



First level Specializing Master

**SUSTAINABLE MANAGEMENT
OF RESOURCES
AND CULTURAL HERITAGE
FOR LOCAL DEVELOPMENT:**
EMPOWERING HIGHER EDUCATION IN AFRICA

THE ORGANIZERS

The Specializing Master is Supported by the IHEA Foundation – Italian Higher Education with Africa, established in 2020 by six leading Italian Universities: Università degli Studi di Napoli Federico II, Università degli studi di Padova, Università degli Studi di Firenze, Politecnico di Milano, Università La Sapienza di Roma, Alma Mater Studiorum Bologna



POLITECNICO
MILANO 1863



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA



UNIVERSITÀ
DEGLI STUDI
FIRENZE



UNIVERSITÀ DEGLI STUDI DI NAPOLI
FEDERICO II



UNIVERSITÀ
DEGLI STUDI
DI PADOVA



SAPIENZA
UNIVERSITÀ DI ROMA

MISSION AND CONTEXT

Africa's role is central in global policies and will become increasingly strategic along the consolidation of national economies and the population growth. In the current context where the challenges are complex and multidisciplinary – sometimes also unpredictable as experienced in 2020 – the role and responsibility of academic training and scientific research play a primary role as they are capable of producing change via innovation and knowledge.

The **mission** of this Specializing Master course is to support African Universities by contributing to upgrading their staff and nurturing a qualified generation of skilled young researchers and lecturers.

The **specific objective**, is threefold:

- to increase the attendants' knowledge about the global challenges of sustainable development and clarify the implications for the Continent
- to provide the attendant's with instruments to pursue research and education actions in this field and being able to transfer their knowledge within their home university
- to enforce the partnership between the attendants' home universities and Italian universities

TRAINING FORMAT



PROGRAM

360 hours of lectures and laboratories design around 6 didactic modules and a final project work



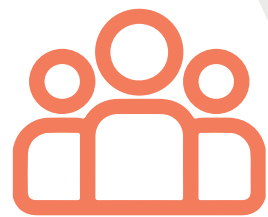
PERIOD

From October 15th, 2021 to April 15th 2023



LANGUAGE

English



TARGET

Young lecturers and junior researchers from Ethiopian Higher Education and/or Research Institutes



AWARDED TITLE

Specializing master Sustainable Management of Natural Resources and Cultural Heritage: Empowering higher education in Africa



BLENDED LEARNING

Didactic modules will be scheduled during selected weeks. Weekly workload is desing to allow candidates mantaining their research and teaching commitments. Lesson in presence will be held in Politecnico di Milano and Italina School in Addis Abeba*

TIMING

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- July 5th 2021**
Application opening
 - September 5th 2021**
Application deadline
 - September 8th 2021**
Start of the selection phase
 - October 15th 2021**
Start of the didactive activities

CALENDAR

Module 1: Sustainable development and the Africa challenge | October 18th - November 17th 2021

Module 2: Project Research Management - Innovative Teaching | January 15th - February 14th 2022

Module 3: Sustainable Food | March 15th - April 21st 2022

Module 4: Energy Resources, Power Technologies, Energy Scenarios and Planning | June 14th - July 23rd 2022

Module 5: Cultural Heritage | September 15th - October 21st 2022

Module 6: One Health: introduction to system thinking, Health and Sustainable Lifestyle, Pollution and Health | November 8th - November 12th 2022

Project Work: November 15th 2022 - February 15th 2023

Final Exam: April 2023

MODULE 1 | Sustainable development and the Africa challenge

Università degli Studi di Napoli Federico II

The introductory module focuses on the Agenda 2030 and the SDGs implementation in Africa. The analysis of the progress towards these SDGs on the Continent - with special attention to the management of natural resources and cultural heritage - will be carried out by adopting a retrospective and a prospective approach, investigating the causes of unsustainability in specific cases.

MODULE 2 | Project Research Management - Innovative Teaching

Università degli Studi di Padova

This module will focus on the EU and International funded calls - where to find data and opportunities, Cooperation opportunities among Universities, research and public or private institutions. It will also focus on innovative teaching and monitoring systems and cooperation projects and internationalization management.

