Invitation letter to apply for Master in Fertilizers Science and Technology

Dear Students

You have a bachelor or an engineering degree and you are looking for a master with real career opportunities in the domains of research, development and industry for the production of new generations of fertilizers for agriculture, join our Master in Fertilizers Science and Technology from Mohamed VI Polytechnic University (www.um6p.ma). A master's degree unique in the world with a world-renowned faculty (contact: esafe@um6p.ma).

In line with its civic commitment, UM6P, a meritocratic university, supports the brightest students through an attractive system of academic scholarships and financial aid grants.

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MASTER’S DEGREE
Fertilizer Science & Technology

Science & Technology Cluster

Mohammed VI Polytechnic University is an institution oriented towards applied research and innovation, which aims to be among the world-renowned universities in these fields. The University is committed to an education system based on the highest international standards in crucial fields such as science and technology, humanities, economics and social sciences for the sustainable economic development of Morocco and the African continent. This allows Mohammed VI Polytechnic University to consolidate Morocco’s avant-garde position in these fields through the implementation of a unique partnership approach and the strengthening of its academic and executive education programs in relevant skills, for the future of Africa. Located in the town of Benguerir, near Marrakech, and situated in the heart of Mohammed VI Green City, Mohammed VI Polytechnic University intends to combine local roots and a national, continental and international influence.

Science & Technology Cluster


The Cluster offers degrees in Engineering, (academic and professional) Undergraduate degrees, Master’s and Ph.D. degrees, as well as executive training programs. The Science & Technology Cluster puts experimentation at the heart of its programs (learning-by-doing approach). In a unique approach to train professors, doctoral students, graduate and undergraduate students, the various entities of the cluster have “living labs”, working and training platforms, (mining facilities, experimental farms, factories, cities, etc.) open to the scientific community, researchers and students to put their learnings to practice.

ESAFE School of Agriculture, Fertilizers and Environmental Sciences

ESAFE is the school of Agriculture at Mohammed VI Polytechnic University aiming to become a leader in the sector of education and research in Africa. ESAFE trains agricultural experts to contribute to food security by advancing research, improving fertilizers and plant products, and through sustainable water and soil management. ESAFE programs address relevant topics, including fertilizers, the environment and crop productivity. These Master’s programs are accredited by the Ministry of National Education, Vocational Training, Higher Education and Scientific Research.
The objectives of the master program in Fertilizer Science and Technology is to prepare graduates possessing broad knowledge of fertilizer and soil fertility to become experts advising African farmers or experts in fertilizer industry by developing fertilizers of the future. The program is designed to provide the most comprehensive training possible in this field.

**OBJECTIVES**

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**CAREER OUTLOOK**

The graduates of this master will have several career options in several areas such as:

- Process engineering related to fertilizer manufacturing;
- Innovation in the field of fertilizers;
- Soil fertility management;
- Fertilizer formulation and recommendation;
- Phosphate and other fertilizers value chain
- Restoring fertility of degraded soils;
- Nutrient management in the soil and nutrients deficiency diagnosis;
- Logistics and communication in relation to the valorization, marketing and rationalization of fertilizers;
- Environmental impact studies.

They may also pursue research work as part of a PhD or create their own startups.

**WHO SHOULD APPLY**

This Master’s program is open to students who have a bachelor’s or engineer’s degree in science with high level of English proficiency, or equivalent.

**CORE COMPETENCIES**

At the end of the training, students will be able to:

- Recommend appropriate fertilizers to farmers.
- Evaluate and correct soil fertility to maximize crop productivity.
- Develop diagnostic and communication tools to rationalize and promote fertilizers.
- Act on the entire value chain of the phosphate fertilizer industry.
- Develop new fertilizer products.
- Evaluate the physical and chemical characteristics / quality of fertilizers.
- Develop standards of interpretation of soil and plant analyses.
- Set up laboratories for analysis related to soil fertility and fertilizers.
- Design and manage environmental studies projects.
- Design, monitor and evaluate research in the areas of fertilizer and soil fertility management.
- Produce soil fertility maps using GIS and practice precision farming.
- Manage projects related to fertilizers and soil fertility.
- Identify and implement actions related to sustainable development (social equity, environment and economic efficiency).

