《工程技术基础II》课程中英文简介

Engineering Technology Fundamentals II

课程代码：2121163B **Course Code：**2121163B

课程名称：工程技术基础II **Course Name：**Engineering Technology

Fundamentals II

学时：48 **Periods：**48

学分：3 **Credits：**3

考核方式：考试 **Assessment：**Examination

先修课程：高等数学、普通物理 **Preparatory Courses：**Advanced Mathematics、

General Physics

《工程技术基础II》是为工业工程专业而开设的课程。通过本门课程的教学，使学生毕业后能迅速适应社会各行业的工程管理实际工作；了解工程力学的基本概念、原理与计算方法；探索它们在实际工作与生活中的应用，并能解决一些实际工程问题。教学过程中，着重培养具有较高的工程技术基础知识的专业实务技能，为学生继续学习和以后从事相关技术、管理与科学研究工作奠定必要的基础。

本课程是一门工业工程专业必修的课程，它涵盖了理论力学和材料力学两门课程中的主要经典内容，课程内容包括：静力学基础、平面力系、空间力系、材料力学的基本假设及杆件内力、拉伸压缩与剪切、扭转、弯曲、强度理论和组合变形。

"Engineering Technology Fundamentals II" is a course of IE major. On the completion of this course, students will be able to cultivate good professional skills of engineering technology in order to be better prepared for their future career of engineering management after they graduate; understand the basic concept, theory and computational method; explore the application of engineering technology in engineering practical work. This course also prepares students for their further study and their career of related field after graduation.

This course is a subject compulsory course of IE students. The purpose of this course is to introduce the classic content in theoretical mechanics and mechanics of materials. The content of this course includes statics, plane force systems, space force systems, assumptions in mechanics of materials and internal force of member, axial tension, compression and shear, twist, bend, strength theory and combined deformation.