

**Doctoral course name:****ECONOMICS - INSTITUTIONS, ENTERPRISES AND QUANTITATIVE METHODS  
(INDUSTRIAL PHD)**

Duration	3 years
Places	<b>2</b>
Grants in favour of children and orphans of members of the unitary credit and social benefits management and of pensioners who are users of the public employees management	<b>1</b> for the topic 'Meso-institutional mechanisms in food chains sustainable transition'.
Places reserved for employees of ARPM LLC (USA)	<b>1</b>
Curricula	1 - Economy and Institutions 2 - Economy and Enterprise 3 - Quantitative Methods for Economics
In agreement with	ARPM LLC (USA)
Coordinator	FIGA' TALAMANCA GIANNA

**Degrees required for admission**

**Specialist degree** pursuant to Ministerial Decree 509/1999, **Master's degree** pursuant to Ministerial Decree 270/2004,

**Degree** according to the system prior to the entry into force of Ministerial Decree 509/1999: **ALL**

**Modality of the selection procedure**

The selection procedure will be carried out as follows:

**Evaluation of qualifications and interview (in 60s: 30 + 30)**

**The assessment of qualifications** will cover the university educational pathway, as well as any further educational pathways and professional and research experience and any scientific publications (it is advisable to attach and/or declare all the qualifications obtained, complete with any element useful for the assessment, including, for educational pathways, the individual marks of profit achieved throughout the entire educational pathway).

The assessment will also include the candidate's proposal and discussion of a research project of their choice, lasting three years, aimed exclusively at assessing the candidate on one of the topics of the curricula into which the doctorate is divided.

**The pass mark in the assessment of qualifications** is **15/30**. Candidates who do not achieve the above-mentioned pass mark in the assessment of qualifications will not

be admitted to the next test.

Under penalty of non-evaluation, the qualifications must be submitted in accordance with the terms of Article 3 of the selection notice and Annex 2.

**The interview will** be conducted in person or by videoconference, at the candidates' request, and will focus on the topics of the curricula into which the doctorate is divided.

The interview will also be aimed at verifying the candidate's aptitude for research, willingness to undertake experience abroad and scientific interests. To this end, the candidate is required to prepare a research project proposal to be submitted together with the application for the competition, which the candidate will illustrate during the interview.

The interview may, at the candidate's choice, be held in English. For interviews held in Italian, knowledge of the English language will be tested.

**The pass mark for the interview is 21/30.**

**Suitability is achieved with an overall mark of 36/60 or higher**

### **Interview calendar**

On **19 April 2023** a notice will be published on the University's website at <https://www.unipg.it/didattica/percorsi-post-laurea> under the headings **“Dottorati di ricerca” – “Bandi, avvisi e modulistica” “Research Doctorates” -/ [“Announcements, notices and forms”]** and on the University's online notice board (“Albo”), announcing the **arrangements for the interview, the date and time of the convocation**, which will take place in **April-May 2023**, or any other communication concerning this selection process. **This calendar has the value of a formal convocation and no personal communications will be sent in this regard.**

**Doctoral course name:**

**INDUSTRIAL AND INFORMATION ENGINEERING  
(INDUSTRIAL PHD)**

Duration	3 years
Grants in favour of children and orphans of members of the unitary credit and social benefits management and of pensioners who are users of the public employees management	<b>1</b> for the topic 'Distributed, autonomous and eco-sustainable sensors for DSS (Decision Support System)'.
Curricula	1. Information engineering 2. Industrial engineering
In convention with	VRIJE UNIVERSITY BRUSSELS (BELGIUM) RINA CONSULTING MATERIALS DEVELOPMENT CENTRE
Coordinator	LIOTTA GIUSEPPE

**Degrees required for admission**

**Specialist degree** pursuant to Ministerial Decree 509/1999, **Master's degree** pursuant to Ministerial Decree 270/2004,

**Degree** according to the system prior to the entry into force of Ministerial Decree 509/1999: **ALL**

**Modality of the selection procedure**

The selection procedure will be carried out as follows:

**Evaluation of qualifications and interview (in 60s: 30 + 30)**

**The assessment of qualifications** will cover the university educational pathway, as well as any further educational pathways and professional and research experience and any scientific publications (it is advisable to attach and/or declare all the qualifications obtained, complete with any element useful for the assessment, including, for educational pathways, the individual marks of profit achieved throughout the entire educational pathway).

The evaluation will also include the elaboration by the candidates of a research project of their choice, lasting three years, aimed exclusively at the evaluation of the candidate on topics related to the theme *Distributed, autonomous and eco-sustainable sensors for DSS (Decision Support System)*

Under penalty of non-evaluation, the qualifications must be submitted in accordance with the terms of Article 3 of the selection notice and Annex 2.