**WHO SHOULD APPLY**

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**Faculty Director**

Dr. Abdelaziz YASRI holds a PhD in BioTechnology from Montpellier II University in France and an MBA from Montpellier Business School. He is currently a professor at Mohammed VI Polytechnic University in Morocco and coordinator/director of School of Agriculture (ESAF). Dr. A. Yasri has more than 25 years of experience in academia, start-ups and biotechnology. He has worked in biotechnology companies in France, Belgium and in the United States where he held several positions as Scientific Director. He has published more than 25 scientific articles in international journals and nine international patents in the field of biotechnology. He works in the ‘AgroBioSciences’ program and conducts research on the valorization of biomass for the development of biostimulants, biofertilizers and biopesticides at Mohammed VI Polytechnic University, Morocco.
Students of this master’s program will benefit from the teachings of qualified academic administration, composed of both renowned academics and practitioners known for their expertise and their sharp vision of the economic and industrial world.

- The teaching model is based on an innovative approach focused on experimentation (learning by doing). The University’s sites are equipped with “Living Labs”, dedicated to applied research. These laboratories are real-scale work and training platforms (mining facilities, experimental farms, factories, towns, etc.) open to the scientific community as well as to the students.
- Our innovation aspect of the pedagogical approaches within this master’s program is based on learning by farming concept.
- The training includes courses in “Flipped Class” as mode of digital education that encourage learning autonomy.
- Beyond technical skills, students will also acquire transversal skills in “Soft Skills” (communication, teamwork and English) and “Business Skills” (innovation, entrepreneurship, project management, etc.) allowing them to interact effectively with their future career environments.

CAMPUS ADVANTAGES

Designed by architects Ricardo Bofill and Elie Mouyal, on a 17-hectare site, the campus provides you with modern infrastructure equipped at the highest international standards, fully adapted to the needs of Teaching and Research.

Our students benefit from a living environment which is conducive to learning and fosters community life and personal development through its secure residences, an athletic complex including 5000m2 of outdoor spaces, a library of 13,000 titles, catering areas and designated places to relax promoting exchanges.

The University also boasts a wellness center as the health and well-being of our students, faculty and staff is of paramount importance. Students’ associative projects, whether they concern entrepreneurship, civic engagement, cultural activities, etc., are encouraged and supported by the University. Thus, over time, your experience here enriches both professionally and personally.

CURRICULUM

PROGRAM HIGHLIGHTS

Students manage a piece of land at the Experimental Farm for the whole period of the program.

Partnership:
Qualifications

This course is open to students holding a bachelor’s or engineer’s degree in science
• Level of training required: Bac+3, L3 scientists
• Specialty/Major required: life sciences, environment or equivalent

Application requirements*

• Application letter
• Curriculum vitae
• Two passport photos
• School marks / transcripts
• Copy of diplomas or certificates of achievement
• Photocopy of C.N.I / passport
• Two letters of recommendation

*Original documents and / or certified copies will be required at the time of final registration.

Admissions calendar

Would you like to join us?
We invite you to sign up online via the link admission.um6p.ma by completing the requested information or by contacting us at: admission@um6p.ma. If you are shortlisted, you will be invited to a written competitive examination followed by an oral interview in keeping with the following schedule:
• 12th of June : Application deadline
• June - July : Written examination and oral interview
• End of July : Admission results and receipt of scholarship application files
• Septembre : Start of term.

Selection procedure

• Examination of application file
• Written test
• Oral Test

Scholarships

In line with its civic commitment, UM6P, a meritocratic university, supports the brightest students through an attractive system of academic scholarships and financial aid grants.

Tuition and fees

• Registration fee : 5,000 Dhs
• Tuition costs : 75,000 Dhs / year

FOR MORE INFORMATIONS

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