FIRST-YEAR OF MASTER OF ARTS
MAJOR GEOGRAPHY REVISED SYLLABUS ACCORDING TO CBCS NEP2020

COURSE TITLE: REMOTE SENSING APPLICATIONS IN URBAN PLANNING
SEMESTER-I, W.E.F. 2023-2024

RECOMMENDED BY THE BOARD OF STUDIES IN GEOGRAPHY
AND
APPROVED BY THE ACADEMIC COUNCIL

Devrukh Shikshan Prasarak Mandal's
Nya. Tatyasaheb Athalye Arts, Ved. S. R. Sapre Commerce, and Vid. Dadasaheb Pitre Science College (Autonomous), Devrukh.
Tal.Sangmeshwar, Dist. Ratnagiri-415804, Maharashtra, India

Academic Council Item No: 03

Name of the Implementing Institute	:	Nya. TatyasahebAthalye Arts, Ved. S. R. Sapre Commerce and Vid. Dadasaheb Pitre Science College (Autonomous), Devrukh. Tal.Sangmeshwar, Dist. Ratnagiri-415804,
Name of the Parent University	:	University of Mumbai
Name of the Programme	:	Master of Arts
Name of the Department	:	Geography
Name of the Class	:	First Year
Semester	:	First
No. of Credits	:	02
Title of the Course	:	Remote Sensing Applications in Urban Planning
Course Code	:	A509GET
Name of the Vertical in adherence to NEP 2020	:	Major Elective
Eligibility for Admission	:	UG Degree in Geography
Passing Marks	:	40%
Mode of Assessment	:	Formative and Summative
Level	:	PG
Pattern of Marks Distribution for TE and CIA	:	60:40
Status	:	NEP-CBCS
To be implemented from the Academic Year	:	2023-2024
Ordinances/Regulations(if any)		

Syllabus for First Year of Master of Arts in Geography

(With effect from the academic year 2023-2024)

SEMESTER-I **Paper No.–**IX

Course Title: Remote Sensing Applications in Urban Planning **No. of Credits -** 02

Type of Vertical: Major Elective **COURSE CODE:** A509GET

Learning Outcomes Based on BLOOM's Taxonomy:

After completing the course, the learner will be able to…

Course Learning Outcome No.	Blooms Taxonomy	Course Learning Outcome
CLO-01	Remember	Remote Sensing Applications in Urban Studies
CLO-02	Understand	Understand the fundamentals of urban planning
CLO-03	Apply	Apply remote sensing for Urban Studies
CLO-04	Analyse	Analyze different sources of Remote Sensing Data used for urban studies
CLO-05	Evaluate	
CLO-06	Create	Create Urban LULC map using Remote Sensing Data.

Syllabus for First Year of Master of Arts in Geography

(With effect from the academic year 2023-2024)

SEMESTER-I **Paper No.–**IX

Course Title: Remote Sensing Applications in Urban Planning **No. of Credits -** 02

Type of Vertical: Major Elective **COURSE CODE:** A509GET

Module No.	Content	Credits	No. of Lectures
1	**Remote Sensing and Urban Studies** o Remote Sensing data sources o Urban land use classification o Urban land use mapping and analysis o Residential land use, commercial land use and industrial land use o Urban land conservation using remote sensing	01	15
2	**Remote Sensing and Urban Planning** o Remote sensing in monitoring master plan / new town development area o Transportation/ road network analysis through RS and GIS o Site selection and suitability analysis for urban development o Urban sprawl and change detection studies	01	15

Required Previous Knowledge

No previous Knowledge is necessary to learn the course.

Access to the Course

The course is available for all the students admitted for Master of Arts.

Methods of Assessment:

The assessment pattern would be 60:40, 60% for Semester End Examination (SEE) and 40 % for Continuous Internal Assessment (CIA). The structure of the SEE and CIA would be as recommended by the Board of Studies and approved by the Board of Examination and the Academic Council of the college.

Grading Scale

The grading scale used is O to F. Grade O is the highest passing grade on the grading scale, and grade F is a fail. The Board of Examinations of the college reserves the right to change the grading scale.

Reference Books:

1. Bernhardsen, Tor(2002): Geographical Information Systems: An Introduction (3rd Edition), John Wiley and Sons, Inc., New York.
2. Burrough, P.A. and McDonnell, R.A. (1998): Principles of Geographical Information System, Oxford University Press, New York.
3. Clarke, Keith C. (1998) : Getting Started with Geographic Information Systems, Prentice-
   Hall Series in Geogl.Info. Science, Prentice-Hall, Inc. N.J.
4. Deakin, M. (2013): Smart Cities, E-book, ISBN 9780203076224.
5. Fleming, Cory, (2005), The GIS Guide for Local Government Officials, International City/CountyManagement association(ICMA),ESRI Press, Redlands, California
6. Hall, P. and Tewdwr, M. (2010): Urban and Regional Planning (5th Edition),
7. Huxhold, William E. (1991): An Introduction to Urban Geographical InformationSystems, Oxford University Press, New York.
8. Markandey, K. and simhadri, S. (2009): Urban Environment and Geoinformatics, Rawat Publications. ISBN 10-8131602567, 13-978-8131602560.
9. Martin, D. (1996): Geographical Information Systems: Socio-economic Applications, (2nd Edition), Routlege, London and New York.
10. Masser, Ian (1998): Government and Geographical Information Systems,Taylor & Francis Group, London
11. Morain, Star (1998): GIS Solutions in Natural Resource management: balancing the Technical-Political Equations, Onward Press, London.
12. Nathawat MS (ed), (2008), Geoinformatics for Decentralized Planning and Governance, Rawat Publications, Jaipur
13. Nyerges, T. and Jankowaski, P. (2010): Regional and Urban GIS: A Decision Support Approach; Rawat Publication. ISBN: 9788131603697, 8131603695.
14. Obermeyer, Nancy J. and Jeffrey K. Pinto (1995): Managing Geographical Information Systems, The Guilford Press, New York.
15. Pamuk, Ayse, (2006), Mapping Global Cities: GIS Methods in Urban Analysis, ESRI Press, Redlands, California.
16. Pickles, John (Ed.) (1995): Ground Truth : The Social Implications of Geographical Information Systems, The Guilford Press, New York.
17. Scholten, H.J. and Stillwell, C.H. (Edts.): Geographical Information Systems for Urban and Regional Planning, ISBN: 978-90-481-4071-8 (Print), 978-94- 017-1677-2 (Online).
18. Subudhi, A.P., et.al. (2001), Remote Sensing and GIS: Applications inUrban and Regional Planning, IIRS, Dehradun.