



दक्षिण बिहार केंद्रीय विश्वविद्यालय CENTRAL UNIVERSITY OF SOUTH BIHAR

COURSE STRUCTURE AND SYLLABI

PREPARED IN THE LIGHT OF NATIONAL EDUCATION POLICY-2020

SYLLABUS

M.A. / M.Sc. IN GEOGRAPHY

EFFECTIVE FROM ACADEMIC SESSION 2022-23

DEPARTMENT OF GEOGRAPHY

**SCHOOL OF EARTH, BIOLOGICAL AND
ENVIRONMENTAL SCIENCES**

POST GRADUATE IN GEOGRAPHY

BOARD OF STUDIES OF THE DEPARTMENT OF GEOGRAPHY

The Hon'ble Vice Chancellor, Central University of South Bihar has reconstituted the Board of Studies of the Department of Development Geography, School of Earth, Biological and Environmental Sciences as per Statute 16 (2) of the University vide in partial modification of CUSB notification No. CUSB/Acad/929/ dt. 23.08.2022, with the following members.

Sl. No.	Name	Address	Position
1.	Prof. Kiran Kumari	Head, Department of Geography, Central University of South Bihar (CUSB), Gaya	Chairman
2.	Prof. Narendra Kumar Rana	Department of Geography, Banaras Hindu University, Varanasi	External Member
3.	Prof. Shiva Kant Singh	Head & Professor Department of Geography, Deen Dayal Upadhyaya Gorakhpur University, Gorakhpur	External Member
4.	Prof. K. N. P. Raju	Ex-Head, Department of Geography, Banaras Hindu University, Varanasi	Special Invitee
5.	Prof. Pradhan Parth Sarthi	Dean, School of Earth, Biological and Environmental Sciences, CUSB	Cognate Member
6.	Prof. Prafull Kumar Singh	Head & Professor, Dept. of Geology, CUSB	Cognate Member
7.	Dr. Rupesh Kumar Gupta	Associate Professor, Department of Geography, CUSB	Member
8.	Dr. Kiran Kumari Singh	Associate Professor, Department of Geography, CUSB	Member
9.	Dr. Sunita Singh	Assistant Professor, Department of Geography, CUSB	Member
10.	Dr. Jogindar Singh Chauhan	Assistant Professor, Department of Geography, CUSB	Member
11.	Dr. Manjit Singh	Assistant Professor, Department of Geography, CUSB	Member
12.	Dr. Somnath Bera	Assistant Professor, Department of Geography, CUSB	Member

The Board meeting held during 29 and 30 August, 2022 discussed and resolved to approve the programme structure and syllabus of the M.A./M.Sc. in Geography.

CONCEPT NOTE ABOUT THE PROGRAMME

Mission & Vision

The mission of the School of Earth, Biological and Environmental Sciences (SEBES) is to provide its students with educational experiences of the highest quality, to conduct vital research that benefits society, and to serve our communities, from the local to the international. We are committed to outstanding teaching and scholarly activities within the framework of academic freedom, the diversity of people and ideas, a spirit of inclusiveness, and a global perspective.

The Department of Geography will continue to stress both the theoretical and applied realms in all of our degree programs. We will provide a rigorous educational experience through innovative teaching, engagement with the community.

As per the vision of the NEP-2020, the main objective of this curriculum is to give the students a holistic understanding of the **Geography**, putting equal weightage to the core content and techniques used in Geography. Keeping employability in mind and in tune with the changing nature of Geography, adequate emphasis is rendered on applied aspects of the subject.

The M.A./M.Sc. Curriculum in Geography consists of four semesters spread over two years. In addition to compulsory paper, few optional papers are offered in each semester.

Objectives:

- Understand the theoretical and applied aspects of geography as a branch of Knowledge.
- Develop their field observations, data gathering and interpretations skill.
- Familiarize with the applied aspects in different sub branches of geography
- Identify frontier area of research and sub-branches of geography for further research.

