

## Engineering Mathematics II (11120MS 20120)

**Class Time:** T3T4/R3R4

**Class Room:** 台達 B05

**Instructor:** Ta-Jen Yen (嚴大任)  
Office: R429, Building Delta  
Tel: (03) 574-2171  
E-mail: [tjyen@mx.nthu.edu.tw](mailto:tjyen@mx.nthu.edu.tw)

**Textbooks:** Advanced Engineering Mathematics (2<sup>nd</sup> edition), *Michael D. Greenberg*, 滄海書局

**Grading:** Quizzes (x3, 25%)  
Mid-terms (x2, 50%)  
Final (25%)

**TAs:** TBA

**TA Hours:** TBA

**OCW:** <http://ocw.nthu.edu.tw/ocw/index.php?page=course&cid=127&>

### Content:

The subject of *Engineering Mathematics* is comprised of five parts within two semesters:

1. Ordinary Differential Equations (Chapters. 2-7)
2. Linear Algebra (Chapters. 8-12)
3. *Multivariable Calculus and Field Theory* (Chapters. 13-16)
4. *Fourier Methods and Partial Differential Equations* (Chapters. 17-20)
5. *Complex Variable Theory* (Chapters. 21-24)

In *Engineering Mathematics II*, we focus on “*Multivariable Calculus and Field Theory*”, “*Fourier Methods and Partial Differential Equations*”, and “*Complex Variable Theory*” to cover the rationale and of particular the engineering applications. Note that this course should be given in **English**. Yet, due to rapidly escalating health concerns relating to the spread of the coronavirus disease (COVID-19), the 2020 Engineering Mathematics II will be provided by the clips in OCW website until **early April**. Then, let us decide how to resume the class, depending on the latest status quo.