NRE 441
Remote Sensing of Environment

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Whether using air- or space-borne systems, remote sensing is increasingly used to inventory, monitor, and assess Earth’s valuable and ever changing resources at scales from local to global.

The lectures cover: fundamentals of energy sources and radiation principles, sensor systems, image characteristics, analysis methods, and problem analysis to determine which remote sensing systems can supply needed data. At the conclusion of the course, student presentations highlight case studies in the application of remote sensing to a diversity of environmental issues of their choosing.

The Lab portion of the course provides: discussion, hands-on interpretation, and measurement of maps, airphotos and satellite images; plus computer image classification, change detection, and land-cover mapping (using ERDAS IMAGINE software).

This course is intended for graduate and advanced undergraduate students. Prerequisites are junior standing and/or NRE 239. 4 credits.

Lecture: T, Th 10-11
Lab:       Section 1 M 1-5
           Section 2 M 6:30-10:30

Where did Ann Arbor and vicinity change between 1985 and 1990? What different types of change occurred?