Content

Course Code	Course Name	Semester	Theory	Practice	Lab	Credit	ECTS
MAT325	Theory of Complex Functions	6	3	2	0	5	8

Prerequisites	MAT102, MAT116
Admission Requirements	MAT102, MAT116

Language of Instruction	French
Course Type	Compulsory
Course Level	Bachelor Degree
Objective	Introduce the student to the universe of complex functions and provide basis for topics such as functional analysis, Riemann surfaces, complex geometry and modular forms.
Content	Complex numbers. Holomorphic functions. Power series. Analytic functions. Derivative and limit. Properties of analytic functions. Laurent series. Classification of singularities. Conformal maps. Rouche teorem. Cauchy integral theoremi. Maksimum principle. Residue theorem. Belirli intgegral hesabına uygulamaları.
References	Introuction to complex analysis, Bak & Newman.

Theory Topics

Week	Weekly Contents