



E0 249 Jan 3:1

Approximation Algorithms

Instructor

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Teaching Assistant

Email:

Department: CSA

Course Time:

Lecture venue:

Detailed Course Page:

Announcements

Brief description of the course

The course is primarily intended for students (both M. Tech. and Ph.D.) who have taken a graduate level algorithms course (such as E0 225). The course is intended to equip the students with some fundamental tools for designing and analyzing approximation algorithms.

Prerequisites

E0 225

Syllabus

Greedy algorithms; Local search; Linear programs (relaxations and rounding); Iterated rounding; Primal dual algorithms; Randomized rounding; Semi-definite programming; Sparsest cut and metric embeddings; Label cover; Unique games.

Course outcomes

The course is intended to equip the students with some fundamental tools for designing and analyzing approximation algorithms.

Grading policy

Homeworks 20%, Midterm Exam 25%, Project 25%, Final Exam 30%

Assignments

Resources