



# HANYANG UNIVERSITY

## Hanyang International Summer School

<b>Faculty Information</b>	<b>Name</b>						
	<b>E-mail</b>						
	<b>Home University</b>						
	<b>Department</b>						
	<b>Homepage</b>						
<b>Course Information</b>	<b>Class No.</b>		<b>Course Code</b>	COE3052	<b>Credits</b>	3	
	<b>Course Name</b>	Engineering Mathematics 2					
	<b>Lecture Schedule</b>	Tue-Fri /					
	<b>Course Description</b>	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.					
	<b>Course Objective</b>	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.					
	<b>Prerequisite</b>	Engineering Mathematics 1					
	<b>Materials/Textbooks</b>	Advanced Engineering Mathematics / Erwin Kreyszig /John Wiley & Sons					
<b>Evaluation</b>	<b>Attendance</b>	10%	<b>Quiz</b>	10%			
	<b>Assignment</b>	%	<b>Mid-term Exam</b>	40%			
	<b>Presentation</b>	%	<b>Final Exam</b>	40%			
	<b>Group Project</b>	%	<b>Participation</b>	%			
	<b>Etc.</b>	<b>Evaluation Item</b>			<b>Ratio</b>		
					%		
			%				
<b>Daily Lecture Plan</b>	<b>Week 1</b>	Day 1	Opening Ceremony				
		Day 2	Linear Algebra: Matrices				
		Day 3	Linear Algebra: Vectors				
		Day 4	Linear Algebra: Determinants				
	<b>Week 2</b>	Day 1	Eigenvalue problems				
		Day 2	Eigenvector problems				
		Day 3	Eigenbases				



		Day 4	Diagonalization
	<b>Week 3</b>	Day 1	Midterm
		Day 2	Vector Differential Calculus
		Day 3	Inner product
		Day 4	Vector product
	<b>Week 4</b>	Day 1	Vector and scalar functions
		Day 2	Gradient of a scalar field
		Day 3	Divergence of vector field
		Day 4	Final