SYSTEMS DESIGN ENGINEERING

Remote Sensing Systems

SYDE 730 - *Topic 2* **WINTER**

This course focuses on the overall remote sensing data production system, from electromagnetic propagation (EM) to data delivery.
Primary course sections include:

1. Transmission and Scattering Behaviour of EM Radiation
2. Operational Workings of Optical and Synthetic Aperture Radar (SAR) Systems
3. Generation and Interpretation of Image Products (spatial statistics, spectral transforms, calibration,
   DEMs, etc.)

Lectures can be further guided by the interests of participating students. Previous experience with remote sensing systems is not a necessity. Students will develop a strong understanding of the source and information content of remotely sensed data and the proper uses of such data.

SYDE 730 - *Topic 2* is an enriched, graduate level version of SYDE 534 in which students are expected to complete a substantial term project in addition to the requirements of SYDE 534. The project typically involves the implementation of application of advanced algorithms to remotely sensed data beyond the material covered in the course.

INSTRUCTOR: D. Clausi
E-MAIL: dclausi@uwaterloo.ca