



University of Nairobi (UoN) - Department of Environmental and Biosystems Engineering, in collaboration with the University of Florence (Italy), invites applications through the Faculty of Engineering to participate in a Student Exchange Programme under the ERASMUS+ KA171 Programme, project n. 2022-1-IT02-KA171-HED-000074624.

Eligibility

The applicant should:

- Be a Ph.D. student registered with University of Nairobi (UoN)
- Have an active status as a Ph.D. student
- Have knowledge of English (B2)

Programme Details

- A 2 to 6 month study period in Italy – University of Florence, between 1st September, 2023 and the 31st July, 2024
- The programme covers a monthly allowance (€ 850) and a travel allowance (€ 820)
- The 2023/2024 academic year applies

At the end of the mobility period, the student shall submit a report of the work undertaken with UNIFI in line with the Learning Agreement. The activities that will be carried out during the period of mobility abroad can be acquired in the academic career of the student with a view to obtaining the PhD final qualification.

Application Documents

- Curriculum Vitae (CV)
- Research project proposal with a maximum length of 5000 characters (spaces included) specifying:
 - Title of the proposed research
 - Preferred theme from programme-supported themes (Annex 1)
 - Background and motivation that includes clear statement of research objectives and hypotheses where applicable
 - Proposed methodology and description of data source(s)
 - If applicable, summary of any preliminary results
 - Proposed timeline for the research
 - References (not included in the 5000 characters)
- Motivational letter
- Declaration of previous ERASMUS+ Mobility periods (Annex 2)
- Declaration / certificate of English language proficiency
- Support letter signed by the Dean of School of Engineering
- Proof of conditions of disabilities or disadvantaged situations, in case the applicants want to apply for the Minority Scholarship (Fewer Opportunities) - see the next section
- **Selection criteria**

A commission formed by researchers and professors of UoN and University of Florence will assess applications based on the following elements:

- The curriculum vitae of the candidate (20 points)
- Motivation for mobility (10 points)
- Research project (20 points)

- A total of 4 grants are available. This includes one Minority Scholarship (Fewer Opportunities) reserved for a student in a disadvantaged situation. If no such students apply, the place shall be opened to ordinary applicants. The Minority Scholarship (Fewer Opportunities) shall be given for the following categories:
 - Disability
 - Economic barriers

Consideration of such conditions shall be subject to the submission of valid documents and proof thereof should be testified with a certificate according to Kenyan regulation.

An additional amount of € 250 per month can be granted to the participant with fewer opportunities.

- In the event of a tie, priority will be given to the younger candidate.

Return of the financial contribution

The student must return the entire amount of the scholarship awarded in the following cases:

- Renunciation of the mobility period
- Stay shorter than the mandatory minimum period of 60 days (return of the entire amount)
- Failure to submit documented research or training activities carried out abroad

The contributions received are subject to the obligation of partial restitution in the event the participant terminates the mobility period before the agreed end date, considering the minimum mandatory period (60 days).

Application letters with supporting documents should be directed to uon-ebe@uonbi.ac.ke and copied to the Programme Coordinators at duncan.mbuge@uonbi.ac.ke; elena.bresci@unifi.it; to reach the office no later than 20th June 2023.

