

Mathematics	
Cycle	39°
Director	Prof. Valeria Ruggiero (valeria.ruggiero@unife.it) Department of Mathematics and Computer Science
Duration	3 years
Course Type	PhD in association with the University of Parma and the University of Modena and Reggio Emilia
Curriculum	No
Research Topics	https://www.unife.it/studenti/dottorato/it/corsi/riforma/mathematics
Qualification required for admission	Italian degree known as “Laurea specialistica/magistrale” or a degree awarded prior to approval of Ministerial Decree D.M. n. 509 of 3 November 1999, updated with D.M. n. 270 of 22 October 2004, n. 270; Master’s (second level) degree, or an equivalent foreign academic qualification awarded abroad

Assessment Criteria		
<p>Evaluation of qualification: maximum score 40 points; Minimum score required to be admitted to the interview 30/40</p> <p>Interview: maximum score 40 points</p> <p>Minimum final score required: 60/80</p> <p>Online interview for candidates living abroad: YES</p>		
Language of the interview:	English	
List of assessable credentials		
Academic curriculum/ Curriculum vitae	<p>Mandatory documentation: Complete academic career information (including eventual abroad periods, research activities in universities public or private companies, working activities and internships, participation in schools, seminars, meetings) including the list of examinations and grades and final mark, for Bachelor and Masters degrees.</p>	Up to 15 points
Research project	<p>Maximum 20,000-character project, spaces included, written in English or Italian on an original research topic, structured as follows: introduction of the issue within the international scientific context, significance of the problem, method through which the problem will be addressed, expected results.</p> <p><i>The mentioned project is not binding regarding the subsequent choice of the doctoral thesis, except for the positions with defined themes.*</i></p> <p><i>If applying for scholarships with a specific theme, the coherence of the research project with the theme is a requirement for evaluation. Therefore, the research project must necessarily relate to the topic of interest, or else the application will be excluded.</i></p> <p><i>If admitted to the doctoral program, the candidate will pursue research training and the thesis consistently with the reported theme.</i></p>	Up to 6 points

	<i>It is possible to apply for a maximum of 2 scholarships with defined themes by submitting 2 distinct research projects as a mandatory requirement.</i>	
Master degree thesis	Summary of the thesis in Italian or English, consisting of a minimum of 3 and a maximum of 6 pages, structured into the following sections: thesis motivations, research methods, and obtained results.	Up to 10 points
Statement of research interest	Short text - maximum length: 2 pages -in English or in Italian, which must contain the motivations to attend the Ph.D. programme and the candidate's specific research interests	Up to 3 points
Reference letters	Maximum 2 letters, supporting the application, written and signed by teachers, experts, researchers or professionals, qualified on the course topics.	Up to 3 points
Other academic/professional qualifications	Academic and working experience; language certifications; publications (including abstracts and/or works presented at meetings)	Up to 3 points
Interview agenda/program		
Discussion over the candidate's scientific interests, focusing specifically on the activities relating to the thesis, as well as the candidate's scientific titles and eventual publications. The candidate's English language knowledge will be tested by reading and translation of a brief scientific text		
Examination Timetable		
Evaluation of qualifications and interview will take place within the 19 th of September 2023. Evaluations' results, The beginning date for consulting the evaluations' results and the interview schedule will be available within the present call deadline at the following page: https://www.unife.it/studenti/dottorato/it/concorsi/esiti-prove-concorso-di-dottorato-per-il-ciclo-39deg		

TOTAL AVAILABLE POSITIONS	14
With scholarship	12
Positions reserved for foreign scholarship holders and/or scholarship holders of specific international mobility programs	2

Regular positions with scholarship		
N°	<i>Funding institution</i>	<i>Research topic or area (if applicable)</i>
3	Università degli Studi di Ferrara	
3	Università degli Studi di Parma	
3	Università degli Studi di Modena e Reggio	
1	Regione Emilia-Romagna – PR FSE+ 2021/2027	Fuzzy and Metric Modal Symbolic Learning

**Positions funded under Ministerial Decree No. 118/2023
CUP: F73C23000480006**

N°	Area of interest	Research topic
1	PNRR PhD Programmes - M4C1 I. 4.1	Modeling and numerical methods in socio-epidemiological dynamics through physics-informed neural networks methodologies
1	PNRR PhD Programmes - M4C1 I. 4.1	Biological and chemical diffusion: analysis and control of the prevailing dynamics