课程简介

《遥感与GIS应用》课程中英文简介

Application of Remote sensing and Geographical Information System

课程代码：012253A **Course Code：012253A**

课程名称：遥感与GIS应用 **Course Name：**Application of RS ＆GIS

学时：48 **Periods：48**

学分：3 **Credits：3**

考核方式：考试 **Assessment：**Examination

先修课程：城市管理学、计算机应用基础、 **Preparatory Courses：**City Management，Computer

数据库应用 Science，Applied Database

在人们的日常生活中，80%的信息与空间有关，空间信息是进行城市与区域管理科学研究和实践的重要内容。作为采集和处理空间信息的基本工具——遥感和GIS是在城市和区域管理相关学科中的重要工具和方法。为本科生开设这门课程，目的是让学生掌握遥感和地理信息系统这门学科的基本理论和方法，了解地理信息系统在城市管理以及社会日常生活中的应用，了解在计算机支持下管理、处理、分析空间数据的技术和方法。

因此，本门课程的内容体系要以讲述遥感和GIS的基本概念、原理为基础，以介绍遥感和GIS在城市和区域科学分析中的应用为重点；具体来说包括遥感信息的处理与分析、基于GIS的空间数据采集和数据处理、GIS的空间分析功能等，并结合专业典型应用案例，介绍遥感和GIS在区域经济分析、区域规划、城市管理、城市规划等领域的具体应用。同时，本课程还是一门理论性和实践性都很强的学科，在教学方法上除进行课堂授课，使学生掌握基本理论与方法外，还要求加强实验和实践，同学课程学习使学生掌握简单的遥感和GIS软件操作，通过两方面的合理结合使学生对遥感和GIS这两种先进的空间信息技术有一整体认知和掌握。

There are 80 percent information in daily lift is in relation with spatial information. Large numbers of spatial information in city is very important to scientific research and practice of city management and regional management. As an important tool and method, Remote Sensing (RS) and Geographic information system (GIS) were basic tools for collecting and processing spatial information in city and regional management disciplines. The purpose of this course is to let students master RS and GIS as assistant systems for decision-making. This course will introduce the basic concept, principle, and the application of RS and GIS mainly in city and regional management and planning.

The course of RS and GIS is a subject need theory study and practice. In during of teaching, many practice experiments are necessarily. Based on theory introduce and practice experiment, students can know RS and GIS comprehensively, master how to solve affairs in city and regional management based on RS and GIS. After this course, students also can master the simple software of RS and GIS.