

Unità di staff Dottorati di ricerca







**ATTACHMENT 9ter** 

LAST REVISED 13/10/2021

## DOCTORAL PROGRAMME in NANOTECHNOLOGY ADMISSION INFORMATION

See Overview

**Disclaimer:** the tables below provide a quick outline of due dates and required documents. Please refer to the <u>Notice of Competition</u> for full information on conditions for applying.

REQUIREMENT	DEADLINE
online application and upload of documents	21 October 2021 13:00 (Italian time)
payment of the admission exam fee	21 October 2021
deadline for graduation	31 October 2021
upload of foreign diploma or certificate	21 October 2021  (if available after 21 October, please send it by email to dottorati@amm.units.it within 10 days of graduation)

	Documents to be uploaded  NOTE: applications sent without the mandatory attachments will not be processed	Mandatory  Optional
1.	proof of identity (eg passport)	mandatory
2.	<b>curriculum vitae et studiorum</b> , with reference to any postgraduate qualifications, participation in research projects, attendance of theoretical/practical internships and training internships related to the topics of the PhD course, as well as any publications.	mandatory
3.	university qualifications:	mandatory

- a. for graduates and near-graduates in Italy:
  - self-certification of all examinations and relevant scores of second-cycle degree programme, i.e. Laurea magistrale (LM), Laurea specialistica (LS) or Laurea vecchio ordinamento (LVO)
  - II) self-certification of LM, LS or LVO final mark (only for graduates).

<u>Self-certification</u> can be drafted using the form available online, or using the online services of the concerned University.

- b. for graduates and near-graduates from **abroad**:
- Transcript of Records including examinations and scores obtained. Where applicable, a
   *Diploma Supplement* can be submitted instead of the Transcript.
- **II)** Master diploma/certificate or equivalent qualification giving access to the Doctoral Programme (only for graduates).

The foreign qualification must be comparable by level and course duration (and, where applicable, by subject area) with the required Italian degree and allow access to the PhD in the issuing country;

**III)** Translation into Italian or English of the above documents, if issued in a different language.

## 4. thesis abstract

scholarship.

It must be submitted by both graduates and near-graduates, in English or Italian. We recommend to use the "Thesis Abstract form, available online.

mandatory

**5. research project** in one of the main themes, "Innovation" or "Green", offered by the chosen PhD Programme. Under "Project abstracts", applicants can find a description of the project proposals that they are recommended to develop according to the "research project form", available online. Applicants may apply for more than one scholarship, provided that they submit one project per

mandatory

6. publications that will be considered in the evaluation of the CV

optional

Applicants who hold a foreign degree and have never enrolled at this or other University in Italy must also upload their Secondary School certificate.

PLACES AND SCHOLARSHIPS AVAILABLE			
Total number of funded places		7	Note: Scholarship increase for study/research abroad can be granted only for uninterrupted periods of no less than 60 days. The number of months abroad that can be funded, as shown below under each scholarship description, must be spent within 31 December 2023. Any periods abroad beyond that date might be funded by the relevant Department, where applicable.
Scholarships PON/10 (code, total number and description)	PON/10	1	Scholarship MUR/PON co-financed by the Department of Medicine, Surgery and Health Sciences Subject area: Innovation
			Project title: "Evaluation of intracellular anti-cancer drug delivery through the synthesis of innovative nanoparticles.
		Principal investigator: prof. Matteo Biasotto	
		Project <u>link</u>	
			Company where the PhD student will spend a compulsory study/research period of 6 months: Nanodent Srl
			Months abroad: 0
	PON/11	1	Scholarship MUR/PON co-financed by the Department of Physics Subject area: Sustainability
		Project title: "Modulation of the micro and nano structure of first wall materials in reactors for the production of energy by nuclear fusion."	
			Principal investigator: prof. Stefano Fabris, Simone Dal Zilio Project link
			Company where the PhD student will spend a compulsory

