

Global Learning Semesters

Course Syllabus

Course: MATH-285 Complex Analysis for Engineers

Department: Computer Science

Host Institution: University of Nicosia, Nicosia, Cyprus



Course Summary		
Course Code	Course Title	Recommended Credit Hours
MATH-285	Complex Analysis for Engineers	3
Semester Offered	Contact Hours	Prerequisites
Spring	42	MATH-191: Calculus and Analytic Geometry II
Department	Level of Course	Language of Instruction
Computer Science	Lower Division	English

Course Description

The following topics are covered: Complex Numbers and Functions, Conformal Mapping, Complex Integration, Power Series, Taylor Series, Laurent Series, Residue Integration and applications, Laplace Transform, z Transform, Fourier Series, Integrals, and Transforms.

Instructor

Dr Katerina Nicolaou

Course Aims and Objectives

This is an introductory course on complex numbers and analysis with applications to Engineering. It provides students with the necessary complex analysis background needed for advanced courses in signals, systems, electromagnetics, and communications.

Teaching Methods

The course is delivered through a mixture of lectures, handouts, tutorials, practical exercises and assignments.

Course Teaching Hours

42 hours (42 hours lectures/presentations/tutorials). The course is delivered during the Spring semester in 14-weeks (3 hours/week).

Evaluation and Grading

Class Participation/Homework/Quizzes: 0-30%
Mid-Term(s): 30-50%
Final Exam: 40-50%

Readings and Resources

Required Textbook

Erwin Kreyszig, Advanced Engineering Mathematics, Eighth Edition, John Wiley and Sons, Inc., 1999
(ISBN: 0-471-33328-X)