CENTRE FOR GEOINFORMATICS TECHNOLOGY

DOS in Geography, Manasagangothri, University of Mysore, Mysuru – 570006

SCHEME BY SEMESTERS MASTER OF SCIENCE IN GEOGRAPHICAL INFORMATION SYSTEMS (GIS)

For students admitted 2023-24 (Onwards)

I Semester (Minimum Credits: 20)

SL.	Code	e Title of Course Types		Nι	ımbe	r of C	of Credits	
No.	No.	Title of Course	HC/SC/OE	L	T	P	Total	
1		Principles of Remote Sensing	HC I	3	1	0	4	
2	(Practical)	Practical Remote Sensing	HC II	0	1	3	4	
3	(Practical)	Map and Mapping Techniques	HC III	0	1	3	4	
4	Any Two	Earth System and Dynamics	SC I	3	1	0	4	
5		Fundamentals of Information Technology	SC II	3	1	0	4	
6		Fundamentals of Cartography	SC III	3	1	0	4	
7		Fundamentals of Statistics	SC IV	3	1	0	4	

Note: All three Hard Core Courses are compulsory. Among the Four Soft Core courses, students have the option to choose any two Soft Core Courses.

II Semester (Minimum Credits: 24)

SL.	Codes	Title of Course	Types Number of Cred		Credits		
No.		Title of Course	HC/SC/OE	L	T	P	Total
1		Principles of GIS	HC IV	3	1	0	4
2	(Practical)	Geospatial Data and Analysis	HC V	0	1	3	4
3	(Practical)	Advanced Land Surveying Technologies	HC VI	0	1	3	4
4		Geoinformatics and Geological Studies	SC V	3	1	0	4
5	A my Tyro	Geoinformatics and Water Resource Management	SC VI	3	1	0	4
6	Any Two	Geoinformatics and Land Resource Management	SC VII	3	1	0	4
7		Geoinformatics and Transportation Management	SC VIII	3	1	0	4
8	Open Elective	Basics of Remote Sensing	OE I	3	1	0	4

Note: All three hard cores are compulsory. Among the Four soft cores, students have the option to choose any two Soft Core Courses. Open Elective Courses for other disciplines, offered by the department is optional

III Semester (Minimum Credits: 20)

SL.	Codes	Title of Course	Types Number of Credi			Credits	
No.	No.	Title of Course	HC/SC/OE	L	T	P	Total
1		Research Methodology and Project Management	HC VII	3	1	0	4
2	(Practical)	Programming for GIS	HC VIII	0	1	3	4
3	(Practical)	Environmental Statistics	HC IX	0	1	3	4
4		Geoinformatics and Urban Studies	SC IX			0	4
5	Any Two	Geoinformatics and Disaster Management	SC X	3	1	0	4
6		Geoinformatics and Marine Studies	SC XI			0	4
7		World and Sustainable Development	SC XII	3	1	0	4
8	OE	Basics of Geoinformatics	OE II	3	1	0	4

Note: All three hard cores and field works are compulsory. Among the Four soft cores, students have the option to choose any two Soft Core Courses. Open Elective Courses for other disciplines, offered by the department is optional

IV Semester (Minimum Credits: 12)

SL.	Codes	Title of Course	Types	Number of Credits				
No.	No. Codes	Title of Course	HC/SC/OE	L	T	P	Total	
1		Internship	HC X	0	1	3	4	
2		Major Research Project	HC XI	0	2	6	8	
Total						12		

Note: All course works / programs are compulsory for M.Sc-GIS students.

• Internships (Hard Core): Internships are done in a government, semi-government, NGO's, corporate institution of repute with specialization on the technologies of Cartography, Remote Sensing, GIS and GNSS, CAD, LiDAR, Photogrammetry, Survey and other interdisciplinary institutions. Internship must begin in the first week of fourth semester and should end with eight week of fourth semester.

• Major Research Project (Hard Core):

- This is a major research project of 3 full months or about 12 weeks, on a larger, manageable program of research where students will find suitable topics related to the course and they have to adopt the techniques and technologies which learnt during the course tenure.
- The outcome of the project is to build a self confidence on students to cope with the future assignment throughout their career. Along with the project report, one publication is compulsory where the publication is the supporting evidences related to the Major Research Project, which may contain the piece of work related to review of literature/ part or whole objectives of the research work.
- O Publication should fulfill the plagiarism criteria met by the University. Student may publish the work in reputed journal/peer-reviewed journal/book chapters to fulfill the criteria.

Seminars are a part of Internships and Project work in which seminars have specific purposes. Students make power point presentations on their chosen theme of research for project work, outlining the background, rationale and objectives of research, on their chosen Methodology and the rationale behind them and on their Draft Final report at the end of the 20th week of the semester (end of June) under the guidance and supervision of their tutors/advisors/guides.

The students are very intensively engaged by the course works of Internship, Project work, seminars, field work and educational tours, with constant monitoring and evaluation of the work carried out by the teachers. Final seminar/ viva voce are conducted, where the students make their presentations on their Final Project Report of their major research work will be jointly evaluated by two internal examiners / experts.