Learning Outcomes:

This syllabus is designed to impart basic and advanced knowledge of geography and to prepare the learners to secure employment in the sectors of geospatial analysis, development and planning, mapping and surveying etc.

Programme Specific Outcomes

After going through this programme, students should be able to:

- Establish Spatio-temporal analysis of geographical phenomena and analyze man environment relations in a better way.

- Comprehend key methodological and different approaches to interpret geographical facts.
- Enhance their practical skill through field visits and first-hand experience of tools/equipment.
- Broaden their job prospects in qualifying various competitive examinations and join various industries and research institutes like Tourism, Rural Development, Disaster Management, Environmental Planning, and Cartography to pursue a bright career.
- Geo spatial analysis of various landscape pattern in the region.

Course structure and Curriculum

The current curriculum and syllabus of the M.A./M.Sc. in Geography has been framed on the basis of the Draft Model Framework for implementation of National Education Policy 2020, developed by the Task Force for Implementation of NEP 2020 constituted by the Central University of South Bihar. The structure of the programmes is designed with the approach of holistic and multidisciplinary education as envisaged in the NEP-2020. Accordingly, the M.A./M.Sc. in Geography Programme has Discipline Based Core Courses (DBCC) and Open Elective (Interdisciplinary) Course (OEIC). There will be a basket of Mandatory Elective Non-Credit (MENC) courses to ensure the courses of multidisciplinary and holistic nature.

Discipline Based Core Courses (DBCC)

This is the foundational course which is to be compulsorily studied by a student as a core requirement to complete the requirement of a programme in a said discipline of study at PG Diploma level. Discipline Based Core Courses are designed to give the students an exposure to different thoughts and theories evolved over time and an understanding of development 'challenges' and 'praxis' prevailing at a global, national and sub-national scale.

Open Elective (Interdisciplinary) Course (OEIC)

This is the elective course, aimed to enable exposure to some other discipline or domain. The students have to choose the Open elective course from the other departments.

Mandatory Elective Non-Credit Course (MENC)

This is the value-added course to promote multidisciplinary and holistic education among the students. The course is of non-credit nature but mandatory to complete successfully for the award of the Master's degree. The students have to choose the MENC courses, equivalent to at least 02 credits, from a basket of offered courses. The Mandatory Elective Non-Credit Courses have no semester boundaries. The students will have full freedom to complete them in any of the semesters during the entire duration of the PG programme. The MENC courses will require only satisfactory completion and have no grading.

CURRICULUM IN BRIEF

Table 1: **Distribution of credits in various type of Courses**

Course Type	Total Credits
Discipline Based Core	
Discipline Based Core Electives	
Introductory Course on Research Methodology in the concerned discipline (minimum 04 credits)	72
Dissertation/Project Work/ Internship/ Report submission (minimum 04 credits)	
Open Elective (interdisciplinary in nature)	08
Total Credits	80
Mandatory Elective Non-Credit Course (Minimum 02 MENCC)	04

Table 2: **The distribution of courses across types of courses semesters-wise**

Sl. No.	Semester	Discipline Based Core Courses	Discipline Based Core Electives	Open Elective (inter-disciplinary in nature)	Total Credits
1.	First Semester	Five Courses (Credits: 4+4+4+2+2)		One Course (Credit:4)	20
2.	Second Semester	Five Courses (Credits: 4+4+4+2+2)	One Course (Credit:4)		20
3.	Third Semester	Four Courses (Credits: 4+4+2+2)	One Course (Credit:4)	One Course (Credits:4)	20
4.	Fourth Semester	Two Courses (Credits:4+8)	Two Course (Credit: 4+4)		20
			Total Credits		80

