Finanziato dall'Unione europea
NextGenerationEU

# DOCTORAL PROGRAMME <br> IN <br> MATHEMATICS, COMPUTER SCIENCE, STATISTICS 

Director prof. Alessandra Sestini
XL cycle - academic year 2024/2025

| SCIENTIFIC AREA |  |
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| ADMINISTRATIVE OFFICE | Department of Mathematics and Computer Science "U. Dini" (DiMal) |
| WEB | www.phdmatinfstat.unifi.it |
| PARTNERS INSTITUTIONS | - University of Perugia <br> - Istituto Nazionale di Alta Matematica "F. Severi" (INdAM) |
| CURRICULA | 1. Mathematics <br> 2. Computer Science <br> 3. Statistics |
| POSITIONS AVAILABLE: 14 <br> Positions with Scholarship: 12 <br> Positions without Scholarship: 2* <br> * standard ranking only |  |
| RANKING LIST FOR <br> STANDARD POSITIONS <br> SCHOLARSHIPS <br> AVAILABLE: 11 | 6 - University of Florence <br> 3 - University of Perugia <br> 2 - Istituto Nazionale di Alta Matematica "F. Severi" (INdAM) |
| RANKING LIST FOR <br> SPECIFIC RESEARCH <br> TOPIC SCHOLARSHIP <br> POSITION AVAILABLE: 1 | Department of Mathematics and Computer Science "U. Dini" <br> Thematic: "Design and Assessment of Dependable and secure Cyber-Physical Systems" <br> Funded by the following projects: PRIN 2022- S2: Safe and Secure Industrial Internet of Things - CUP B53D23012900006; BONDTOSCA - "Tool Optoelettronico per Strutture in Calce cementoAcciaio - Ferrovie Italiane" (TOSCA-FI); BONDSISTER - POR FESR 2014-2020 SIgnaling \& SensingTechnologies in Railway application. <br> The PhD student will work in the area of resilient, safety-critical and secure cyberphysical systems, providing novel techniques, mechanisms and architectural solutions for the design of cyber-physical systems, ecosystems and critical infrastructures, and innovative experimental and model-based techniques for their dependability and security assessment. |
| STUDY/RESEARCH PERIODS ABROAD | 3 months |


| DOCUMENTS REQUIRED <br> FOR THE ADMISSION <br> (under penalty of exclusion) | - Copy of the Identification Document <br> - Self-declaration for qualifications obtained in Italy (laurea triennale, specialistica o magistrale o ciclo unico) with a list of all exams taken and their marks, title of the thesis and graduation mark (download the form here, make sure you fill in all the fields) <br> - Qualifications obtained abroad (Bachelor's and Master's Degrees or combined cycle Degree) with a list of all exams taken and their marks, title of the thesis and graduation mark. <br> The same documentation except for the final mark must be submitted by those who will graduate within the 31/10/2024 |
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| DOCUMENTS REQUIRED <br> FOR THE EVALUATION | MANDATORY <br> - Curriculum vitae et studiorum <br> - List of completed examinations with marks and with the Weighted average of the exams both for Bachelor's and Master's Degrees (or equivalent) <br> - Research Project <br> OPTIONAL <br> - Publications <br> - Any other qualification document |
| RESEARCH PROJECT | The research project, consisting of 5,000 characters including references and notes, excluding spaces, may be discussed during the interview, possibly contributing to the evaluation of the aptness of the applicant for research. The candidate may present the same project for the standard scholarship and for any scholarship with specific research topic and separate ranking lists he/she intends to apply to, or alternatively may present different projects for each scholarship, indicating clearly to which scholarship each project refers. |
| INTERVIEW MODE | In person <br> (In the application form candidates may ask to conduct the interview remotely) <br> The interview can be conducted in English language |
| FURTHER INFORMATION | The interview is aimed to evaluate the basic preparation and the research potential of the candidate and may include the discussion of the research project, Master's thesis, curriculum and other possible qualifications. <br> For specific research topic scholarships part of the interview will be focused on the discussion of the topic. |
| EVALUATION MARKS | parameter $\quad$minimum maximum <br> score score |
|  | Curriculum vitae, academic career, research <br> project, publications and other scientific <br> qualification documents. $40 / 120$ $60 / 120$ |
|  | Applicants who obtain a mark of at least 40/120 in the evaluation of the above parameters will be admitted to the interview |
|  | Interview $40 / 120$ $60 / 120$ |
|  | Eligibility is achieved with a minimum score of 80/120 |


| EXAMINATION SCHEDULE |  |  |  |
| :--- | :---: | :---: | :---: |
|  | DATE | TIME | PLACE |
| INTERVIEW | July $11^{\text {th }}, 12^{\text {th }}, 15^{\text {th }}$ and $16^{\text {th }} 2024$ | $09: 00$ a.m. | Department of Mathematics and <br> Computer Science "U. Dini" <br> Viale Morgani, 67/A - Florence |
| The list of candidates admitted to the interview and the final ranking will be published at the following <br> web page: https://www.unifi.it/p12593 |  |  |  |

