

Mathematics 161 A Au
Mathematics 162 A Wi
Mathematics 263 A Sp

5 cr.

**Accelerated Calculus with
Analytic Geometry I, II, III**

Prerequisite:

Students are individually chosen by the College of Engineering
Math 161A - Course code L placement and high school calculus.
Math 162A - 161A or written permission of department.
Math 263A - 162A or written permission of department.

Catalog Description:

161A:

Functions, limits and continuity, derivatives, applications of the derivative, L'Hopital's Rule, the integral, techniques of integration, applications of the integral.

162A: Improper integrals, polynomial approximations and Taylor's Theorem; infinite sequences and series; tests for convergence; vectors, lines and planes, curves and surfaces in three-space

263A:

Multivariable calculus, line and surface integrals, vector fields.

Purpose:

These classes are part of the College of Engineering's Honors (FEH) Program, (previously known as the Gateway Program), in which selected students study core topics for the engineering curriculum in an integrated format. They were officially renamed 161G, 162G, 263G in 97-98 and 161A, 162A, and 163A in 04-05.

Text:

Calculus/Early Transcendentals, Stewart, 5th edition, Volumes 1 and 2.

Topics:

Generally, the first quarter does the equivalent of 151 and 152; the second quarter covers 153; and the third quarter covers 254, and some additional topics.