



Master's Degree in Geomatics and Natural Resources Evaluation

IAO 31th edition

2nd November 2010 - 28th June 2011

AIM OF THE COURSE

- Provide participants with a common background in Geomatics and its application to various environmental disciplines.
- Training in Remote Sensing data interpretation, along with accurate field data collection.
- Setup and use of a GIS, in order to carry out natural resources inventory and evaluation.

COURSE STRUCTURE

- FIRST MODULE: Theoretical part (November to February), lectures and laboratories.

Basic Topics

- Introduction to informatics
- Cartography
- Photo-interpretation
- Principles of remote sensing
- Digital image processing
- Laboratory of image processing
- Geographical Information Systems
- Laboratory of Geomatics

Natural Resources Evaluation

- Climatology
- Geology and geomorphology
- Agriculture and land use
- Land cover and vegetation ecology
- Forests
- Soils
- Land degradation

Seminars

- SECOND MODULE: A case study (February to June); the participants will work together in an interdisciplinary way.
- Three weeks of fieldwork. Fieldwork took place in Bolivia (1997, 1999), China (2005), Eritrea (1995), Morocco (2001, 2002, 2007), Tunisia (1993, 2000, 2004), Senegal (2003), Ethiopia (2008, 2009) and Italy (1989, 1991, 2010).

GENERAL INFORMATION

- The Course is open to 16 participants having a University degree (B.Sc. or M.Sc.) in Agriculture, Forestry, Geology, Natural Sciences or other environmental disciplines.
- 12 fellowships from the Italian Ministry of Foreign Affairs are available for candidates from the following countries: Senegal, Egypt, Ethiopia, Lebanon, Tunisia, Palestinian Territories
- The Master awards 60 academic credits (ECTS)
- The Master fee is € 2,000 including all course activities (lessons, laboratories and seminars)
- The Master activities are situated in the IAO (classes and accommodation)
- IAO will provide funding for the fieldwork (travel and accommodation)

APPLICATION

- The applications for EU candidates must be presented at the University of Florence by October 2nd 2010. For more information please consult the University web site.
- Candidates wishing to apply for fellowships: there is no application form for this Master; the following documentation must be presented to local Italian Embassies by July 31st 2010:
 - *Curriculum vitae* in English (we suggest to use the EU CV format – e.g. <http://europass.cedefop.europa.eu/>)
 - Statement of your present post and outline of responsibilities, and how you think this Master will help you.
 - University Diploma, with the list of courses and degrees
 - Certificate of fluency in English (TOEFL > 500, BCT/IELTS > 5.5, Cambridge CPE/CAE or equivalent)
 - Supporting statement(s) from local academic or government institution(s)
- For more information please consult the IAO web site at <http://www.iao.florence.it/training/geomatics/>

STAFF

Directors: Prof. Stefano Carnicelli (stefano.carnicelli@unifi.it), Dr. Luca Ongaro (ongaro@iao.florence.it)
Tutor: Dr. Valeria Alessandro (valessandro@iao.florence.it)