

Department of PHYSICS

School of Mathematical and Physical Science



Curriculum Framework Master of Science

In

(M.Sc.) Physics

Based on National Education Policy- 2020

Date of BoS 16/09/2022

Doctor Harisingh Gour Vishwavidyalaya

(A Central University)

Sagar-Madhya Pradesh-470003

3. Structure of the Programme:
Curriculum Framework
Syllabus – B.Sc. (Physics) 2022-23
L-5 (I & II Semester)

I-Semester :

Level / Semester	Nature of Course	Courses Code	Course Title	MM	Credits
L-5 I Semester	Discipline Specific: Major- 1	PHY-DSM-111	Mechanics and Relativity	100	4
	Discipline Specific: Major- 2	PHY- DSM 112	Mechanics lab.	100	2
	Multi Discipline Major - 3	PHY-MDM 113	General Physics -I	100	6
	Skill Enhancement Course	PHY-SEC 114	Basic Electronics	100	2
	Ability Enhancement	PHY-AEC-115	Report writing for Lab I	100	2
Total Credits :					16

II-Semester:

Level / Semester	Nature of Course	Courses Code	Course Title	MM	Credits
L-5 II Semester	Discipline Specific: Major -1	PHY-DSM-211	Electricity and Magnetism	100	4
	Discipline Specific: Major-2	PHY- DSM 212	Electricity and Magnetism Lab.	100	2
	Multi Discipline Major - 1	PHY-MDM 213	General Physics -II	100	6
	Skill Enhancement Course	PHY-SEC 214	Basic Instrumentation	100	2
	Ability Enhancement	PHY-AEC-215	Report writing for Lab II	100	2
Total Credits :					16

1. Structure of the Programme:

Curriculum Framework Syllabus – M.Sc. (Physics) 2022-23 L-8 (I & II Semester)

I-Semester

Level / Semester	Nature of Course	Courses Code	Course Title	MM	Credits
L-8 I Semester	Discipline Specific: Major- 1	PHY-DSM- 121	Mathematical Physics	100	4
	Discipline Specific: Major- 2	PHY- DSM -122	Classical Mechanics	100	4
	Discipline Specific: Major- 3	PHY-DSM -123	Atomic, Molecular and Laser Physics	100	4
	Discipline Specific: Major- 4	PHY-DSM -124	Digital Electronics and Operational Amplifier	100	4
	Discipline Specific: Major- 5	PHY-DSM- 125	Laboratory Course	100	4
	Multi Discipline Major - 1	PHY-MDM- 126	Hands on Workshop Training	100	2
	Skill Enhancement Course	PHY-SEC- 127	Seminar	100	2
Total Credit s					24

II-Semester

Level / Semester	Nature of Course	Courses Code	Course Title	MM	Credits
L-8 II Semester	Discipline Specific: Major- 1	PHY-DSM- 221	Quantum Mechanics	100	4
	Discipline Specific: Major- 2	PHY- DSM -222	Classical Electrodynamics	100	4
	Discipline Specific: Major- 3	PHY-DSM -223	Condensed Matter Physics	100	4
	Discipline Specific: Major-4	PHY-DSM -224	Electronics Devices	100	4
	Discipline Specific: Major- 5	PHY-DSM- 225	Laboratory Course	100	4
	Multi Discipline Major - 1	PHY-MDM- 226	Digital communication Skills Development	100	2
	Skill Enhancement Course	PHY-SEC- 227	Seminar	100	2
Total Credit s					24