# LAND USE, INFRASTRUCTURE, AND TRANSPORTATION PLANNING SPECIALIZATION, MUP Program

The Land Use, Infrastructure, and Transportation Planning area of specialization prepares students for careers in planning dealing with orderly, efficient, and equitable urban spatial development. The knowledge and skills necessary for land use, infrastructure and transportation planning embrace:

- The economic and political forces that shape urban form and spatial structure
- The roles of both the public and private sectors in urban development
- · Land information systems including the application of computer models, GIS and remote sensing
- The planning and finance of infrastructure and transportation
- The fundamentals of public budgeting, public finance, and economic development
- The design of policies, plans and projects
- · Using public investments, regulations, and incentives to shape the location and timing of development
- Transportation policy for sustainable development.

Specialization in land use, infrastructure, and transportation planning is provided in two separate tracks. It is expected that students will select courses that together constitute an area of emphasis within land use and infrastructure planning or transportation. In addition to courses offered in this department, additional appropriate courses are offered in such academic units as Landscape Architecture, Geography, Public Affairs, Civil Engineering, Forest Resources, Marine Studies, and Law.

### LAND USE AND INFRASTRUCTURE TRACK:

# Required foundation courses\*

| URBDP 566 | Infrastructure Planning         | Autumn | Whittington |
|-----------|---------------------------------|--------|-------------|
| URBDP 522 | Geospatial Analysis             | Winter | variable    |
| URBDP 561 | Urban Economics & Public Policy | Spring | Shen        |

#### **Electives**

A minimum of two additional courses from within or outside the department, in land use or growth management planning, neighborhood planning, housing, transportation/infrastructure planning, sustainable development, climate change, carbon neutral cities, hazards mitigation or related subjects, to be determined in consultation with the faculty advisor.

#### Thesis or professional project

A thesis or professional project related to this area of specialization

#### **TRANSPORTATION TRACK:**

#### Required foundation courses\*

|     | URBDP 566 | Infrastructure Planning                        | Autumn | Whittington |
|-----|-----------|--|--------|-------------|
|     | URBDP 561 | Urban Economics & Public Policy                | Spring | Shen        |
| And | d either: |  |        |             |
|     | URBDP 532 | Current Topics in Transportation Planning      | Winter | Shen        |
| OR  |           |  |        |             |
|     | URBDP 533 | Sustainable Transportation and the Environment | Spring | Bae         |

# **Electives**

A minimum of two additional courses from within or outside the department, in transportation/infrastructure planning, transportation engineering, land use or growth management planning, housing, sustainable development, climate change, carbon neutral cities, hazards mitigation or related subjects, to be determined in consultation with the faculty advisor.

# Thesis or professional project

A thesis or professional project related to this area of specialization

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<sup>\*</sup> Except where noted, required courses can be taken in the 1st or 2nd year. The schedule is effective for the 2024-2025 academic year. Course selection may change in subsequent years.