Introduction to satellite remote sensing and imaging (ENGR 30100)

Research Project

A final project worth 20% of total points is required in this course. It is left to the students to choose a topic, based on his/her experience and interest. I strongly encourage small group (of 3 students) to choose a topic that has personal or professional relevance. It could be a project or a study topic you would like to carry forward into other courses.

The project must be technical; the student will need to acquire remote sensing and GIS data (if needed) over a geographic area of interest and use software tools introduced in the course to solve a problem or analyze a scenario. There are numerous public sources of data that can be discovered through Internet-based clearinghouses. The final project deliverable should be a map or series of maps, with written documentation detailing the data sources, methods used, and conclusions reached. Deliverables will include data, a written report (5 pages, single line spacing), and a short VoiceThread presentation or Story Map.

The final project will unfold over the last half of the course session. Students will begin by proposing ideas and providing each other with suggestions and feedback. The next step will be to conduct a search for data; many students find they have to make adjustments to their initial project idea on this point based on the availability of appropriate data. Students will be asked to write an outline of their project approach, documenting data sources, which will again be reviewed by the instructors and classmates. We encourage students to use the discussion to brainstorm final ideas with other students. The final project must be a group effort. Each student must contribute equally turn in a complete the project.