软件开发技术与应用课程介绍

一、中文简介：

本课程主要介绍计算机软件设计的基础知识，具体包括：典型的数据结构（包括栈、队列、树、图等）和常用的查找与排序算法；操作系统的基本知识，包括进程控制、内存管理、文件访问、设备通讯等；数据库的基本理论及其操作的具体实现； 网络技术，包括网页的创建及访问、服务器建设等；软件设计、测试、调试、维护、团队协作软件开发等软件工程技术。通过课程的理论学习和上机训练，使学生系统地了解和掌握软件设计的基本技术理论，并且具备一定的软件设计及开发能力。

二、英文简介：

"Software Development Technology and Applications" is one of computer courses in software technology. The course focuses on the basics of software design. The specific works include typical data structures (stack, queue, tree and graph), search and sorting algorithms, the basis of operating system (process, memory, file and hardware), the theory and operations of database, and network communication technology (web access and network server). The knowledge of software engineering such as software design, testing, debugging, maintenance and team software development are also covered. Through theoretical study and computer programming training, students can systematically understand and master the principles of software design, the same as ability for software design and development.