DEPARTMENT OF GEOGRAPHY

Syllabus Structure For M.A./ M.Sc. Geography

FIRST SEMESTER

Course Type	Course Code	Title	Credit			Full Marks	Internal evaluation	End Term
			L	T	P			
DBCC	GEO81DC00104	Geographic Thought: Concept and Issues	4			100	30	70
DBCC	GEO81DC00204	Geomorphology	4			100	30	70
DBCC	GEO81DC00304	Remote Sensing (Theory)	4			100	30	70
DBCC	GEO81DC00402	Remote Sensing (Practical)			2	100	30	70
DBCC	GEO81DC00502	Statistical Techniques in Spatial Analysis			2	100	30	70
OEIC Open Elective (Interdisciplinary in nature) From the Discipline/ Swayam/MOOC (any one from the list of options to be taken from the Other Department)								
OEIC	GEO81OE00104	Geography of South Asia	4			100	30	70
OEIC	GEO81OE00204	Geography of India	4			100	30	70
OEIC	GEO81OE00304	Contemporary Human Geography	4			100	30	70
Mandatory Elective Non-Credit Course (Equivalent to 02 Credits)								
MENC	Noncredit	Indian Knowledge System in concerned Discipline/ Subject/Yoga, Health & Mental Wellbeing/ Instrumentation/Entrepreneurship/ SWAYAM Approved courses/ Ancient Indian Text						
Total Credits						20		

SECOND SEMESTER

Course Type	Course Code	Title	Credit			Full Marks	Internal evaluation	End Term
			L	T	P			
DBCC	GEO82DC00604	Research Methodology	4			100	30	70
DBCC	GEO82DC00704	Climatology	4			100	30	70
DBCC	GEO82DC00804	Geographical Information Science (Theory)	4			100	30	70
DBCC	GEO82DC00902	Geographical Information System (Practical)			2	100	30	70
DBCC	GEO82DC01002	Advanced Field Tools Techniques (Practical)			2	100	30	70
Core Elective (Any one of the following)								
DBCE	GEO82DE00104	Settlement Geography	4			100	30	70
DBCE	GEO82DE00204	Agricultural Geography	4			100	30	70
DBCE	GEO82DE00304	Social Geography	4			100	30	70
DBCE	GEO82DE00404	Political Geography	4			100	30	70
DBCE	GEO82DE00504	Geography of Transport	4			100	30	70
DBCE	GEO82DE00604	Economic Geography	4			100	30	70
DBCE	GEO82DE00704	Geography of Tourism	4			100	30	70
Mandatory Elective Non-Credit Course (Equivalent to 02 Credits)								
MENC	Noncredit	Indian Knowledge System in concerned Discipline/ Subject/Yoga, Health & Mental Wellbeing/ Instrumentation/ Entrepreneurship/ SWAYAM Approved courses/ Environmental ethics						
Total Credits			20					

THIRD SEMESTER

Course Type	Course Code	Title	Credit			Full Marks	Internal evaluation	End Term
			L	T	P			
DBCC	GEO91DC01104	Population Geography	4			100	30	70
DBCC	GEO91DC01204	Dissertation	4			100	30	70
DBCC	GEO91DC01302	Field work and investigation			2	100	30	70
DBCC	GEO91DC01402	Introduction to Machine Learning			2	100	30	70
Core Elective (Any one of the following)								
DBCE	GEO91DE00804	Hydrology and Water Resource Management	4			100	30	70
DBCE	GEO91DE00904	Advanced Geography of India	4			100	30	70
DBCE	GEO91DE01004	Geography of Health and well being				100	30	70
DBCE	GEO91DE01104	Rural Development	4			100	30	70
DBCE	GEO91DE01204	Urban Governance and Planning	4			100	30	70
DBCE	GEO91DE01304	Geography of Heritage Conservation	4			100	30	70
DBCE	GEO91DE01404	Geography of Geo Parks and Geo Tourism	4			100	30	70
DBCE	GEO91DE01504	Environment hazards and disaster risk reduction	4			100	30	70
OEIC Open Elective (Interdisciplinary in nature) From the Discipline/ Swayam/MOOC (any one from the list of options to be taken from the Other Department)								
OEIC	GEO91OE00404	Introduction to Climate Change	4			100	30	70
OEIC	GEO91OE00504	Spatial Information System	4			100	30	70
OEIC	GEO91OE00604	Physical Geography	4			100	30	70
Mandatory Elective Non-Credit Course (Equivalent to 02 Credits)								
MENC	Noncredit	Indian Knowledge System in concerned Discipline/ Subject/Yoga, Health & Mental Wellbeing/ Instrumentation/ Entrepreneurship / SWAYAM Approved courses						
Total Credits			20					