**The interview will** be held by videoconference and will focus on the subjects of the curricula into which the PhD programme is divided and will also be aimed at verifying the candidate's aptitude for research, willingness to undertake experience abroad and scientific interests. To this end, the candidate is required to draw up a research project proposal to be submitted together with the application for the competition, which the candidate will illustrate during the interview.

The interview may, at the candidate's choice, be held in English. For interviews held in Italian, knowledge of the English language will be tested.

**The pass mark for the interview is 21/30.**

**Suitability is obtained with an overall mark of 25/60 or higher**

### **Interview calendar**

On **19 April 2023** a notice will be published on the University's website at <https://www.unipg.it/didattica/percorsi-post-laurea> under the headings **“Dottorati di ricerca” – “Bandi, avvisi e modulistica”/ ["Research Doctorates" - "Announcements, notices and forms"]** and on the University's online notice board, “Albo”, announcing the **arrangements for the interview, the date and time of the convocation**, which will take place in **April-May 2023**, or any other communication concerning this selection process. **This calendar has the value of a formal convocation and no personal communications will be sent in this regard.**

**Doctoral course name:**

**CHEMICAL SCIENCES  
(INDUSTRIAL PHD)**

Duration	3 years
Grants in favour of children and orphans of members of the unitary credit and social benefits management and of pensioners who are users of the public employees management	<b>1</b> for the topic 'SUS-BIO-CHEM: Sustainable and automated processes for the valorisation of waste biomass and the preparation of bioplastics and "biobased chemicals
Curriculum	1) Spectroscopy, chemical kinetics and molecular dynamics 2) Methods and materials for catalysis, energy, environment and cultural heritage 3) Theoretical chemistry and computational modelling
In convention with	THE HEBREW UNIVERSITY OF JERUSALEM - ISRAEL GEORGE-AUGUST-UNIVERSITY GOETTINGEN - GERMANY ELETTRA S.R.L. NOVAMONT S.P.A. MASTER-TEC S.R.L.
Coordinator	VACCARO LUIGI

**Degrees required for admission**

**Specialist degree** pursuant to Ministerial Decree 509/1999 in:

- 7/S 'Agricultural biotechnology';
- 8/S 'Industrial biotechnology';
- 9/S 'Medical, veterinary and pharmaceutical biotechnology';
- 14/S 'Pharmacy and industrial pharmacy';
- 61/S 'Materials Science and Engineering';
- 62/S 'Chemical sciences';
- 81/S 'Industrial chemistry science and technology';

**Master's degree** pursuant to Ministerial Decree 270/2004 in:

- LM-7 'Agricultural biotechnology';
- LM-8 'Industrial biotechnology';
- LM-9 'Medical, veterinary and pharmaceutical biotechnology';
- LM-13 'Pharmacy and industrial pharmacy';
- LM-53 'Materials Science and Engineering';
- LM-54 'Chemical sciences';

-LM-71 'Science and technology of industrial chemistry'.

Degree according to the system prior to the entry into force of Ministerial Decree 509/1999, equated to the above-mentioned specialised and magisterial degrees, pursuant to current regulations on equivalence for the purposes of participation in public competitions.

### **Modality of the selection procedure**

The selection procedure will be carried out as follows:

### **Evaluation of qualifications and interview (in 60s: 30 + 30)**

The **assessment of qualifications** will cover the university educational pathway, as well as any further educational pathways and professional and research experience and any scientific publications (it is advisable to attach and/or declare all the qualifications obtained, complete with any element useful for the assessment, including, for educational pathways, the individual marks of profit achieved throughout the entire educational pathway).

The evaluation will also include the candidates' elaboration of a research project of their choice, lasting three years, aimed exclusively at evaluating the candidate on one of the topics of the curricula into which the PhD is divided, and in particular *catalytic processes for biomass valorisation*.

Under penalty of non-evaluation, the qualifications must be submitted in accordance with the terms of Article 3 of the selection notice and Annex 2.

The interview will be held in person and will focus on the following topics: catalytic methods, synthetic methods of target molecules, biomass and will also be aimed at verifying the candidate's aptitude for research, willingness to undertake experience abroad and scientific interests. To this end, the candidate is required to draw up a research project proposal to be submitted with the application for the competition, which the candidate will illustrate during the interview.

The interview may, at the candidate's choice, be held in English. For interviews held in Italian, knowledge of the English language will be tested.

**The pass mark for the interview is 20/30.**

**The qualification is achieved with an overall mark of 36/60 or higher**

### **Interview calendar**

On **19 April 2023** a notice will be published on the University's website at <https://www.unipg.it/didattica/percorsi-post-laurea> under the headings **“Dottorati di ricerca” – “Bandi, avvisi e modulistica” / [“Research Doctorates” – “Announcements, notices and forms”]** and on the University's online notice board (“Albo”), announcing the **arrangements for the interview, the date and time of the convocation**, which will take place in **April-May 2023**, or any other communication concerning this selection process.

**This calendar has the value of a formal convocation and no personal communications will be sent in this regard.**