

## **Data Structures and Algorithms (ESO207)** **(Semester 2020-21-I)**

**Course Objectives:** To familiarize students with basic design and analysis techniques of algorithms.

This will allow students to come up with efficient solutions to computational problems and be able to write a program for it.

**Syllabus:** A detailed syllabus can be seen at

<https://www.cse.iitk.ac.in/pages/ESO207.html>

Order of topics covered may differ.

**Lectures:** Recorded lecture videos will be released on the course website twice in a week (Mon & Wed). These will roughly be of duration 2.5 hours (equivalent to three lectures) per week.

**Discussion-Time:** 10-10:50 AM, Monday.

(link will be announced on the course website by previous Sunday)

**Course website:** [hello.iitk.ac.in](http://hello.iitk.ac.in).

Students are encouraged to use various discussion forums (general discussion, topic-wise discussions etc.) on the website to clarify doubts related to lectures and course material.

Other students, course TAs and instructor may answer the questions raised.

### **Evaluation (Initial Plan):**

Theory/programming Assignments (3-4)	50%
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Midsem Exam	20%
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Endsem Exam	30%
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There could be some changes in evaluation plan based on

our experience and feedback from the class, as semester progresses.

Using unfair means in online exam may be penalized. Penalty may range from zero marks in that exam to F grade in the course and instructor may also refer the case to appropriate institute bodies.

**Course Textbook:**

- 1) Thomas H. Cormen, Charles E. Leiserson, Ronald L. Rivest, Clifford Stein: Introduction to Algorithms, 3rd Edition. MIT Press 2009. (Indian reprint of the book is available.)