FOURTH SEMESTER

Course Type	Course Code	Title	Credit			Full Marks	Internal evaluation	End Term
			L	T	P			
DBCC	GEO92DC01504	Environment & Sustainable Development	4			100	30	70
DBCC	GEO92DC01608	Dissertation			8	100	30	70
Core Elective (Any two of the following)								
DBCE	GEO92DE01604	Oceanography	4			100	30	70
DBCC	GEO92DE01704	Climate Change and Adaptations	4			100	30	70
DBCE	GEO92DE01804	Regional Planning and Development	4			100	30	70
DBCE	GEO92DE01904	Soil Geography	4			100	30	70
DBCE	GEO92DE02004	Gender Geography	4			100	30	70
DBCE	GEO92DE02104	Introduction to Demographic Methods	4			100	30	70
DBCE	GEO92DE02204	Cultural Geography	4			100	30	70
DBCE	GEO92DE02304	Urbanization and Urban System	4			100	30	70
DBCE	GEO92DE02404	Natural Resource Management	4			100	30	70

Mandatory Elective Non-Credit Course (Equivalent to 02 Credits)

MENC	Noncredit	Indian Knowledge System in concerned Discipline/ Subject/Yoga, Health & Mental Wellbeing/ Instrumentation/Entrepreneurship/ SWAYAM Approved courses						
Total Credits			20					

Grand Total Credits of I+II+III+IV Semester **80**

Note:

1. Elective courses would be offered depending upon the availability of specialized faculties. Courses to be offered as elective papers in a particular semester would be announced before commencement.
2. Each student would obtain 08 credits from courses offered by other departments in the name of OEIC/UGC-MOOCs/SWAYAM courses as approved by the Department Committee in a particular semester.
3. Students must complete at least two MENC courses of two credits each in the entire duration of the programme.

M.A. / M.Sc. in GEOGRAPHY

First Year (Previous)

The previous year consists of two semesters, called the first and second semester. In each of these semesters, there will be five core/elective papers and a mandatory Elective Non-credit course to be taken any two out of four semester Master programme. Evaluation of performance in these papers will be based on internal evaluation as well as written examination. There will be 30% internal evaluation and 70% written examination. The internal evaluation in each paper will be based on regularity, punctuality and class test.

The written papers will be of 4 credits (maximum 70 marks), except were stated otherwise. Their examinations will be held in the months of December and May respectively. Each paper will be of three hours duration.

Semester-I

Paper	Course	Paper Code	Title of the Paper
Paper-1		GEO81DC00104	Geographic Thought: Concept and Issues
Paper-2		GEO811DC0204	Geomorphology
Paper-3	DBCC	GEO81DC00304	Remote Sensing (Theory)
Paper-4		GEO81DC00402	Remote Sensing (Practical)
Paper-5		GEO81DC00502	Statistical Techniques in Spatial Analysis
		Open Elective (Interdisciplinary in nature) From the Discipline/ Swayam/MOOC (any one from the list of options to be taken from the Other Department)	
Paper-6	OEIC	GEO81OE00104	Geography of South Asia
		GEO81OE00204	Geography of India
		GEO81OE00304	Contemporary Human Geography
		Mandatory Elective Non-Credit Course (Equivalent to 02 Credits)	
	MENC (Noncredit)	Indian Knowledge System in concerned Discipline/ Subject/Yoga, Health & Mental Wellbeing/ Instrumentation/ Entrepreneurship/ SWAYAM Approved courses	