MODULE 3 | Sustainable Food

Università degli Studi di Firenze

The overall objective of this module is to frame the issue of Sustainable Food into a more general framework of development economics. The classes will provide an introduction to agrifood systems and rural development in LDCs.

MODULE 4 | Energy Resources, Power Technologies, Energy Scenarios and Planning

Politecnico di Milano

The main goal of the module is to widen the participants' knowledge of the energy sector examining energy systems at different scales and highlight the main challenges in the energy sector for the future decades, thus giving constraints and opportunities for energy technology development.

MODULE 5 | Cultural Heritage

Università La Sapienza di Roma

The module examines different aspects of cultural heritage in Africa focusing on: the legal framework and wide-ranging actions of the main international UN-based actors working in Africa; the role and functions of preventive archaeology; the relationships between cultural heritage, local communities and society; digital humanities.

MODULE 6 | One Health: introduction to system thinking, Health and Sustainable Lifestyle, Pollution and Health

Alma Mater Studiorum Bologna

The main goal of the module will be to introduce the students to One Health approach and system thinking at human/animal/environment interface. Student will be also introduced to understand how Nutrition and Physical Activity are associated to a Healthy and Sustainable Lifestyle. Consideration on the nexus between Pollution and Health will be also subject of this module.

- understanding how Nutrition and Physical Activity are associated to a Healthy and Sustainable Lifestyle
- Understanding of the nexus between Pollution and Health

ELIGIBILITY FOR ADMISSION

Admission is selective and the requirements are:

- 1) Bachelor or Master of Science in disciplines connected to the topics of the Specializing Master:
 - copy of the degree in the original language and its translation into Italian/English/French or Spanish
 - copy of the transcripts with the list of exams in the original language and their translation into Italian/English/French or Spanish or Diploma Supplement
 - copy of a valid passport
 - Curriculum vitae
- 2) Motivational letter by the candidate
- 3) Letter of support by the candidate's home University (preferably issued on headed letter by an institutional representative (head of the unit/department of the candidate))

Moreover:

- To hold a position in a local universities (lectures, assistant, fellow researchers...) will be an additional asset of merit.
- Good knowledge of written and oral English is requested, a language certification will also be an additional asset of merit

SCHOLARSHIPS

Scholarships covering the entire cost of the Specializing Master will be available for 35 applicants coming mainly from Ethiopian Higher Education and/or Research Institutes.

ADMISSION STEPS

STEP 1 - Upon receipt of applications, the Department of Energy will assess the eligibility criteria as above described, for each applicant with respect to the degree requirement. Applicants who pass this first step will move on to step 2. The Department of Energy of Politecnico di Milano will share the list of the eligible candidates with the IHEA Foundation.

STEP 2 - The IHEA Foundation will identify, at its sole discretion, the applicants to be enrolled through evaluation of qualification, letter of motivation and letter of support. Based on this evaluation IHEA Foundation, at its sole discretion, might invite for an individual interview a selected group of candidates. During the interview the following elements will be assessed:

- provided with capacity to communicate clearly and accurately in spoken and written English
- stimulated by Sustainable Development, Agenda 2030 and Agenda 2063

- endowed with good communication skills
- committed to work on a project work for his/her home University on one of the subject of the Specializing Master
- availability to act as trainers of trainees within the home University to multiply the benefit and the impact of the Specializing Master in their home University

The interview follows a defined structure and patterns will be supplied with the necessary template with questions for the interview and an interview assessment sheet. To ensure transparency and quality of the interviews the interview is public. Individual applications will not be taken into consideration, as it is a requirement to be referred by the applicant's home University. The Specializing Master will be available to additional postdoc fellows and young lecturers at full cost. The list of the selected candidates will be shared with the Department of Energy of Politecnico di Milano.

SCIENTIFIC COMMITTEE

Prof. Giovanni Carlo Cereti

Università La Sapienza di Roma

Prof.ssa Emanuela Colombo

Politecnico di Milano

Prof. Guido D'Urso

Università Federico II di Napoli

Prof.ssa Giorgia Giovannetti

Università degli Studi di Firenze

Prof.ssa Alessandra Scagliarini

Alma Mater Studiorum Bologna

Prof. Piergiorgio Sonato

Università degli Studi di Padova.



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Contacts

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