

Spatial Analysis Graduate Certificate Program Course Requirements

The Spatial Analysis Certificate program consists of 12 credit hours.

At least 12 credit hours selected from the following groups of courses (may substitute a practicum for three credits)

APPLIED REMOTE SENSING

Remote sensing core courses:

- CLIMATE 532 Radiative Transfer (3 credits)
- NRE 541 Remote Sensing for Environmental (4 credits)

Additional remote sensing courses:

- EECS 430/CLIMATE 431 Radiowave Propagation and Links (4 credits)
- CLIMATE 585/SPACE 585 Remote Sensing (3 credits)

GEOGRAPHIC INFORMATION SYSTEMS & Spatial Analysis

GIS core courses (only one of these two courses can be counted):

- NRE 531 Principles of Geographic Information Systems (4 credits)
- URP 520 Introduction to Geographic Information Systems (3 credits)

Additional GIS courses:

- URP 521 Geographic Information Systems (3 credits)
- NRE 540 GIS in Natural Resource Applications (2 credits)
- NRE 534 GIS and Landscape Modeling (3 credits)
- NRE 543 Environmental Spatial Data Analysis (3 credits)
- BIOSTAT 696 Spatial Statistics (3 credits)

3. RELATED INFORMATION SCIENCE

Students may count one of the following towards the Certificate:

- ENG 477 Principles of Virtual Reality (3 credits)
- CMPLXSYS 530 Computer Modeling of Complex Systems (3 credits)
- SI 654 Database Application Design (3 credits)
- SI 649/EECS 548 Information Visualization (3 credits)
- SI 614/CLIMATE 605 Climate Change Informatics (3 credits)