



Advanced Algorithms

CSE 6332

Credit Hours:

3.00 - 3.00

Course Levels:

Graduate (5000-8000 level)

Course Components:

Lecture

Course Description:

Advanced graph algorithms, string algorithms, linear programming, matrix operations, Fourier transforms, randomized algorithms, approximation algorithms, geometric algorithms.

Prerequisites and Co-requisites:

Prereq: 6331 (780).

Course Goals / Objectives:

- Be familiar with advanced topics in algorithms such as advanced graph algorithms, string algorithms, linear programming, matrix operations, Fourier transforms, randomized algorithms, approximation algorithms, geometric algorithms
 - Master a subset of algorithms: Linear programming, advanced graph algorithms, approximation algorithms
 - Be familiar with how to design algorithms for problems in applications
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Course Topics:

- Advanced graph algorithms
 - Linear programming
 - Fourier transforms and matrix operations
 - String algorithms
 - Randomized algorithms
 - Approximation algorithms
 - Geometric algorithms
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Designation:

Elective