

Annex B

**PHD COURSE IN
BIOTECHNOLOGY AND SMART PRACTICES FOR A SUSTAINABLE MANAGEMENT
OF NATURAL RESOURCES, FOOD AND AGRICULTURE – XLI cycle
ACADEMIC YEAR 2025/2026**

Coordinator: Maria Luisa Amodio (Full Professor) – SSD: AGRI-04/B – Agricultural Mechanics – University of Foggia

Scientific-Disciplinary Sectors:

AGRI-01/A; AGRI-02/A; AGRI-03/A; AGRI-02/B; AGRI-06/A; AGRI-04/A; AGRI-04/C; AGRI-05/B; AGRI-06/B; AGRI-07/A; AGRI-08/A; AGRI-09/C; MVET-02/B; MVET-03/B; CHEM-01/A; CHEM-05/A; IIND-06/A; IEGE-01/A; IINF-05/A; PHYS-01/A; BIOS-01/C; BIOS-02/A; BIOS-06/A

Administrative Office: Department of Agricultural Sciences, Food, Natural Resources and Engineering

Duration:

3 years

Curriculum:

1. SUSTAINABLE AGRICULTURE, NATURAL RESOURCES AND BIODIVERSITY

This curriculum will develop skills for the sustainable management of natural resources and agriculture, with particular emphasis on precision agriculture and smart farming, decision support systems, reduction of agricultural inputs, logistics and management of production inputs and outputs (Internet of Things), product quality, environmental protection, and the preservation of animal, plant, and microbial biodiversity. It also includes bioindustry for waste and non-food product valorization (circular economy), biorefineries, and biogenetics.

	<p>2. EMERGING TECHNOLOGIES FOR ENSURING FOOD QUALITY AND SAFETY</p> <p>Skills will be developed in precision management of processes, logistics and management of transformation inputs and outputs (Internet of Things), food product quality, traceability and safety, biotechnology and innovative low environmental impact technologies aimed at increasing product added value, maximizing efficiency and reducing waste. The curriculum also covers sustainability assessment of products and processes, strategies to raise awareness among consumers and supply chain actors on environmental issues, and marketing of sustainably produced food products.</p>
TOTAL NUMBER OF POSITIONS AVAILABLE: 4	
4 POSITIONS WITH SCHOLARSHIPS granted by the University of Foggia	
COURSE DESCRIPTION:	
https://www.unifg.it/en/studiare/corsi-post-laurea/ciclo-xli/biotechnology-and-smart-practices-sustainable-management-natural-resources-food-and-agriculture	
ADMISSION PREREQUISITES:	
<p>Master's Degree in:</p> <p>LM-3 Landscape Architecture</p> <p>LM-6 Biology</p> <p>LM-7 Agricultural Biotechnology</p> <p>LM-8 Industrial Biotechnology</p> <p>LM-9 Medical, Veterinary and Pharmaceutical Biotechnology</p> <p>LM-17 Physics</p> <p>LM-18 Computer Science</p> <p>LM-21 Biomedical Engineering</p> <p>LM-22 Chemical Engineering</p> <p>LM-23 Civil Engineering</p> <p>LM-24 Building Systems Engineering</p> <p>LM-25 Automation Engineering</p> <p>LM-26 Safety Engineering</p> <p>LM-27 Telecommunications Engineering</p> <p>LM-28 Electrical Engineering</p> <p>LM-29 Electronic Engineering</p> <p>LM-30 Energy and Nuclear Engineering</p> <p>LM-31 Management Engineering</p> <p>LM-32 Computer Engineering</p> <p>LM-33 Mechanical Engineering</p> <p>LM-35 Environmental and Land Engineering</p> <p>LM-41 Medicine and Surgery</p> <p>LM-42 Veterinary Medicine</p> <p>LM-48 Urban and Environmental Planning</p> <p>LM-52 International Relations</p> <p>LM-53 Materials Engineering</p> <p>LM-53 Materials Science and Engineering</p> <p>LM Materials Science</p> <p>LM-54 Chemical Sciences</p> <p>LM-56 Economics</p> <p>LM-59 Public, Business, and Advertising Communication</p>	

LM-60 Natural Sciences
 LM-61 Human Nutrition Science
 LM-69 Agricultural Science and Technology
 LM-70 Food Science and Technology
 LM-71 Industrial Chemistry Technology
 LM-73 Forest and Environmental Sciences and Technology
 LM-74 Geological Sciences and Technology
 LM-75 Environmental and Land Sciences and Technology
 LM-77 Business Economics
 LM-79 Geophysics
 LM-82 Statistics
 LM-83 Actuarial and Financial Statistics
 LM-86 Animal Science and Technology
 LM/GASTR Economic and Social Sciences of Gastronomy

ADMISSION PROCEDURE:

The selection is based on: Evaluation of academic qualifications, Evaluation of the research project and Oral exam.

The evaluation will be carried out according to Articles 6 and 7 of the call for applications. Foreign candidates may choose to take the oral exam in English.

Please list your qualifications as follows:

Degree and grade:

Degree granting access to the program and final mark

(For candidates with a foreign degree, the commission may modify or disregard this item in favor of the following ones.)

Academic and educational qualifications:

Additional degrees beyond those required

PhD

First or Second-level University Master's degree

Postgraduate specialization courses

Specialization diplomas

Research activities:

At qualified Italian and foreign institutes in fields related to the PhD program. Participation in EU projects.

(Specify type of position, duration, and institution; project details, duration, and role)

Scientific publications and patents:

Publications in SCOPUS-indexed journals

Patents

Non-SCOPUS publications

Book chapters

Conference proceedings

Abstracts/posters presented at conferences

Awards: (Specify reason, title, and date of award)

ADMISSION TEST CALENDAR AND VENUE:

Interviews will be held from **September 11 to 15, 2025**.

The date will be published on the website through a public notice:

<https://www.unifg.it/en/studiare/corsi-post-laurea/ciclo-xli/biotechnology-and-smart-practices-sustainable-management-natural-resources-food-and-agriculture>

Mode: online for all candidates

Oral exam:

The oral exam will include discussion of the candidate's submitted research project and assessment of English language proficiency. Candidates may choose to take the interview in English

OTHER USEFUL INFORMATION:

For additional details, please consult the university website:
<https://www.unifg.it/en/study/post-lauream/phd-programmes>

USEFUL CONTACTS:

Didactic/scientific coordinator

Prof. **Maria Luisa Amodio**
email: marialuisa.amodio@unifg.it

Administrative contact person

Dr **Maria Grazia Mariella**
email: ufficiodottorato@unifg.it