<table>
<thead>
<tr>
<th>PhD Program</th>
<th>Engineering for energy and environment</th>
</tr>
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<tbody>
<tr>
<td>Cycle</td>
<td>XXXVII</td>
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<tr>
<td>Duration</td>
<td>3 years: 1\textsuperscript{st} January 2022 – 31\textsuperscript{st} December 2024</td>
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<tr>
<td>Coordinator</td>
<td>Prof. Danilo Monarca</td>
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<tr>
<td>Department</td>
<td>Economics, Engineering, Society and Business Organization in collaboration with Department of Agriculture and Forest Sciences</td>
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<tr>
<td>Number of positions</td>
<td>No. 5 additional PhD scholarships on Green topics</td>
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**Action IV.5**  
**Additional PhD scholarships on Green topics**  
**PON R&I 2014-2020**

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<th><strong>Curriculum: Energy and engineering systems</strong></th>
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| Topic: *Strategies of valorization of off-specification compost* | Scientific Coordinator: Dr. Marco Barbanera (ssd ING-IND/11)  
The doctoral program includes 12 months in the company and 6 months abroad to be carried out within the first 2 years of the course |
| Topic: *Green Hydrogen as a tool for the energy transition* | Scientific Coordinator: Prof. Andrea Luigi Facci (ssd ING-IND/08)  
The doctoral program includes 12 months in the company and 6 months abroad to be carried out within the first 2 years of the course |

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<th><strong>Curriculum: Biosystems and environment</strong></th>
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| Topic: *Innovative fusion reactor design for spherical tokamaks* | Scientific Coordinator: Prof. Giuseppe Calabrò (ssd ING-IND/31)  
The doctoral program includes 12 months in the company and 6 months abroad to be carried out within the first 2 years of the course |
| Topic: *Innovative machine for cultivation and harvesting of energy crops for biofuels* | Scientific Coordinator: Prof. Andrea Colantoni (ssd AGR/09)  
The doctoral program includes 12 months in the company and 6 months abroad to be carried out within the first 2 years of the course |
| Topic: *Optical methods for the detection of phenolic pollutants* | Scientific Coordinator: Prof.ssa Ines Delfino (ssd FIS/07)  
The doctoral program includes 6 months in the company and 6 months abroad to be carried out within the first 2 years of the course |
| Admission requirements | Application to the public competition is open to all, regardless of age and citizenship, who, by the date this call expires, possess one of the qualifications listed below:
- an Italian “laurea specialistica” degree, obtained according to the Ministerial Decree n. 509/1999;
- an Italian “laurea magistrale” degree, obtained according to the Ministerial Decree n. 270/2004;
- an Italian equivalent university degree obtained under the Italian regulations previously in force, the time-span of which being no less than 5 years;
- a foreign university degree equivalent to those mentioned above. Admission is also open to university students who will finish their MS degree by October 31, 2021. In such cases admission will be “conditional”. Failure to obtain the degree by that date will result in forfeiture of admission to the doctoral course. |

| Methods of evaluation of candidates (Maximum score 80/80) | Evaluation of academic qualification and oral examination
Assessment of the English Language Knowledge.
Language for the examination: Italian or English
The evaluation of qualifications is preliminary to the oral exam. The score obtained by candidates after the evaluation of their qualifications will be added to the score of the oral examination. The results will be published on the Tuscia University web site (www.unitus.it) at the section of Didattica>Offerta post lauream>Dottorati di Ricerca
Together with the application form, candidates should submit a research project, within the themes of Ph.D., up to a maximum of 5 pages, which must be written in Italian or English. The research project will be discussed during the oral exam. The project must be relevant to the chosen topic and bring a high added value, in terms of scientific, social and economic repercussions.
In evaluating the applications and with particular reference to the project proposal submitted by the candidates, the Commission will also take into account the criteria indicated in art. 3, paragraph 2 of the Ministerial Decree no. 1061 of 08.10.2021. |

| Evaluation of Academic qualification (Maximum score: 20 out of 80) | Master’s thesis: max 5 points
University career (exams taken with the relative grades and final grade): max 4 points
Research and/or study activities in foreign institutions: max 2 points
Professional experiences and other qualifications that each candidate considers useful: max 4 points
Research project submitted by the candidate: max 5 points |
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<th>Details</th>
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| **Evaluation of the oral exam (Maximum score: 60 out of 80)**           | Oral exam: maximum score 60 out of 80 points  
The minimum score for a positive oral exam will be at least 40 out of 80 points.  
The foreign language subject to verification will be English. |
| **Topics of the oral examination**                                     | The oral test, aimed at ascertaining the candidate aptitude for scientific research, will focus on the discussion of issues related to the research project. |
| **Oral examination timetable**                                         | The timetable for the exams will be published in the section Didattica>Offerta post lauream>Dottorati di Ricerca of the University’s website (www.unitus.it) within October 31, 2021. |
| **Contact to information**                                             | Contacts of the course:  
Prof. Danilo Monarca e-mail: monarca@unitus.it  
Prof. Giuseppe Calabrò e-mail: giuseppe.calabro@unitus.it |

Before of the oral exam, the evaluation of academic qualification results will be published on the Tuscia web site www.unitus.it (section Didattica>Offerta post lauream>Dottorati di Ricerca).