

INTRODUCTION TO REMOTE SENSING (GIS 12)

<u>Pathways</u> + <u>Writing Intensive</u> + <u>Elective Course (Scientific World – E)</u> (3 Credits; 4hrs) This course is offered in <u>On-campus</u> and <u>Online modes in all semesters.</u>



Course description: The 3 credit 4 hr. course will introduce you to basic concepts in Remote Sensing (RS) and provide an opportunity to acquire hands-on industry standard skills. RS techniques are used to analyze different types of geographic data acquired from satellites and aircrafts for creating intelligent maps and spatial solutions. For example image analysis of a time-series of satellite imagery may be used to map pollution and its sources. RS techniques may be used to map changes in vegetation – a key input in modeling climate change and global warming. Very high-resolution satellite imagery may be used to visualize solar energy potential in a city. Satellite data may also be used to create an entire city in three (3) dimension for mapping microclimatic variations or mitigating the effects of urban heat island. Whether you are an aspiring engineer, environmental enthusiast, budding health worker, or planner or environmental major, RS techniques aids visualization and mapping of complex spatial relationships. Whether you are a Liberal Arts, Engineering or Science major your acquired skills in GIS will enhance your chances to secure employment in a high growth geospatial industry.

Course syllabus: [Prerequisites: RDL 2 and ENG 2 and MTH 5, if required]

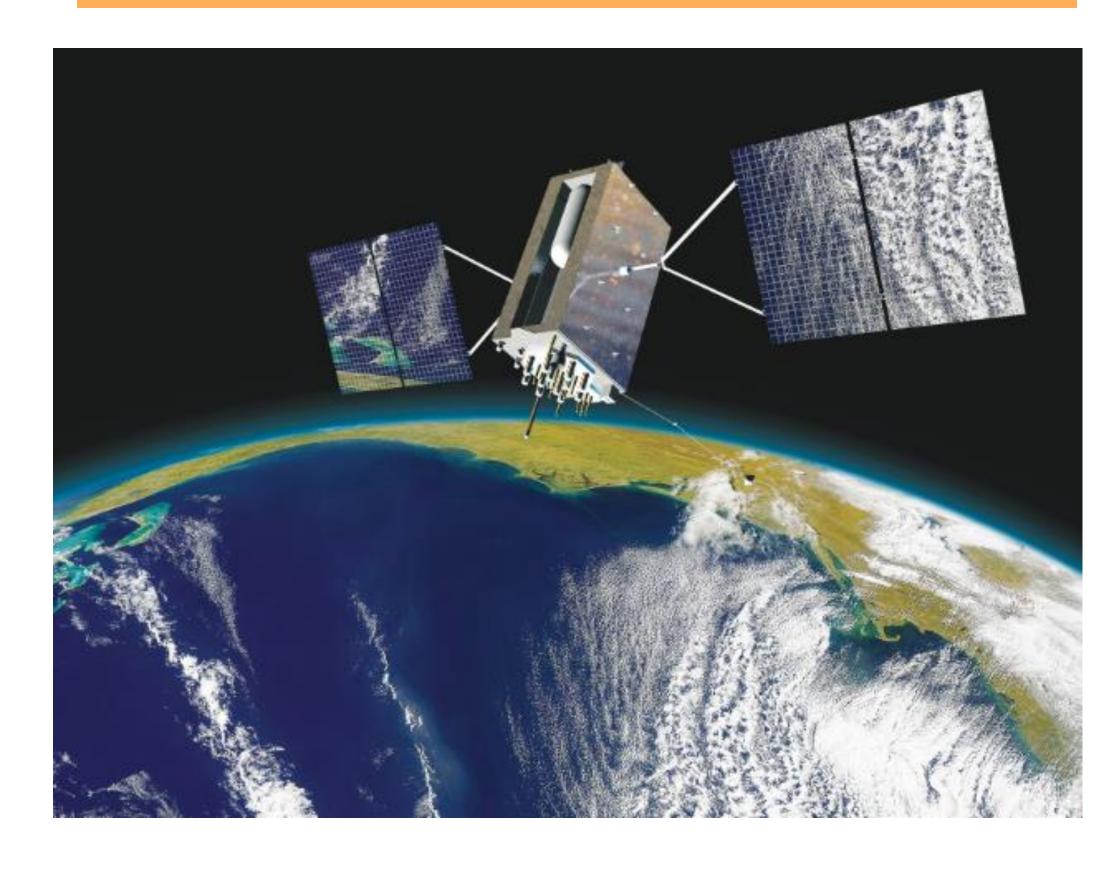
The course will be taught by a series of lectures and lab work. Key concepts in RS will be taught by lectures and hands-on training will be provided in the state-of-the-art geospatial computer lab. Assessment will be by a combination of quizzes, written assignments and term paper. * For the online mode students will need to purchase the Terrset software that runs on Windows OS system only.

Ask a question

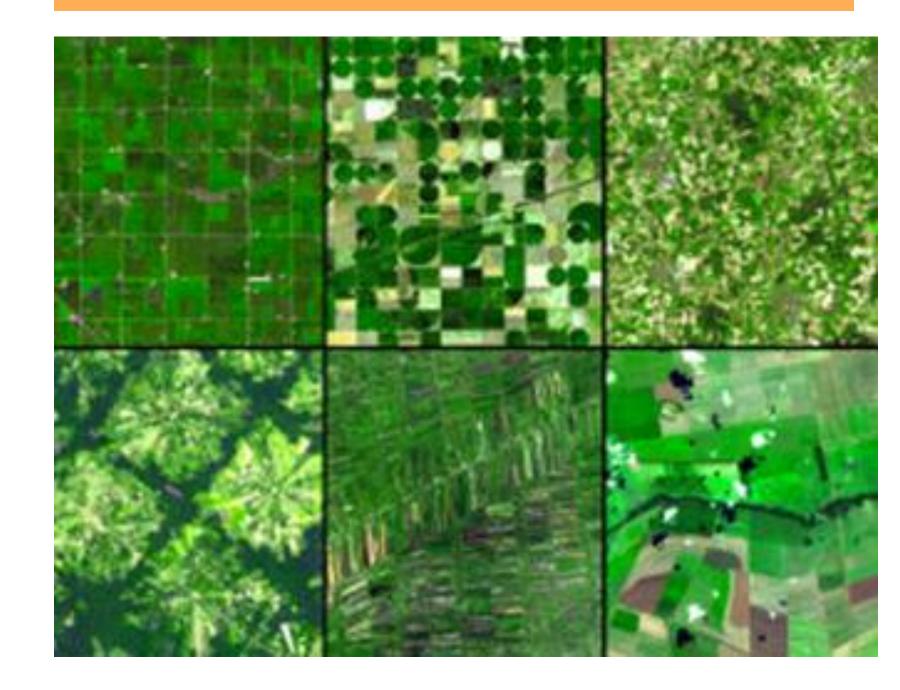
Acquire data

Analyze the data

Remotely Sensed Data



Analyzed and
Classified Remotely
Sensed Data



Get hands-on training at the State-of-the-Art
Geospatial Computing Center
(ME 330)

Emerging Discipline
High Growth Industry
Many Job Opportunities
Many Scholarships and
Internship Opportunities

BGCCCIGeo

Applications for Planning, Agriculture,
Homeland security, Social sciences,
Emergency, Disasters, Pollution,
Transportation, Mining, Archaeology,
Environment

Examine the results

Implement policies