ANNEX 1: Available positions

ANNEX 2 – Declaration of ERASMUS + Student Mobility

ANNEX 1 – AVAILABLE POSITIONS

Ph.D. Course	Theme	Scientist Responsible	Semester (1st, 2nd, both)	Detailed description	Email address of the scientist responsible	Email address of the admin responsible
Environmental and agricultural science	Soil microbial ecology	Carlo Viti	both	Analysis on soil microbial community using molecular approaches	carlo.viti@unifi.it	alessandra.pantani@unifi.it
Sustainable Management of Agricultural Forestry and Food Resources	Forest hydrology	Daniele Penna	both	Analysis of expansion and contraction dynamics of stream network in forested mountain catchments. Field surveys, data processing, GIS and remote sensing.	daniele.penna@unifi.it	lucia.castellucci@unifi.it
Sustainable Management of Agricultural Forestry and Food Resources	Agricultural hydrology	Daniele Penna	both	Analysis of water uptake dynamics, transpiration and soil moisture spatio-temporal variability in an experimental vineyard. Field surveys, data processing, GIS and remote sensing	daniele.penna@unifi.it	lucia.castellucci@unifi.it
Environmental and agricultural science	Plant and soil ecosystem functionalities under legume-cereal intercropping	Giacomo Pietramellara	both	Assessment of the intercropping potential by focusing on pesticide reduction, plant-microbe mediated element cycling, soil health improvement, and crop quality and health.	giacomo.pietramellara@unifi.it	alessandra.pantani@unifi.it
Environmental and agricultural science	Agronomy and Agricultural water management	Anna Dalla Marta	both	Analysis and modelling of crop response to water, impact of different irrigation and agricultural management on crop production and crop water productivity	annadallamarta@unifi.it	alessandra.pantani@unifi.it
Civil and Environmental Engineering	River eco-hydraulics, plastic pollution and morphodynamics	Luca Solari	both	Interactions between river hydraulics, riparian vegetation sediment and plastic transport and structures through laboratory experiments, field measurements and analytical analyses	luca.solari@unifi.it	margherita.mellini@unifi.it
Civil and Environmental Engineering	Assessment methods of Water-Energy-Food and Ecosystems (WEFE) Nexus	Enrica Caporali	both	Particular attention is given to physically based water, crops and ecosystem resources management and scenarios analysis, integrated to simulate the effects of climate, hydrological and environmental changes and to analyse water-agriculture-ecosystems interdependencies.	enrica.caporali@unifi.it	margherita.mellini@unifi.it
Sustainable Management of Agricultural Forestry and Food Resources	Irrigation, water harvesting, hydrological modelling in agricultural area	Elena Bresci	both	Identification of best siting of water harvesting structures through the use of GIS and remote sensing. Analysis of the effects of WH implementation through the ecosystem services approach.	elena.bresci@unifi.it	lucia.castellucci@unifi.it



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Sustainable Management of Agricultural Forestry and Food Resources	Irrigation, water harvesting, hydrological modelling in agricultural area	Elena Bresci	both	Water resources management in arid and semi-arid areas	elena.bresci@unifi.it	lucia.castellucci@unifi.it
Industrial Engineering	Geothermal energy	Daniele Fiaschi	both	Resource evaluation, preliminary design of power plant, production of power and cold, application of LCA for sustainability assessment	daniele.fiaschi@unifi.it	laura.galli@unifi.it
Industrial Engineering	Renewable energy (solar, grid)	Daniele Fiaschi	both	Evaluation of productivity for solar PV and Thermal energy conversion. Matching with load demand, energy storage.	daniele.fiaschi@unifi.it	laura.galli@unifi.it

ANNEX 2 - DECLARATION OF ERASMUS+ STUDENT MOBILITY

I, the undersigned, _____, born on _____ in _____,
 nationality _____ residing in _____ phone number _____ email

HEREBY DECLARE

➤ to be enrolled at the University of _____ Faculty _____ Course _____
 Study cycle (1st, 2nd, 3rd) _____ for the a.y. _____

➤ to have previously attended a student mobility

NO

YES

If yes:

Type of mobility	Study cycle (1 st , 2 nd , 3 rd)	Duration of mobility (months and days)	Period of mobility (fromto)	A.Y.	Hosting University (name/country)
Erasmus+ student mobility for studies					
Erasmus+ student mobility for traineeship					
Erasmus Mundus					
Other: _____					

By signing, I vouch for the truthfulness of the information in this declaration and agree that I will permanently lose the possibility of obtaining the status of Erasmus student, if it is determined that I intentionally gave a false information.



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In _____, date _____ Signature: _____

To be filled in by sending institution

We hereby certify that the above statements are true.

Responsible person

Name and surname:

Position:

E-mail:

Signature and stamp _____

In _____, date _____



Important note

The same student can go on mobility several times, up to a maximum of 12 months per each study cycle (Bachelor, Master and Doctoral level), independently of the number and type of mobility activities (Erasmus+ for studies/Erasmus+ for traineeship). Prior experience under LLP-Erasmus Programme, Erasmus+ mobility for higher education students (both KA103/131 and KA107/171) and as scholarship holders of Erasmus Mundus Master Courses and Erasmus Mundus Joint Master Degrees is taken into account for the maximum of 12 months. However, participation in Erasmus Mundus Master Courses and Erasmus Mundus Joint Master Degrees as self-financing participants is not taken into account.

In single-cycle degree courses, such as Medicine, students can be mobile for up to 24 months.