

MATE130062	材料分析	学分：3	周学时：3
	Materials Analysis	总学时：54	
预修课程：普通化学，大学物理，普通化学实验，大学物理实验			
修读对象：大学二年级下学期及以后			

中文课程简介（150 字以内）

本课程系统地介绍材料学相关的各类分析技术的基本原理以及相关的重要仪器，包括红外光谱、拉曼光谱、核磁共振、有机质谱、X 射线衍射、电子显微技术等，课程特色是有机地将各类分析与不同特征与性质的材料研究结合起来，阐明分析技术与材料结构的关系。通过本课程的学习，同学们可以理解基本的材料分析技术与原理。

英文课程简介

Basic principles and important equipments associated with materials sciences are systemically introduced here. The contents include infrared and Raman spectrums, nuclear magnetic resonance, organic mass spectrum, x-ray diffraction, electron microscopy. The distinguishing feature is different analysis techniques and materials with different properties are combined organically, so as to clarify the relationship between analysis techniques and material structure. By this course, basic analysis techniques and principles can be understood.