

ME261 Aug. 3:0 Engineering Mathematics

Instructor

Gaurav Tomar, C.S. Jog, V. R. Sonti Email: gtom@iisc.ac.in

Teaching Assistant

Email:

Department: Mechanical Engineering

Course Time:

Lecture venue:

Detailed Course Page:

Announcements

Brief description of the course

The course is meant for graduate students (after a bachelors degree in science or engineering). The course involves a revision of some undergraduate math topics and some advanced concepts like Linear Algebra, ODEs and Complex Analysis.

Prerequisites

None

Syllabus

Linear Algebra, ODEs and Complex Analysis.

Course outcomes

At the end of the course student would have learnt

- 1) How to solve systems of equations,
- 2) Manipulate matrices and tensors,
- 3) Solve linear and nonlinear ODEs, plot phase diagrams, check stability,
- 4) compute advanced proper and improper integrals using complex analysis.

Grading policy

10% for assignments

20 % each for two mid term examinations

50% for the written final examination.

Assignments

Resources