|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Faculty Information** | **Name** | | Hongyun So | | | | | |
| **E-mail** | | hyso@hanyang.ac.kr | | | | | |
| **Home University** | | Hanyang University | | | | | |
| **Department** | | Mechanical Engineering | | | | | |
| **Homepage** | | https://ma2p.hanyang.ac.kr/ | | | | | |
| **Course Information** | **Class No.** | | TBA | **Course Code** | COE3052 | | **Credits** | 3 |
| **Course Name** | | Engineering Mathematics 2 | | | | | |
| **Lecture Schedule** | | Mon-Fri / 09:00 ~ 15:00 | | | | | |
| **Course Description** | | In this class, engineering mathematics including complex numbers, conformal mapping, complex integration, linear system of equations, and Gauss elimination will be introduced for students in engineering fields. | | | | | |
| **Course Objective** | | As an engineer, this course provides the basic concept of complex mathematics as a basic mathematical knowledge to know. In addition, it systematically guides complex integration to help students complete major subjects and cultivate mathematical knowledge and scientific thinking skills. | | | | | |
| **Prerequisite** | | * - | | | | | |
| **Materials/Textbooks** | | Advanced Engineering Mathematics / Erwin Kreyszig /John Wiley & Sons | | | | | |
| **Evaluation** | **Attendance** | | 10% | Quiz | | % | | |
| **Assignment** | | % | Mid-term Exam | | 40% | | |
| **Presentation** | | % | Final Exam | | 40% | | |
| **Group Project** | | % | Participation | | 10% | | |
| **Etc.** | | **Evaluation Item** | | | **Ratio** | | |
|  | | | % | | |
|  | | | % | | |
| **Daily**  **Lecture Plan** | **Day 1** | Linear Algebra: Matrices, Vectors | | | | | | |
| **Day 2** | Linear Algebra: Determinants | | | | | | |
| **Day 3** | Complex Numbers and Functions, Hands-on Practice 1 | | | | | | |
| **Day 4** | Complex Differentiation | | | | | | |
| **Day 5** | Midterm | | | | | | |
| **Day 6** | Cauchy’s Integral Theorem, Hands-on Practice 2 | | | | | | |
| **Day 7** | Derivatives of Analytic Functions | | | | | | |
| **Day 8** | Power Series, Taylor Series, Maclaurin Series | | | | | | |
| **Day 9** | Final | | | | | | |