

## Eligible Countries for academic year 2013-2014

### → ETHIOPIA

Italian Embassy – Italian Cooperation Office  
Villa Italia – Kebena' – P.O. Box 1105, Addis Abeba  
Ph. +251 11 1239600/01/02 – Fax +251 11 1239603  
[utl@itacaddis.it](mailto:utl@itacaddis.it) - [www.itacaddis.org](http://www.itacaddis.org)

### → KENYA

Italian Embassy  
International House, Mama Ngina st., P.O. Box 30107, Nairobi  
Ph. +254 20 2247750 – Fax +254 202247086  
[ambasciata.nairobi@esteri.it](mailto:ambasciata.nairobi@esteri.it) - [www.ambnairobi.esteri.it](http://www.ambnairobi.esteri.it)  
Italian Cooperation Office  
Ph. +254 20 319198/9 – Fax +254 20 2229141  
[cooperazione.nairobi@esteri.it](mailto:cooperazione.nairobi@esteri.it)  
[www.nairobi.cooperazione.esteri.it](http://www.nairobi.cooperazione.esteri.it)

### → TANZANIA

Italian Embassy  
316, Lugalo Rd. – Upanga – P.O. Box 2106, Dar es Salaam  
Ph. +255 22 2115935/6 – Fax +255 22 2115938  
[segr.dar@esteri.it](mailto:segr.dar@esteri.it) - [cons.dar@esteri.it](mailto:cons.dar@esteri.it)  
[www.ambdaressalaam.esteri.it](http://www.ambdaressalaam.esteri.it)

### → UGANDA

Italian Embassy  
Plot n. 11, Lourdel rd., Nakasero – P.O. Box 4646, Kampala  
Ph: + 256 414 250450 – Fax: + 256 414 250448  
[segreteria.kampala@esteri.it](mailto:segreteria.kampala@esteri.it) - [www.ambkampala.esteri.it](http://www.ambkampala.esteri.it)

### → MOZAMBIQUE

Italian Cooperation Office  
381, Rua Damião dei Góis, Maputo  
Ph. + 258 21 491782/7/8 – Fax. +258 21 491725  
[utl@italcoop.org.mz](mailto:utl@italcoop.org.mz) - [borsestudio@italcoop.org.mz](mailto:borsestudio@italcoop.org.mz)  
[www.italcoopmoz.com](http://www.italcoopmoz.com)

### → SENEGAL

Italian Cooperation Office  
69, J. Bougnicourt (ex Kléber), Dakar  
Ph. + 221 33 8828711 – Fax + 221 33 8828424  
[cooperazione.dakar@esteri.it](mailto:cooperazione.dakar@esteri.it)  
[www.dakar.cooperazione.esteri.it](http://www.dakar.cooperazione.esteri.it)

## Istituto Agronomico per l'Oltremare

Via A. Baldesi 14, 50131 Florence, Italy  
Ph. +39 055 5061500 – Fax. + 39 055 5061333  
[www.iao.florence.it](http://www.iao.florence.it)

## IAO – Istituto Agronomico per l'Oltremare

IAO is an institute of the Italian Ministry of Foreign Affairs, a technical-scientific body for research, training, consulting and technical assistance in the fields of tropical and sub-tropical agriculture and environmental protection. Based in Florence, IAO is a centre of excellence for advanced education in Irrigation and in Geomatics. The institute provides technical assistance for international cooperation programs in several countries, focusing on poverty reduction, food security and sustainable development.

→ [www.iao.florence.it/training/irrigation](http://www.iao.florence.it/training/irrigation)

## University of Florence – GESAAF

### Department of Agricultural, Food and Forestry Systems

GESAAF works together with several Italian research organizations, and it provides technical support to institutions, as well as public and private bodies. The Department faculty members have a well established tradition in studying, teaching, researching and consulting in the field of tropical and sub-tropical agriculture. GESAAF is involved in international cooperation projects in developing countries, promoted by the Italian Ministry of Foreign Affairs, the European Commission, Italian firms and NGOs.

→ [www.gesaaf.unifi.it](http://www.gesaaf.unifi.it)

→ [www.unifi.it/cmpro-v-p-9624.html](http://www.unifi.it/cmpro-v-p-9624.html)

## Master Staff

Supervision: **Dr. Giovanni Totino**, Director General, IAO  
Academic coordination: **Prof. Elena Bresci**, University of Florence  
Project coordination: **Dr. Tiberio Chiari**, IAO

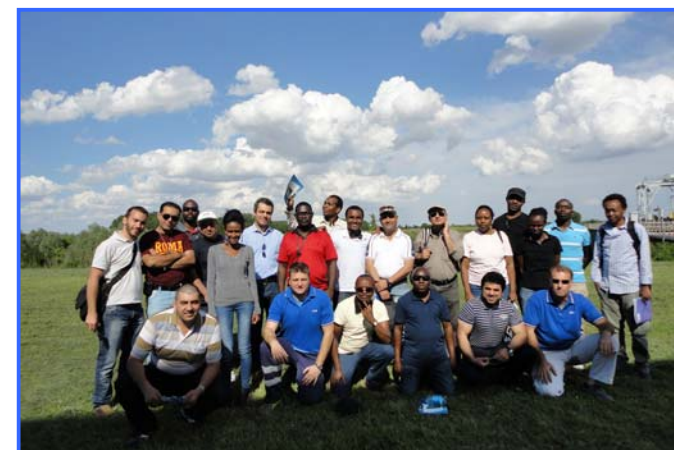
Staff E-mail: [irrigation@iao.florence.it](mailto:irrigation@iao.florence.it)



The program is funded by the General Direction for Development Cooperation (DGCS) of the Italian Ministry of Foreign Affairs.

