
Engineering Calculus (공학미적분학)

IE-1500379-066, SPRING 2025

Mon/Wed 10:30-11:45

Instructor Chanseok Park (e-mail: CP<AT>PUSAN<DOT>AC<DOT>KR)
OFFICE: Engineering Building 207-10527
OFFICE HOURS: 12:00-13:00 (M/W); or by appointment.

Textbook 미분적분학 (저자: 수학교재편찬위원회). (주)한빛아카데미. (2022).
ISBN: 979-11-5664-595-5

Web Page <https://AppliedStat.GitHub.io/class>

Software *R Language* (<http://www.r-project.org>).

Prerequisite The expectation is that you have already been exposed to the basic high-school-level algebra.

Description and Learning Objectives

- Engineering Calculus will focus on basic concepts and theories of calculus with engineering applications.
- Basic topics covered in this class include function, limit and continuity, derivative, integration, series, plain equations, vector-valued functions, etc.
- The popular R statistical language will be briefly handled in this class.

Upon successful completion of this course, a student will be able to:

- Understand basic concepts on differentiation and integration.
- Solve various engineering applications related to calculus.
- Solve problems related to series.
- Understand a basic concept of a vector and a vector-valued function.

Grading The final grade will be curved and calculated as follows.

HOMEWORK:	5%
ATTENDANCE:	5%
MIDTERMS:	45%
FINAL:	45%

ROUGH GRADING GUIDE:

- A+: 95 ~ 100 A: 90 ~ 95-
- B+: 85 ~ 90- B: 80 ~ 85-
- C+: 70 ~ 80- C: 60 ~ 70-
- D+: 50 ~ 60- D: 40 ~ 50-
- F : below 40.

Exams

MIDTERM: T.B.A. In class

FINAL: T.B.A. In class

- All the exams are in-class and closed-book. (시험은 강의실에서 실시하며 시험중에 교과서는 볼 수 없습니다.)
- The final exam will be comprehensive.
- During the exams, a basic calculator will be permitted but cannot be shared with others.
- Calculators in smart phones, tablet PC and laptops are **not** allowed.
- No early or late exams will be allowed without a written and legitimate excuse.

Homework

- The students can collaborate on their homework problems, but they should submit their homeworks separately.
- Late homeworks will **not** be accepted.
- Up to 1 ~ 3 problems, selected at random, will be graded in detail, on a scale of 0–5 each.
- To get full credit, you must show all work on the homework problems, which must be submitted in the same order as they are assigned.