

## **Core Curriculum Information Sheet**

### **Course Information:**

Course name-GIS and Urban Spatial Information Analysis Method;

Course number-M511001B;

Credit-3.0; Learning hours-48.0

### **Classroom Teacher:**

Name of teacher responsible-Zhang Chun; Title-Professor

### **Course Introduction:**

This course introduces fundamental and advanced techniques in ArcGIS for spatial analysis, data visualization, and urban planning applications. Students will learn to integrate GIS tools into urban planning workflows, focusing on practical skills such as map creation, terrain analysis, demographic mapping, and spatial modeling. The course emphasizes hands-on projects aligned with real-world planning challenges, including urbanization rate analysis, slope and aspect mapping, and population distribution studies.

### **Course Objectives:**

Develop proficiency in ArcGIS software for spatial data management and analysis.

Apply GIS techniques to address urban planning issues, such as land use, transportation, and demographic trends.

Cultivate critical thinking through map interpretation and spatial

problem-solving.

Enhance communication skills by creating professional maps with essential cartographic elements.