PHD PROGRAMME TABLE

Announcements of competition for admission to PhD Courses 41st cycle, Academic Year 2025/2026

PhD Course: CIVIL, ENVIRONMENTAL AND MATERIALS ENGINEERING

Available positions: 9

Evaluation Methods: based on academic and research records

Available positions:

Place	Description	Financial support	Specific research topic
n.			
1	Scholarship	University Scholarship	-
2	Scholarship	University Scholarship	-
3	Scholarship	University Scholarship	-
4	Scholarship	University Scholarship funded by Fondazione di Modena	-
5	Scholarship	Scholarship funded by I.M.A. S.p.A.	-
6	Scholarship	Scholarship funded by Zima S.r.l.	1
7	Scholarship	Scholaship funded under the project PRJ-0296-EARTH-TECH-FISA-TARANTINO – Call Project FISA 2022 "EARTH-TECH - Implementation of new Shot-Earth technology in the construction industry" - CUP E93C24000250001	-
8	Scholarship	Scholarship funded by Emilia Romagna Region in implementation of the programme 'Advanced Skills for Resilience and Land Sustainability' - PR ESF+ 2021/2027 CUP E83C24003170002	Development of innovative hydrological and hydraulic models based on ultra-high- resolution topographic data to enhance the resilience of rural and urban areas to extreme events
9	Fellows from Foreign Countries	Scholarship funded by Foreign Countries	-

Areas of PhD Programme: The Course aims to train high-profile figures with a solid multidisciplinary background in the field of Civil, Environmental and Materials disciplines and topics closely related to the Sustainable Development Goals (SDGs) jointly endorsed by the European Commission (European Skills Agenda) and by the United Nations (United Nations 2030 Agenda).

The course objectives aim to:

- 1) train theoretical/modelling, technological and design skills aimed at the conception, design, work management, development, verification, testing, management and decommissioning of building and soil protection works, structures and infrastructures and, in general, of civil and environmental and territorial systems and plants, in compliance with the regulatory requirements in force and through the use of modern and interoperable tools (BIM, CAD, FEM);
- 2) develop theories and innovative methods for the study and modelling of pollution phenomena and the dynamics of pollutants in the environment and in the atmosphere, to the analysis of environmental impact and health, eco-toxicological and major accident risk,

to the design, management and verification of water, waste water and sludge treatment and recovery plants; to optimize waste management to improve products and processes sustainability to reach a circular economy;

3) foster the design, synthesis/production, characterization and scaling-up of new materials in applications belonging to multiple sectors (mechanical engineering, ceramics, biomedical, aerospace, renewable energy, etc.).

In order to best achieve these objectives, the PhD course is structured through 3 curricula: one dedicated to Civil Engineering topics, a second one focused on Environmental Engineering topics and a third one focused on Materials Engineering topics. The research paths covered in this PhD Course will be integrated with the cross-curricular nature of the topics that distinguish the E4E (Engineering for Economics - Economics for Engineering) Doctoral School, to which this Course belongs.

Official course language: English. However, all the PhD students are encouraged to learn the Italian language during the course of study.

Further information is available on the PhD Programme website at: https://www.phd-dcem.unimore.it/

Admission requirements: Italian second cycle master's degree ("Laurea Magistrale", under D.M. 270/04 or "Laurea Specialistica", under D.M. 509/99) or Italian degree obtained prior to D.M. 509/99 (the previous Italian regulations) or Second cycle Master's degree obtained abroad, equivalent to the above-mentioned Italian degrees, in accordance with Article 2 of this notice.

Documents to be attached to the application:

- In order to express interest in also competing for the scholarship linked to a specific research topic, candidates must complete and attach the file "<u>Declaration of priority</u> <u>interest to compete for scholarships linked to a specific research topic</u>"
- 2) Degree certificate (or self-certification for Italian degrees), including the final grade and the maximum possible grade at the awarding institution; and Transcript of Records including the full list of examinations, the corresponding ECTS credits and grades obtained. Applicants with a non-Italian degree must attach their certificate (including the full list of examinations with corresponding marks) and a legalized translation or Diploma Supplement and, if available, the Declaration of Value ("Dichiarazione di Valore in loco") issued by the competent Italian diplomatic-consular Representation, or the certificates issued by the CIMEA - ENIC-NARIC centre. If the degree certificate is not yet available or if the degree has not yet been obtained, the candidate must attach a description of the degree with a list of the examinations taken using <u>Annex A</u>;
- 3) a curriculum vitae including their scientific and teaching activities in Italian or English using the form in Annex B; the CV must include the university-level qualifications held;
- 4) a summary in Italian or English of the master's thesis, or equivalent, consisting of a minimum of three and a maximum of six pages, structured as follows: thesis motivation, research methods, results achieved;
- 5) a short text in English (Statement of Research Interest) using the form in Annex C, in which the candidate illustrates her/his motivation for attending the Course and the description of her/his specific research interests;
- 6) possible certificate of English competence (TOEFL, Proficiency or others);
- 7) possible certificate of completion of the GRE (Graduate Record Examination) test;
- 8) maximum three letters of introduction/recommendation/reference; in the online application, applicants must enter all the personal details of the

professor/researcher/expert who will be sending the letter of recommendation. Once the application has been submitted, the computer system will send an automatic email to the contact person requesting the letter of recommendation. The deadline for uploading letters is June 30th 2025, 11.59 pm (CET); applicants can check on the application summary page whether the contact person has sent the cover letter/recommendation. Within the aforementioned deadline, applicants may send a reminder to the contact person who has not yet done so by selecting the 'reminder' item from the application summary page;

- any other document considered useful for the candidate's assessment and/or scientific publications; candidates must provide a full list of all the documents and publications attached;
- 10) a copy of a valid identity document.

Candidates who meet the requirement (holding a scholarship from foreign Countries) and wish to apply primarily for the reserved place for candidates with scholarship of foreign Countries must express their interest by compiling and attaching <u>Annex D</u> of this call to their online application.

The Selection Committee will verify whether the candidates who have expressed their interest in applying for the reserved positions meet the necessary requirements.

Evaluation Criteria:

In the evaluation of candidates' qualifications, the Selection Committee assigns scores up to a total of 60 points, as follows:

- Curriculum and relevance to the topics of the PhD Programme: from 0 to 25 points,
- Master Thesis (topic and grade): from 0 to 25 points,
- Candidate motivation (Statement of Research Interest), from 0 to 5 points;
- Publications, other qualifications and various attestations: from 0 to 5 points,

Once the qualifications have been assessed, the Committee will compile a merit-based ranking of candidates based on the scores awarded. Candidates obtaining a minimum score of 36/60 will be considered eligible.

The places reserved for scholarship holders from foreign countries will be allocated, among the candidates who have expressed priority interest, and have submitted appropriate documentation of possession of the scholarship or the application to obtain it, to those with the highest score on the ranking list.