		study/research period of 6 months: ENI SpA
		Months abroad: 0
PON/12	1	Scholarship MUR/PON co-financed by the Department of Physics Subject area: Sustainability
		Project title: "Engineering of nanostructured photocatalytic materials for hydrogen technologies"
		Principal investigator: prof. Roberto Gotter
		Project <u>link</u>
		Company where the PhD student will spend a compulsory study/research period of 9 months: APE Research Srl Months abroad: 6
PON/13	1	
PON/13	1	Scholarship MUR/PON co-financed by the Department of Physics Subject area: Sustainability
		Project title: "X-ray spectroscopy for hydrogen-based economy."
		Principal investigator: prof. Marco Lazzarino, Elena Magnano
		Project link
		Company where the PhD student will spend a compulsory study/research period of 6 months: BRETON SpA
		Months abroad: 0
PON/14	1	Scholarship MUR/PON co-financed by the Department of Physics and by SNAM S.p.A.
		Subject area: Sustainability
		Project title: "Study of materials for SOFC application by AP-NEXAF"
		Principal investigator: prof Piero Torelli
		Project <u>link</u>
		Company where the PhD student will spend a compulsory study/research period of 6 months: SNAM S.p.A.
		Months abroad: 3
PON/15	1	Scholarship MUR/PON co-financed by the Department of Chemical and Pharmaceutical Sciences and by ENPHOS Srl
		Subject area: Sustainability
		Project title: "Functional Carbon Nanostructures for "Green" Electrolyzers (NANOGREEN)
		Principal investigator: prof. Maurizio Prato
		Project <u>link</u>
		Company where the PhD student will spend a compulsory study/research period of 6-12 months: ENPHOS SrI
		Months abroad: 0
PON/16	1	Scholarship MUR/PON co-financed by the Department of Medicine, Surgery and Health Sciences with funds on the project H2020 iToBoS Grant Agreement n. 965221
		CUP J99C21000380006
		Subject area: Sustainability
		Project title: "Green synthesis of nanoparticles and implementation of biosensors for medical-diagnostic applications"
		Principal investigator: prof. Serena Bonin
		Project <u>link</u>
		Company where the PhD student will spend a compulsory study/research period of 6 months: AB ANALITICA Srl
		Months abroad: 6

TERMS AND CONDITIONS				
Required academic qualifications (see art. 2 of the Notice of Competition)				
"Lauree vecchio ordinamento" (awarded in All Italy before the D.M. 509/99 reform of the University system)				
"Lauree specialistiche Italy	e" (LS) awarded in All			
"Lauree magistrali" (L	M) awarded in Italy All			
Selection criteria  Qualifications + interview  Maximum final score: 100 - Minimum final score required for eligibility: 60				
Evaluation criteria	Qualifications including rese	earch project (maximum score:	30 - minimum score re	equired: <b>15</b> ):
1	criteria subcriteria			
	curriculum vitae et studiorum	Evaluation of the CV based on any postgraduate qualifications, participation in research projects, attendance of theoretical / practical internships and training internships related to the topics of the PhD course, study and research periods abroad.	maximum score 5	maximum score <b>7</b>
		Evaluation of the degree final mark:  - 110 cum laude: 2 points  - from 108/110 to 110/110: 1 point  - from 105/110 to 107/110: 0,5 points  Evaluation of study abroad: 1 point for every 3 months up to a maximum of 2 points		
		Up to a maximum of 2 points taking into consideration any papers published from 2017 onwards (1 score point for each paper published on a journal indexed by ISI, and 0,5 score point for any other publication in extenso or contribution to a conference).	maximum score 2	
	abstract of the degree thesis	Up to a maximum of 3 point coherence and relevance of topics covered by the PhD Concorrectness and clarity of the using the dedicated form.	f the thesis to the ourse, as well as the	maximum score 3
	exams taken	The Committee will consider the weighted mean (M) and assign the points as shown here:	weighted mean     points       29≤ M ≤30     5       27≤ M <29	maximum score <b>5</b>
	Research project	maximum score 15 - minimum	M < 21 0 score required 9	

The Committee will evaluate the description of the state of the art, the relevance of the scientific research, the objective to be achieved, the personal contribution to the research activity, including the activity to be performed in the company.

Relevance of the project to the criteria of the Programma Operativo Nazionale (PON) will be considered, particularly in relation to the <u>National Smart Specialisation Strategy</u> (<u>NSSS</u>) and the National Research Program (<u>PNR</u>), and its ability to provide added value in terms of scientific, social and economic impact on the national territory (max 5.000 characters)

Interview: maximum score 70 - minimum score required 45

During the interview, the Committee will consider the candidate's skills, ie clarity and consistency, ability to analyze and summarize as well as their scientific knowledge, capacity for research, knowledge of the current scientific literature underlying the topics of the research. The interview will also include reading and comprehension of a short text in English.

The <u>admission results</u> will be published online. The admission process includes the following steps: Assessment of foreign degrees >> Assessment of other qualifications >> Interview. The merit list will be published following the Doctoral Board decision on the assignment of places and scholarships.

Examination schedule	Assessment of qualifications	from 25 October 2021
	Interview	4 November 2021 at 8:00 (Italian time)
		The Board of Examiners will interview candidates also on subsequent days
		Further details on the interview will be published on this link.
	Language(s) of the interview	Italian
	Language(s) of the litterview	English (for non-Italian speaking candidates)
	Language(s) tested in the interview	English (level of knowledge required: CEFR B2)
	Videoconference interview	Upon request of the candidates, the interview may be carried out by videoconference. The form is available on "Videoconference interview" and must be uploaded within the application deadline.
		Candidates wishing to take the interview remotely and failing to upload the appropriate form for videoconferencing within the deadline, can send their request by email to dottorato.nanotecnologie@units.it up to 4 working days before the date of the interview, stating the reason for their late request.
		The Board of Examiners may arrange with the candidate a different time for the interview.

## **SUPPLEMENTARY INFORMATION (following publication of the Notice of Competition)**