

MATE130050	数学物理方法	学分：4	周学时：4
	Method of Mathematical Physics	总学时：72	
预修课程：高等数学，普通物理			
修读对象：材料科学系材料物理专业二年级本科生。			

中文课程简介（150 字以内）

本课程主要内容是复变函数、积分变换和三类数学物理方程的求解三个部分。通过教学，使学生掌握、运用复变函数、积分变换、数学物理方程求解方法等基本数学工具。培养学生逻辑和推演等理性思维能力，训练学生将物理问题归结为数学问题并进行求解的能力，为进一步学习相关的基础、专业理论课打好数学基础。

英文课程简介

The theory of complex functions, integral transform and the solution of three kinds of partial differential equations related to the physical problems are the three major parts in this course. From the course, the students should master the basic concepts in theory of complex functions and can use typical solution methods for the partial differential equations. This course can cultivate the students' logic and deduction ability, improve their abilities of deducing the physical problems to mathematical equations and solve the equations. This is the foundation course of the further studies for the corresponding specific theory courses.