Engineering Science

Cycle	XXXVII
Director	Prof. Stefano Trillo – Dept. of Engineering – stefano.trillo@unife.it
Duration	3 years
Curriculum	1. Civil Engineering 2. Industrial Engineering 3. Information Engineering
Research Topics	http://www.unife.it/studenti/dottorato/corsi/riforma/engineering
Qualification required for admission	LM-4, LM-17, LM-18, LM-19, LM-20, LM-21, LM-22, LM-23, LM-24, LM-25, LM-26, LM-27, LM-28, LM-29, LM-30, LM-31, LM-32, LM-33, LM-34, LM-35, LM-40, LM-43, LM-44, LM-48, LM-53, LM-54, LM-66, LM-71, 20/S, 23/S, 25/S, 26/S, 27/S, 28/S, 29/S, 30/S, 31/S, 32/S, 33/S, 34/S, 35/S, 36/S, 37/S, 38/S, 45/S, 50/S, 54/S, 61/S, 62/S, 81/S, 82/S, equivalent Italian degree Lauree V.O. in Engineering, Physics and Information Technology or an equivalent foreign academic qualification awarded abroad.

Available Positions

Positions with Scholarship	Regular positions	7
Positions without Scholarship	Regular positions	3
Positions reserved to candidates belonging to specific categories	Reserved positions for employees of Companies active in high qualification activities (Industrial Doctorate)	2
	Reserved positions for candidates holding a foreign government scholarship or a scholarship funded by international mobility programmes	**2**
	Total number of available positions	**14**

Kind of Financial Support

N°	*Financial support*	*Research subject*
3	Università degli Studi di Ferrara	
1	Co-financed by Dept. of Engineering and Università di Ferrara	Integrated Sensing and Communication in 6G Networks
1	Co-financed by Consorzio Futuro in Ricerca – CFR and Università di Ferrara	Numerical and experimental analysis of particle deposition in absorbing power turbomachinery
1	Financed by Eurac Research	Evaluating the impact of facade-integrated controlled ventilation on speech intelligibility, listening effort and indoor soundscapes in educational buildings
1	Agreement with Bonfiglioli Engineering s.r.l. (Industrial Doctorate. Reserved positions for employees engaged in high qualified research activities)	Architectures based on deep learning for vision inspection and product quality control
1	Agreement with MT s.r.l. (Industrial Doctorate. Reserved positions for employees engaged in high qualified research activities)	Development of innovative methods for monitoring/diagnostic/prognostic and predictive maintenance in tool holders
1	Funded by Regione Emilia-Romagna: Research Project for Technology Transfer and Business	Big data solutions for Industry 4.0: from shop floor to smart products

Assessment Criteria

Evaluation of qualification: maximum score 50 points. Minimum score required to be admitted to the interview 35/50 - **Interview**: maximum score 30 p.ts (including the foreign language examination). **Minimum final score required: 60/80**

During the interview, the applicant's knowledge of the following languages will be tested:	English

List of documents for the evaluation

Curriculum vitae et studiorum	**Mandatory documents:** Full academic career information (Bachelor and Master degree), a list of examinations and grades and final mark, for Bachelor and Masters degrees, and post degree experience. Thesis abstract (max length 2 pages), with the following structure: motivation, research methodology, obtained or expected results and bibliography. Only for undergraduates students the abstract must be signed by the supervisor.	Up to 20 points

Research Project	Maximum length: 3 pages - in English or in Italian which must contain an original proposal for a research project, with the following structure: introduction to the scientific international context, relevance of the topic, expected results, argumentation. The proposed research project is not binding with regard to the subsequent topic that will be carried out during the three year course.	Up to 20 points
Scientific publications	Abstracts and/or papers presented to meetings or congresses **OR** File containing the full list of the publications with associated link.	Up to 5 points
Statement of research interest	Short text - maximum length: 1 page -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
Other professional or academic qualifications	Academic, professional qualifications; language certificates.	Up to 2 points

Interview
Presentation of the proposed research project and the Candidate's linguistic skills will be verified.

Examination Timetable
Evaluation of qualifications and interview will take place in September. Evaluation results may be checked at the following link: http://www.unife.it/studenti/dottorato/concorsi/selection. The beginning date for consulting the evaluation results and the interview schedule will be available within the present call deadline at the following page http://www.unife.it/studenti/dottorato/concorsi/commissioni.