# PhD Programme Table - 38th cycle Call for Applications for further PhD positions funded by Next Generation EU - NRRP "National Recovery and Resilience Plan" and from other sources







| PROGRAMME'S NAME  | AUTOMOTIVE ENGINEERING FOR INTELLIGENT MOBILITY                                     |  |
|---|---|--|
| ASSOCIATED PARTNERS  Pursuant to art. 3 para 2 lett. a) | Università degli Studi di Modena e Reggio Emilia<br>Università degli Studi di Parma |  |
| of the MD n. 226/2021                                   | Oniversità degli stadi di l'arma  |  |
| DURATION  | 3 years   |  |
| PROGRAMME START DATE                                    | 01/03/2023 (DD/MM/YYYY)   |  |
| LANGUAGES   | English   |  |
| MANDATORY STAY ABROAD                                   | 3 months  |  |
| COORDINATOR   | Prof. Nicolò Cavina ( <u>nicolo.cavina@unibo.it</u> )                               |  |
| CURRICULA   | 1. Vehicle Design, Manufacturing and Systems Integration                            |  |
|   | 2. Energy Systems, Powertrains, Vehicle Performance                                 |  |
|   | 3. Vehicle Informatics and Connectivity   |  |
| PhD POSITIONS   | 2   |  |
| ADMISSION PROCEDURE                                     | Qualifications and research proposal evaluation                                     |  |
|   | Oral examination  |  |

#### Available Positions and Scholarships

| Pos. n. | Financial<br>Support          | Description  | Positions linked to research topics   |
|---------|-------------------------------|--|---|
| 1       | PhD<br>Scholarship<br>NRRP CN | Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) - Campioni Nazionali (CN MOBILITY) - CUP J33C22001120001 | Stylistic design engineering of vehicle chassis and body for the integration of fuel cells based powertrain |
| 2       | PhD<br>Scholarship<br>NRRP CN | Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) - Campioni Nazionali (CN MOBILITY) - CUP J33C22001120001 | Systems and Algorithms for Navigation and Control of autonomous vehicles: Design and Experimentation        |

Applicants awarded with PhD scholarships funded by Next Generation EU shall fulfil specific obligations foreseen in the relevant funding scheme and in the relevant regulations.

# **Admission Exams**

The admission exams detailed schedule shall be published starting from December 1st, 2022:

- on the <u>University website</u>, selecting the relevant PhD Programme > "More information", at the bottom of the page in the section "Notices";
- on <u>Studenti Online</u> (select "summary of the requests in progress" > "see detail" and open the .pdf file at the bottom of the page). **No personal written communication will be sent to applicants**.

#### Required and Supporting Documents to be attached to the application

All the documents listed below **shall be drawn up in English or in Italian**. In case of documents originally issued in any other language (e.g. identity document, qualifications), an official translation is required.

Only qualifications obtained **during the last 5 calendar years** shall be taken into consideration, except for the University Degree. The Admission Board will assess the relevance of the supporting documents to the PhD Programme.

| Identity document                  | Valid identity document with photo (i.e. identity card, passport)  |  |  |
|------------------------------------|--|--|--|
| Curriculum Vitae                   | No specific CV format is required  |  |  |
| Degrees                            | Documents attesting the awarding of the first and second cycle degrees, the exams taken and the marks obtained (see Art. 3 of the Call for Applications)   |  |  |
| Research proposal  SUPPORTING DOCU | <ul> <li>Multi-annual research proposal, with special emphasis on the activities to be completed during the first-year course. The proposal must meet the following requirements: <ul> <li>it must mention on the cover page the main research topic the applicant is interested to and the proposal is about;</li> <li>it cannot exceed 20,000 characters, including spaces and formula possibly used. This figure does not include: the title of proposal, the outline, references and images (such as graphs, diagrams, tables, etc if present);</li> <li>it must include: the state of the art; description of the proposal; expected results; references.</li> </ul> </li> </ul>                        |  |  |
| 3011 OKTING DOCO                   |  |  |  |
| Thesis abstract                    | Abstract of the <b>second cycle degree thesis.</b> Graduands applicants may submit the draft of the thesis. Abstracts cannot exceed 5,000 characters, including spaces and formula possibly used. The above figure does not include: the title of the thesis, the outline, references, and images such as graphs, diagrams, tables etc.  |  |  |
| Publications                       | Lists of publications (i.e. monographs, articles on scientific journals), minor publications (conference papers, etc.), abstracts and posters presented during national and international conferences, etc.  |  |  |
| Other documents                    | <ul> <li>Postgraduate vocational training programmes relevant to the PhD Programme main research topics</li> <li>Teaching activities carried out at university level</li> <li>Research activity of any kind - whether basic, applied, translational, etc carried out in any capacity, including when covered by research grants, and as a staff member of research projects</li> <li>Documents attesting the knowledge of foreign languages</li> <li>Study periods completed by applicants outside their countries of origin (e.g. Erasmus programme or other similar mobility programmes)</li> <li>Other qualifications attesting the suitability of the applicants (scholarships, prizes, etc.)</li> </ul> |  |  |

# Evaluation criteria\*

Scores will be expressed in points out of 100, as follows.

#### 1. Qualifications and research proposal evaluation

Minimum score for admission to the oral examination: 30 points, Maximum score: 50 points

| Qualifications evaluation    | Second cycle (Master's) degree final mark. Graduands shall be evaluated according to the Weighted Average Mark (WAM) | 20 points max |  |
|------------------------------|--|---------------|--|
|                              | Publications and other qualifications attesting the applicant's training and skills                                  | 5 points max  |  |
| Research proposal evaluation | Scientific value and ground-breaking nature of the proposal  | 15 points max |  |
|                              | Structure of the proposal  | 5 points max  |  |
|                              | Proposal feasibility   | 5 points max  |  |

#### 2. Oral examination

Minimum score for eligibility: 30 points, Maximum score 50 points

| Foreign language proficiency   | 5 points max  |
|--|---------------|
| Research proposal presentation   | 30 points max |
| General knowledge of the research topics linked to the available PhD positions | 15 points max |

Oral examination aims to assess the suitability of the applicant for scientific research as well as the general knowledge of the research topics linked to the available PhD positions.

# The oral examination is carried out in English.

<sup>\*</sup> Possible further evaluation criteria will be available on the <u>University website</u>, selecting the relevant PhD Programme > "More information".