Semester-II

Paper	Course	Paper Code	Title of the Paper
Paper-1		GEO82DC00604	Research Methodology
Paper-2		GEO82DC00704	Climatology
Paper-3	DBCC	GEO82DC00804	Geographical Information Science (Theory)
Paper-4		GEO82DC00902	Geographical Information System (Practical)
Paper-5		GEO82DC01002	Advanced Field Tools Techniques (Practical)
		Core Elective (Any one of the following)	
Paper-6		GEO82DE00104	Settlement Geography
		GEO82DE00204	Agricultural Geography
		GEO82DE00304	Social Geography
	DBCE	GEO82DE00404	Political Geography
		GEO82DE00504	Geography of Transport
		GEO82DE00604	Economic Geography
		GEO82DE00704	Geography of Tourism
		Mandatory Elective Non-Credit Course (Equivalent to 02 Credits)	
	MENC (Noncredit)	Indian Knowledge System in concerned Discipline/ Subject/Yoga, Health & Mental Wellbeing/ Instrumentation/ Entrepreneurship/ SWAYAM Approved courses	

M.A./M.Sc. in Geography Second Year (Final)

The final year consists of two semesters, called the third and fourth semester. In each of these semesters, there will be five core/elective papers. Evaluation of performance in these papers will be based on internal evaluation as well as written examination. There will be 30% internal evaluation and 70% written examination. The internal evaluation in each paper will be based on regularity, punctuality and class test.

Semester-III

Paper	Course	Paper Code	Title of the Paper
Paper-1		GEO91DC01104	Population Geography
Paper-2	DBCC	GEO91DC01204	Dissertation
Paper-3		GEO91DC01302	Field work and Investigation
Paper-4		GEO91DC01402	Introduction to Machine Learning
Core Elective (Any one of the following)			
Paper-5		GEO91DE00804	Hydrology and Water Resource Management
		GEO91DE00904	Advanced Geography of India
		GEO91DE01004	Geography of Health and well being
		GEO91DE01104	Rural Development
		DBCE GEO91DE01204	Urban Governance and Planning
		GEO91DE01304	Geography of Heritage Conservation
		GEO91DE01404	Geography of Geo Parks and Geo Tourism
		GEO91DE01504	Environment hazards and disaster risk reduction
OEIC to be offered for the Other department			
Paper-6	OEIC	GEO91OE00404	Introduction to Climate Change
		GEO91OE00504	Spatial Information System
		GEO91OE00604	Physical Geography
Mandatory Elective Non-Credit Course (Equivalent to 02 Credits)			
	MENC	Indian Knowledge System in concerned Discipline/ Subject/Yoga, Health & Mental Wellbeing/ Instrumentation/Entrepreneurship/ SWAYAM	
	Noncredit	Approved courses	

Semester-IV

Paper	Course	Paper Code	Title of the Paper
Paper-1	DBCC	GEO92DC01504	Environment & Sustainable Development
Paper-2		GEO92DC01608	Dissertation
Core Elective (Any one of the following)			
Paper-3		GEO92DE01604	Oceanography
		GEO92DE01704	Climate Change and Adaptations
		GEO92DE01804	Regional Planning and Development
		DBCE GEO92DE01904	Soil Geography
		GEO92DE02094	Gender Geography
		GEO92DE02104	Introduction to Demographic Methods
		GEO92DE02204	Cultural Geography
		GEO92DE02304	Urbanization and Urban System
		GEO92DE02404	Natural Resource Management
	Mandatory Elective Non-Credit Course (Equivalent to 02 Credits)		
	MENC	I K S in concerned Discipline/ Subject/Yoga, Health & Mental Wellbeing/ Instrumentation/Entrepreneurship/ SWAYAM	
	(Noncredit)	Approved courses	