ECSE 343. NUMERICAL METHODS IN ENGINEERING.

Credits: 3

Offered by: Electrical & Computer Engr (Faculty of Engineering)

Terms offered: Fall 2025, Winter 2026

View offerings for Fall 2025 or Winter 2026 in Visual Schedule Builder.

Description

Number representation and numerical error. Symbolic vs. numerical computation. Curve fitting and interpolation. Numerical differentiation and integration. Optimization. Data science pipelines and data-driven approaches. Preliminary machine learning. Solutions of systems of linear equations and nonlinear equations. Solutions of ordinary and partial differential equations. Applications in engineering, physical simulation, CAD, machine learning and digital media.

- Restriction: Not open to students who have taken ECSE 443.
- (3-2-4)
- Prerequisites: ECSE 205, MATH 263 and (ECSE 250 or COMP 250)

Most students use Visual Schedule Builder (VSB) to organize their schedules. VSB helps you plan class schedules, travel time, and more.

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