Looking for an exciting course to enroll in for Semester 2 2014?

UNSW and NASA/JPL will jointly offer a one-week intensive short-course, GMAT 9606 Radar Remote Sensing (6 UOC) for postgraduate students. Together with a sister course “GMAT9600 Principles of Remote Sensing”, this course will prepare you for a range of job opportunities in remote sensing and other geo-spatial professions.

When: the mid-semester break from 29 September to 3 October 2013, 9am – 5pm.
Who is eligible: The course is open to ALL UNSW postgraduate students, coursework or by research.

What is special about radar remote sensing?

Remote sensing has been termed as the "eye" for spatial IT systems. With many advantages over optical remote sensing, radar remote sensing is a special "eye" that can see through clouds, smoke and haze, day and night. It has many potential applications – as just one example, the 2011 major floods in Queensland were mapped by UNSW using remote sensing.

Lecturers and content:

The course will be presented by Dr Scott Hensley of NASA/JPL and Associate Professor Dr Linlin Ge of UNSW. Topics to be covered range from an introduction to radar remote sensing to advanced radar interferometry. A wide range of applications will also be addressed, such as flood and oil spill monitoring, generation of digital elevation models, ship detection and monitoring ground displacement due to mining, earthquakes and extraction of groundwater, oil and gas.

Comprehensive course notes and morning and afternoon tea will be provided. Interested students are encouraged to contact A/Professor Linlin Ge (l.ge@unsw.edu.au) for further details. Coursework postgraduate students can enroll in this course by themselves through MyUNSW. But postgraduate by research students cannot enroll by themselves online. They need to speak to their supervisor and postgraduate coordinator or Head of School for approval and then go to GRS to get enrolled by filling out the GRS research student enrolment form.

Assessment structure:

- An open-book written exam which contributes to 70% of the total mark, and
- Assignments and lab practicals will contribute a further 30%.
About the course coordinator:

Dr Linlin Ge is an Associate Professor of remote sensing and earth observation in the UNSW School of Civil and Environmental Engineering. He has been an active researcher in the field of earth observation since 1985. Among many other prestigious awards, A/Professor Ge and his team’s work to support the Sichuan Earthquake rescue effort won them the JK Barrie Award for Overall Excellence at the 2008 Asia-Pacific Spatial Excellence Awards. He was named "NSW Scientist of the Year 2009" in the category Physics, Earth Sciences, Chemistry and Astronomy for his work in near real-time satellite remote sensing.

About the co-lecturer:

Dr. Scott Hensley joined the staff of the NASA Jet Propulsion Laboratory in 1992. Dr. Hensley has worked with a range of satellite and space shuttle missions such as ERS-1, JERS-1 and SIR-C data for monitoring earthquakes and volcanoes. He was a major contributor to the ROI-PAC, the most popular software package for processing interferometric radar remote sensing data. He was the Chief Scientist for GeoSAR, a simultaneous X-band and P-band radar interferometer for mapping above and beneath the canopy, which is now commercially operational. He was the technical lead of the Interferometric Processor Development Team of the NASA Shuttle Radar Topography Mission (SRTM), a shuttle-based interferometric radar used to map the Earth’s topography between ±60° latitude within only 11 days. He is currently the principal investigator of NASA’s UAV SAR program (http://uavsar.jpl.nasa.gov/).