

# Advanced Mathematics (CIEE 701 / IMSC 001)

Semester Syllabus

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## Part 1: Course Information

### Instructor Information

Instructor: Prof. K.V. Yuen

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### Course Description

This course introduces fundamental concepts of linear operator theory. It serves as an advanced level mathematics course for engineering students. Instead of doing computations only, this course emphasizes also fundamental concepts, such as existence, uniqueness and stability. With the knowledge of the course, students will be equipped to study other advanced level mathematics courses.

### Prerequisite

None

### Course Duration

42 contact hours, 3 hours per week (3-credit course)

**Credit:** 3

**Compulsory/elective course:** Compulsory

## Part 2: Course Objectives

1. To introduce the basic linear operator theory.
2. To introduce some computational methods of linear algebra.
3. To prepare students for their needs in mathematics for thesis research.

## Part 3: Major Assessment Methods

Midterm exam:	40%
Final exam:	60%