	CH4226	Ecosystem and Biodiversity Economics	Theory	Core	2	0	0	2
2	CH4227	Understanding Public Policies, Regulations, ESG Framework	Theory	Core	2	0	0	2
3	CH4228	Sustainability Research Project	Project	Core	0	0	20	20
Total Credits								24