《移动应用开发技术（Android）（双语）》课程中英文简介

Developing Techniques for Mobile Applications (Android)（Bilingual）

课程代码：071103B **Course Code：**071103B

课程名称：移动应用开发技术 **Course Name：**Developing Techniques for

（Android）（双语） Mobile Applications (Android)（Bilingual）

学时：48 **Periods：**48

学分：3 **Credits：**3

考核方式：考查 **Assessment：**Inspection

先修课程：数据结构， **Preparatory Courses：**Data Structure,

面向对象程序设计 Object-Oriented Programming

《移动应用开发技术（Android）》是我校计算机科学与技术专业本科生的专业提升课，本课程是为适应信息时代对移动设备平台应用开发人才的要求而开设的。它以开源的Android移动操作系统平台为基础，全面讲述Android应用开发技术，为进一步学习Android高阶技能（如游戏开发）打下良好的基础。通过本课程的教学，使学生达到：（1）了解Android发展史以及行业前景，能够对Android移动终端设备进行设置和软件安装，了解Android平台上的优秀第三方软件；（2）能够快速搭建Android开发环境及配置Android虚拟机，能够使用Android Studio熟练建立Android应用项目，并使用Java语言进行逻辑实现，熟练掌握Android应用的开发模式与开发技术；（3）能够熟练使用各种界面控件、界面布局管理器以及常见控件的事件处理方法，具有基本的移动网络编程、数据库编程和多媒体开发的能力；（4）具有进一步开发Android高级应用的能力。

本课程按本科水平的内容讲授，重点讲授Android用户界面开发、网络通信以及Android数据存储。主要讲授的内容有：界面控件的使用方法；控件的事件处理机制与侦听方法；Android开发中的四大组件与一个桥梁；JSON以及网络通信框架、SQLite数据库编程及使用方法等。

"Developing Techniques for Mobile Applications" is a promotion subject for undergraduate students majoring in computer science and technology in University. This course is designed to meet the talents requirements of the information age for the development and application of mobile devices. Based on Android, an open-source operating system for mobile devices, this course comprehensively tells about the Android application development technology, and lay a good foundation for further studying Android advanced skills (such as game development). Through the teaching of this course, students can achieve: (1) understanding the development history of Android and the prospect of the industry, setting up Android mobile terminal equipment to carry out software installation, understanding the excellent third party software on Android platform; (2) building Android development environment and the configuration of Android virtual machine, using Android Studio to establish Android project and implementing it using Java language, being familiar with Android development mode and technology ; (3) skilled using a variety of interface widgets, common event processing method for widgets and interface layout manager, having the ability of mobile network programming, database programming and multimedia development; (4) having the ability to further develop Android advanced applications.

This course will teach all the content mentioned above at the undergraduate level, and focus on the Android user interface development, network communication and Android data storage. The main points of teaching are: the using of interface widgets; event processing mechanism and interception method for interface widgets; four components and a bridge in the development of Android; JSON and framework of network communication, SQLite database programming.