## University of Florence – GESAAF

Via S. Bonaventura 13, 50145 Florence, Italy  
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## First Level Master Degree in

# Irrigation Problems in Developing Countries

Edition 6 | Academic Year 2013-2014

Florence, Italy

12 November 2013 – 30 June 2014

## Presentation

Emerging countries in sub-Saharan Africa and the Middle East, often featuring wide dry-climate regions, hold a great potential in the development of irrigated lands. At the same time, available irrigation systems can be improved in order to overcome low efficiency problems. The planning of effective and sustainable irrigation schemes, along with the rehabilitation of existing structures and the improvement of irrigation management should be all considered priorities for rural development.

The aim of this First Level Master Degree program is to build and strengthen the skills of local officers and researchers in the fields of irrigation, drainage and water management. The Master, now opening its 6<sup>th</sup> edition, has awarded degrees to some 75 students coming from several African countries and the Middle East.

## Organisation

The program is jointly organized by IAO – Istituto Agronomico per l’Oltremare, and the University of Florence – GESAAF, it is funded by the Italian Ministry of Foreign Affairs, and it awards a First Level Master Degree according to the Italian higher education system: [www.miur.it/guida/capitolo3.htm](http://www.miur.it/guida/capitolo3.htm).

Academic activities will last about 8 months, from 12 November 2013 to 30 June 2014. Lectures, seminars, case studies, practical sessions and field visits will be held in the first 6 months, while the last 2 months will be dedicated to the preparation of the Master thesis. Attendance is always required.

The Master awards a total of 60 academic credits, including modules, workshops and final thesis, in accordance with the European Credit Transfer and accumulation System (ECTS).

Classes will be held at IAO Training Centre in Florence. All participants from eligible countries will be hosted in the facilities of the Training Centre.

English is the working language.

## Participants

The Master is planned for max 25 students, including **11 participants eligible for scholarships from Ethiopia, Kenya, Tanzania, Uganda, Mozambique and Senegal**. The Master is primarily addressed to public administration officers, extension service employees and researchers working in the fields of irrigation, drainage, and water management for rural development.

## Syllabus

The Master includes the following 13 modules:

- Principles of Fluid Mechanics and Irrigation Engineering
- Applied Hydrology
- Principles of Irrigation Techniques
- Irrigation Methods
- Drainage Techniques
- Diagnostic Analysis of Irrigation Systems
- Diagnostic Analysis: Priority of Solutions
- Users Participation in Irrigation Systems Design and Management
- Information Technology in Irrigation and Drainage
- Deficit Irrigation
- Irrigation with Saline Water
- Irrigation with Non Conventional Water
- Functioning and Monitoring of Hydraulic Structures in Irrigation Systems.

A number of seminars will be selected from the following topics:

- Principles of Geomorphology
- Climate change in Developing Countries
- Remote Sensing for environmental Monitoring
- Environmental and Natural Resources Economics
- Equitable and Ethic Exploitation of Water Resources
- Drip Irrigation Applications
- Introduction to GIS (Geographic Information System)
- Soils Hydrological Behaviour

In addition, a number of technical visits will be carried out at selected facilities, laboratories and institutions in order to complement in-class training with field experiences. In previous years such visits have targeted the following: Center for Irrigation Technology, Arezzo; Consortium for the Land Reclamation of Emilia Romagna Region, Bologna; Consortium for the Land Reclamation of the Capitanata Region, Foggia; Bilancino Dam, Florence; Water potabilization plant, Florence; FAO – Land and Water Division, Rome; specialized fairs in the agricultural sector.



## Admission Requirements

Applicants must hold at least a 3-year Bachelor’s degree from a recognized university in Environmental Engineering, Agriculture or related disciplines. Professional experience is considered an asset, while full proficiency in the English language, both in speaking and writing, is required. Moreover, a good command of standard software and IT tools is recommended.

## Scholarship Application Procedure

Eleven participants from eligible countries will be awarded a scholarship covering university tuition, a return air ticket from the capital city of their home country to Florence, food and lodging at IAO Training Centre throughout the program, medical insurance and a small pocket money allowance.

All interested candidates must download the **Application Form** from [www.iao.florence.it/training/irrigation](http://www.iao.florence.it/training/irrigation). The Application Form must be filled in all its sections, and it must be submitted to the local Italian Embassy, or Italian Cooperation Office, together with the following documents:

- Full CV (EU format recommended);
- Motivation letter;
- Copy of the bachelor’s degree;
- Certificate of English proficiency (e.g. TOEFL, IELTS, Cambridge) if university studies were carried out in a different language;
- Supporting statement from local institutions or employer;
- Additional Training certificates, if available.

Selected participants will be formally notified by mid-October and, before departure, they will be asked to collect the following documents, required for enrolling at the University of Florence:

- Copy of the Bachelor’s degree, authenticated by the local Italian Embassy;
- Italian certified translation of the degree;
- “Dichiarazione di valore” / Statement of Value, issued by the local Italian Embassy;
- Employer’s agreement to support the candidate’s participation in the Master program.

The application for a permit of stay in Italy for the duration of the course will be arranged by the Master staff.

**Deadline for applications: 12 September 2013**

**Candidates not eligible for scholarship should apply directly to the University of Florence**