Course title: Major Project			
Course code: NRG 113	**No. of credits:** 20	**L-T-P:** 0-0-600	**Learning hours:** 600*
Pre-requisite course code and title (if any):			
Department: Department of Natural and Applied Sciences			
Course coordinator: Dr. Adwitiya Sinha		**Course instructor:**	
Contact details:			
Course type: Core		**Course offered in** Fourth semester	

Course Description: The major project provides an opportunity for students to conduct a research project in a reputed organization for 16 weeks*. The suggested learning hours is minimum expected time to be invested for self-learning, interaction with experts training at the organization, dissertation writing etc. over a duration of 16 weeks.

Course objectives: The objective of the major project is to widen the students' perspective by providing exposure to real-life issues. That mainly involves the application of geoinformatics as a part of its solution, through a project with external institution/organization or TERI SAS.

Evaluation criteria:

The marks obtained by students in the major project would be graded as per absolute grading scale given by the university (*Annexure 1*).

The distribution of marks for the major project work as follows:

a. Timeline adherence – 10% [the marks are distributed among a timely submission of joining report, synopsis, progress reports, feedback form, and final Dissertation]
b. Supervisor feedback – 20% [A feedback e-form would be sent to the supervisor of the host organization at the end of the course]
c. Dissertation – 40 % [Dissertation submitted in the format prescribed in the guideline will be evaluated by the internal supervisor and a faculty member as examiner one and two with the weightage of 25% and 15% respectively. The Dissertation submitted by the student will undergo a similarity check AI plagiarism check, and a penalty for plagiarism would be imposed as per the university standards and policy (*Annexure 2*)]
d. Oral presentation/viva voce – 30% [An evaluation panel consist of internal faculty members and External/s (whenever necessary) would evaluate the oral presentation at the end of the course]

Learning outcomes: A fully engaged student shall be able to attain professional experience in the field and prepare themselves for solving spatial problems using geoinformatics technology and other related research tools. Also, able to communicate and demonstrate the learning through structured thesis and oral presentation.

Pedagogical approach: Student's conduct research under the mentorship of research supervisor/s on a topic mutually agreeable to the supervisor of the external host organization. The internal supervisor constantly monitors the progress of the work through the reports submitted periodically and helps the student in all possible means. Intermittent evaluation and feedback from the main/internal supervisors to assess the progress and midterm correction, if necessary. The student can also undertake a major project at TERI SAS, in such case both the internal and external supervisors are from TERI SAS. The guideline issued by the Programme before the Major implementation shall detail the mode of implementation, reporting, and evaluation. The outcome of the project is evaluated through an oral presentation and the Dissertation.

Additional information: For detailed process including timelines for submissions, format for various reports, and other items related to the thesis student should refer the major project guideline uploaded in the student portal.
Student responsibilities: The students are expected to be in constant touch with the internal supervisor, co-ordinate between supervisors, and to follow major project guidelines strictly.
Course reviewers: • Dr Shefali Agarwal, Group Head, Geospatial Technology & Outreach Programme Group, IIRS(ISRO). • Ms Seema Joshi, GM & Head – Strategic Solutions & Technology, ESRI India

Annexure 1: Major project grading scale

Table1. The absolute grading scale for the major project

Mark obtained	**Grade**
>90	A+
>80≤90	A
>70≤80	B+
>60≤70	B
>50≤60	C+
>45≤50	C
>40≤45	D
≤40	F

The students scoring overall marks less than or equal to 40% (≤ 40%) in the evaluation would be considered unsuccessful and would be graded F (fail).

Annexure 2: Plagiarism in the Dissertation

TERI SAS strongly encourages its students to submit the original dissertation work without similarity and AI plagiarism. TERI SAS has zero-tolerance for plagiarism. The similarity detected in the Dissertation submitted by the student would be examined by the Department Integrity Panel. The DIP would determine the final percentage of plagiarism. The penalty for plagiarism shall be imposed as per table 2 in line with the UGC notification dated 23rd July 2018 on "Promotion of academic integrity and prevention of plagiarism in higher education institutions, REGD. NO. D. L.-33004/99". The students are responsible for resolving the similarity in consultation with external/internal supervisors, and for ensuring the document deemed fit for final submission upon written consent of external/internal supervisors to the major project coordinator along with the list of amendments.

Table 2. Different levels of similarity and AI plagiarism scores and its corresponding penalty (in line with UGC guidelines) for minor project dissertation.

Levels of Plagiarism	**Percentage of Similarity & AI Plagiarism Scores***	**Penalty**
Level 3	> 60%	Registration of the student to the program stands cancelled
Level 2	> 40% ≤ 60%	The student repeats the minor project next year
Level 1	> 10% ≤ 40%	The student needs to revise and resubmit the thesis within a stipulated period decided by the MPEC not exceeding 6 months
Level 0	≤ 10%	Minor similarities or AI plagiarism, no penalty

*Both plagiarism scores, i.e. similarity score and AI score, should be collectively less than the given percentage for a particular level. For instance, if similarity score is less than 10% and AI score is more than 60%, then it will be considered a case of *Level 3*.