

INFORMATION TECHNOLOGIES		
Cycle	XXXII	
Duration	3 years	
Coordinator	Prof. Marco LOCATELLI – Department of Information Engineering email: marco.locatelli@unipr.it	
Research Topics (the applicant MUST indicate one research topic)	<ul style="list-style-type: none"> Electronics instrumentation and electrical drives Computer systems and automatic control Telecommunications and electromagnetic fields 	
Training objectives	The course aims at educating the future Ph.D.'s so that they will enter the research world with an active role, within both universities and industries	
Academic degree required	Laurea pursuant to the previous university system, laurea specialistica or laurea magistrale, or a foreign academic qualification that has been recognized as equivalent or to the position covered by high internship and Research Agreements Laurea Magistrale in Engineering (from LM20 to LM35), in Computer Science (LM18), in Mathematics (LM40 and LM44) and Physics (LM17).	
POSITIONS PUT OUT TO COMPETITION		
With Scholarship	7	
Without Scholarship	3	
Covered by High Internship and Research Agreements	1	
Reserved to Research Grant	1	
TOTAL	12	
KIND OF SCHOLARSHIP		
N°	<i>Funding entity</i>	<i>Research Topic, if any</i>
2	Scholarship Ministerial funds	
1	Scholarship University funds	
1	Funded by Department of Information Engineering	• Nonlinear optical communications
1	Funded by VisLab s.r.l.	--
1	Funded by EMILIA ROMAGNA REGION in the Project "Creating value for enterprises and companies with the management and analysis of Big Data"	• Big Data visual analysis for automatic geolocation of people and vehicles
1	Co-funded by Fondazione Cariparma	
Positions covered by High Internship and Research Agreements		
N°	<i>Company</i>	<i>Research Topic</i>
1	Elettric80 S.p.A.	• Industrial mobile robot navigation based on automatic perception of environmental features
Positions Reserved to Research Grant		
N°	<i>Subject Area of the Research</i>	
1	Safe trajectory planning for autonomous vehicles	

ADMISSION PROCEDURES		
<p>Assessment of QUALIFICATIONS: up to 70 points (a minimum score of 20 points shall be required to be admitted to the Oral Exam)</p> <p>ORAL EXAM: up to 50 points</p> <p>Minimum score for ELIGIBILITY: 70/120</p>		
Foreign Language	<p>Language the fluency of which shall be assessed during the Oral Exam: ENGLISH.</p> <p>The evaluation of the knowledge of this language will be oral and will consist of a short interview on a technical topic.</p>	
<p style="text-align: center;">Possibility of videoconference for candidates residing abroad (the relevant request shall be submitted using the form attached to the competitive examination announcement)</p>		YES
THE INTERVIEW MAY BE HELD ALSO IN ENGLISH		
LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT		
Graduation thesis	Summary (maximum 2 pages) of the graduation thesis (mandatory qualification)	Up to 2 points
Graduation mark	Score related to the final mark: - 110 with honours (magna cum laude): 2 points; - 110: 1 point;	Up to 2 points
Average of the exam marks (for all candidates)	Score related to the average of the exam marks: - 30/30: 32 points; - From 20/30 to 29.99/30: 3 points for each unit mark (For qualifications obtained abroad indicate the grade obtained by specifying the minimum and maximum expected vote by the releasing university)	Up to 32 points
Curriculum Vitae et studiorum and other qualifications	Including academic career and postgraduate experience, accompanied with a statutory declaration in lieu of the certification of the exams passed with the relevant marks, as well as the final graduation mark (mandatory qualification)	Up to 4 points
Research Project	The research project shall consist of a maximum of 3 pages, be written in Italian or in English, focus on an original research topic and it shall be structured as follows: introduction of the problem in the scientific context, significance of the problem, expected results, argumentation. <u>It shall amount to no commitment on the subsequent choice of the doctoral thesis</u>	Up to 6 points
Statement of Research Interest	Short text – maximum 1 page – in Italian or in English, aimed at explaining the candidate's reasons to attend the PhD and at describing the specific research interests	Up to 6 points

Scientific publications	Articles on national and international journals, papers presented at conferences or symposia, book chapters etc.	Up to 12 points
Other qualifications	Awarding of Scholarships, prizes, trainings, etc.	Up to 6 points
SCHEDULE OF THE ADMISSION EXAMS		
Schedule of the admission exams	ORAL EXAM DATE: 15 September 2016 TIME: 09:00am PLACE: MASTER ROOM – Building 3 - Office Scientific of Engineering Parco Area delle Scienze, 181/A – 43124 PARMA, ITALY	
Oral Exam topics	The Oral exam will focus on qualifications and research interests of the candidate..	
OTHER INFORMATIONS	For foreign candidates, the admission examinations may be held in English at the candidate's choice.	