DEPARTMENT OF MATHEMATICS
INDIAN INSTITUTE OF TECHNOLOGY GUWAHATI

MA498 PROJECT I
Regulations and Guidelines

(A) Objectives

In the project course MA498 and in the continuation course MA499, the student should be able to

- Undertake detailed literature review as a way of information search.

- Carry out detailed investigations (theoretical / computational / practical) as a way of solving project problem.

- Write and put together a detailed report of the investigations carried out to a scientifically acceptable standard at the end of seventh and eighth semesters.

Course Content:
The course is an individual investigation into an assigned problem in mathematics/statistics or in computing, using established research techniques such as literature surveys, analytical or numerical work to solve the problem. Ideally, the chosen problem should have enough content on both the mathematical aspects and the computational aspects. Examination is on the basis of a treatise and an oral presentation.

The course 'MA498 Project I' is a compulsory course with 6 credits in the seventh semester and it is the first stage of the B.Tech. project work. The second stage of the project work will be continued in the ensuing semester.

The students are advised to meet with their project supervisors regularly. They are expected to choose the problem in consultation with their supervisors and also report the progress in the project work to their supervisors regularly.

(B) Guidelines to prepare the Project Report

The report/document of the project work (Project I) should comply to the following specifications:

- The report must contain a good introduction of the work covering all the basic definitions/theories which are needed to understand the work with proper citations.

- The report must be neatly typed using LaTeX software. The format is: Sty file:a4paper, 12 point and Times New Roman font.

- The text of the report should be double (=24pt) or one-and-a-half (=18pt) lines spaced. The reference/bibliography may be single (=12pt) line spaced.

- Top, bottom, and both side margins must be at least an inch (1") to allow for binding and trimming. You may give more space on the left side as you have to make bound copy of the report later. All information (text headings, notes, and illustrations), excluding page numbers, must be within the text area.

- The following order of presentation be followed:

  Title page   (See the sample report)
  Certificate   (See the sample report)
  Acknowledgement (optional)
  Dedication (optional)
  Abstract
  Table of contents
  List of figures (if any)
  List of tables (if any)
  List of symbols or Notation (if any)
  Main text (that is, Chapters)   (For example, Chapters: Introduction
                                                    Chapters covering actual work, Conclusions, etc.)
  References / Bibliography
  Appendices (if any)

- The entire report (including title page, prefatory material, illustrations, and all text and appendices) must be paginated. Every page must be included in the count regardless of whether a number is physically printed on a page.

  The title page is always considered to be page 1 (Only this page number will not be physically printed on it, because it is the title page. See the sample report. In all other pages, the page number will be printed on it). All the pages preceding before the first chapter must be numbered in *Roman numerals*.

  Again, the first page of the first chapter is always considered to be page 1 and the following pages must be paginated in one consecutive numbering sequence. All the pages starting from the first page of the first chapter must be numbered in *Arabic numerals*.

- For your reference, a model report is attached along with this guidelines. The students are advised that they should follow the pattern given in the model report.

- In the model report, the title page, the certificate page are given. The students need to fill in the appropriate places. The main LaTeX file is *report.tex*, and the other files are needed to support this main file. A model 'bib.bib' file is also given, and you may use this to type the references (as per the classifications such as books, articles, proceedings, etc.).

- Referencing in the report should be as per the model given in the sample report and it should be followed consistently.

(C) Submission of the Report and Oral Examination

1. The student is requested to submit final report online as per instructions from your faculty advisor. After submission, the student should inform his/her supervisor for approval the report. The last date for submission of the project report is mentioned in the academic calendar of the department.

2. The student is required to present the work of Project I to PEC on the date of viva-voce examination.

3. The student is allowed to present the work on the black board or on overhead/LCD projectors depending on the availability of the facility. Each student will get appro. The students are advised to prepare the presentation accordingly. Overshooting the time may attract negative marking.

4. At the end of the final viva-voce examination, the corrections/modifications (if any) suggested by the members of PEC are to be incorporated to the satisfaction of the supervisor.

5. At the end of the viva-voce examination of MA498, the members of PEC may also provide suggestions for your project work. Implement these suggestions in the second phase of project work MA499 Project II.

(D) Evaluation of MA498 Project I

MA498 course will be evaluated by the Project Evaluation Committee (PEC) based on the work done in this semester towards his/her project work (which can be measured/judged from the report) and the performance of the student in the viva-voce examination. The following is the probable scheme of the evaluation.

	Maximum Marks
Marks for the report of the project work (by PEC)	a
Marks for the understanding/command over the topic (by PEC)	b
Marks for the final presentation in the viva-voce exam (by PEC)	c
Marks for answering questions in the viva-voce exam (by PEC)	d
Total	$= a + b + c + d \leq 100$ marks

The PEC, while awarding marks, will also make sure that the guidelines for the preparation of the report are followed and the report is in the prescribed format.

Over the marks decided by the PEC, the Project Coordinator will impose penalty for late submission of project report as per the following scheme:

1. After the due date, before commencement of End Semester Examination, 2 marks for each day will be deducted.

2. The report will not be accepted after commencement of End Semester Examination and the student will be awarded an 'F' grade.

If any student, because of health reasons or any other genuine reason, either fails to complete his/her project work or fails to submit the report or fails to appear for the viva-voce examination, the student will be temporarily awarded 'I' grade. He/she should get in touch with the Project Coordinator for further course of actions. 'F' grade will be awarded if the student fails to submit the report or fails to appear in the viva-voce examination without any genuine reason, or fails in the course.