DOCTORAL PROGRAMME

IN

MATHEMATICS, COMPUTER SCIENCE, STATISTICS

Director prof. Alessandra Sestini

XLI cycle – academic year 2025/2026

SCIENTIFIC AREA	
ADMINISTRATIVE OFFICE	Department of Mathematics and Computer Science "U. Dini" (DiMaI)
WEB	www.phdmatinfstat.unifi.it
CURRICULA	1. Mathematics 2. Computer Science 3. Statistics
	POSITIONS AVAILABLE: 10 Positions with Scholarship: 8 Positions without Scholarship: 2* ** standard ranking only*
RANKING LIST FOR STANDARD POSITIONS SCHOLARSHIPS AVAILABLE: 6	**6** - University of Florence
RANKING LIST FOR SPECIFIC RESEARCH TOPICS SCHOLARSHIPS POSITION AVAILABLE: 1	Department of Statistics, Computer Science, Applications "G. Parenti" – Progetto Ministeriale "Dipartimenti di Eccellenza 2023-2027" **Thematic:** "Rethinking Data Science" The Ph.D. student will be involved in the development of innovative statistical models and learning methods, together with computationally efficient algorithms, for the analysis of high-dimensional data and data with complex structure, to support research in substantive fields and across disciplines.
RANKING LIST FOR SPECIFIC RESEARCH TOPICS SCHOLARSHIPS POSITION AVAILABLE: 1 *(conditioned on the allocation of the grant)*	National Cybersecurity Agency - <u>call for 30 scholarships on cybersecurity</u>, for the funding of the following scholarship. **Thematic:** "OT Malware Alarms with Sandboxing and Honeypotting (OT-MASH)" If the grant is awarded, the scholarship holder will design and implement an advanced architecture for OT malware analysis through the integration of sandboxing and OT honeypots, for monitoring the behavior of advanced malware to improve the quality of alerts generated by SIEM systems, reducing false positives and contributing to automatically extracting response procedure patterns for attack mitigation. **Please note: the scholarship will be awarded ONLY if the funding is granted**

Further information on Cybersicurezza Call	Article 4 (Obligations of the PhD student recipient) 1. The PhD student recipient of the scholarship funded by the Agency must carry out the research project in line with what is indicated in the Research Project Fact Sheet approved for the funding. 2. The PhD student recipient of the scholarship funded by the Agency must comply with the obligations related to intellectual property aspects as outlined in the following Article 5. Article 5 (Intellectual property and research results) 1. Universities may not use, for advertising purposes or any other promotional activity, the name, trademark, or other distinctive sign of the Agency except to disclose the funding of the PhD scholarships. 2. Without prejudice to the moral right of authorship of the PhD students, the ownership of the research results of the projects funded by the Agency will be shared equally (50%) between the Agency and the University. Consequently, the University will promptly inform the Agency – via Certified Electronic Mail (PEC) to the address acn@pec.acn.gov.it – of the existence of research results so that the Agency, within the following sixty days, may express its possible intention to waive its right via Certified Electronic Mail (PEC) to the address acn@pec.acn.gov.it. In such a case, the University will acquire full ownership of the research results. Article 9 (Revocations, non-allocation of scholarships, withdrawals, terminations, and cessations) 1. The Agency will proceed with the total revocation of the funding, with the consequent obligation for the University to return any amounts already disbursed, in the following cases: a) failure to start the doctoral program in the XLI doctoral cycle within the established deadlines; b) interruption of the courses due to reasons attributable to the University itself; c) failure to comply with the obligations incumbent on the University as outlined in the Call and the Implementation Regulations; d) implementation of the research project in a manner different from that approved for funding. 2. In the case of the PhD student recipient failing to obtain the doctoral degree, or if the PhD student recipient is not positively evaluated for the renewal of the scholarship, or if or if he/she renounces it, partial revocation of the funding will occur, with the obligation to return the amounts disbursed following the last annual report submitted by the University to the Agency. Amounts not yet disbursed will be considered not due, and payments will be interrupted. 3. The University will notify the Agency of any withdrawals by the PhD student, whether regarding the position or the scholarship, even if related to a portion of the course.
STUDY/RESEARCH PERIODS ABROAD	3 months
DOCUMENTS REQUIRED FOR THE ADMISSION (under penalty of exclusion)	● Copy of the Identification Document ● Self-certification for qualifications obtained in Italy (laurea triennale, specialistica o magistrale o ciclo unico) with list of exams taken, credits and related grade, title of the thesis and graduation mark (using this **template** or similar forms containing the required information) ● Qualifications obtained abroad (Bachelor's and Master Degrees or combined cycle Degree) with a list of all exams taken, credits and related grade, rating scale, title of the thesis and graduation mark *The same documentation except for the final mark must be submitted by those who will graduate within the 31/10/2025*

DOCUMENTS REQUIRED FOR THE EVALUATION	**MANDATORY** ● Curriculum vitae et studiorum ● List of completed examinations with marks and with the Weighted average of the exams both for Bachelor and Master Degrees (or equivalent) ● Research Project **OPTIONAL** ● Publications ● 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** (In the application form candidates may ask to conduct the interview remotely) 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. For the specific research topic scholarship part of the interview will be focused on the discussion of the topic.

EVALUATION MARKS

parameter	minimum score	maximum score
Curriculum vitae, academic career, research project, publications and other scientific 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	15, 16 and 17 July 2025	9:00 a.m.	Dipartimento di Matematica e Informatica "Ulisse Dini" Viale Morgagni, 67/A - Firenze

The list of the candidates admitted to the interview and the final ranking will be published at the page **PhD courses**