

FOOD SCIENCE		
Cycle	XXXII	
Duration	3 years	
Coordinator	Prof. Furio BRIGHENTI – Department of Food Science E-mail: furio.brighenti@unipr.it	
Research Topics (the applicant MUST indicate one research topic)	<ul style="list-style-type: none"> • Novel non-targeted methodologies and big data management applied to sensomics, safety and authenticity of food • Insect biorefinery: from waste to high-added value products like proteins and chitin • Characterization of the protein fraction extracted from insects for feed and food applications • Co-Products recovery from cereals to increase sustainability and competitiveness of the agro-food chain • Modeling of heat and matter exchange • Life-cycle assessment in confectionary products and ingredients • Defining intervention strategies for sustainable food systems, consumption and diet • Biotechnologies for hop selection • Identification and characterisation of emerging risks in food production chain (Joint Program with University Cattolica Sacro Cuore of Piacenza and EFSA) • Structure-activity correlation in food allergenic proteins 	
Training objectives	Acquisition of theoretical and experimental knowledge to interpret innovation needs and to contribute to developments in the food sector, from a multidisciplinary viewpoint (chemistry, agronomy, food microbiology, food technology, sensory analysis, human nutrition, marketing and food inspection).	
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.	
POSITIONS PUT OUT TO COMPETITION		
With Scholarship		9
Reserved to employees of companies having a “Industrial Engineering Doctorate” arrangement		1
TOTAL		10
KIND OF SCHOLARSHIP		
N°	<i>Funding entity</i>	<i>Research Topic, if any</i>
3	Scholarship Ministerial funds	<ul style="list-style-type: none"> • Modeling of heat and matter exchange • Defining intervention strategies for food systems • Biotechnologies for hop selection
1	Scholarship University funds	<ul style="list-style-type: none"> • Structure-activity correlation in food allergenic proteins

1	Funded by EMILIA ROMAGNA REGION in the Project "Safety, quality and integration of regional food chains to increase competitiveness"	<ul style="list-style-type: none"> • New challenges and needs of the cereal agro-food chain to increase competitiveness while ensuring safety and quality
1	Funded by Department of Food Science within the Project EU H2020 INDIRECT	<ul style="list-style-type: none"> • Characterization of the protein fraction of the insects
1	Funded by VITO Visione Technology NV (Belgium)	<ul style="list-style-type: none"> • Insect biorefinery
1	Funded by Barilla S.p.A.	<ul style="list-style-type: none"> • Novel non-targeted methodologies
1	Co-funded by Fondazione Cariparma	<ul style="list-style-type: none"> • Identification and characterization of food risks
Positions reserved to employees of companies having a "Industrial Engineering Doctorate" arrangement		
N°	Company	Research Topic, if any
1	SOREMARTEC ITALIA s.r.l.	- Life-cycle assessment in confectionary products and ingredients
ADMISSION PROCEDURES		
Assessment of QUALIFICATIONS: up to 30 points ORAL EXAM: up to 90 points Minimum score for ELIGIBILITY: 70/120		
Foreign Language	Language the fluency of which shall be assessed during the Oral Exam: ENGLISH.	
Possibility of videoconference for candidates RESIDING NON-EU. (the relevant request shall be submitted using the form attached to the competitive examination announcement)		YES
THE INTERVIEW MAY BE HELD ALSO IN ENGLISH		
LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT		
Graduation thesis	Coherence of the theme of the graduation thesis with the educational objectives of the PhD and grade obtained (mandatory qualification)	Up to 10 points
Curriculum Vitae et studiorum and other qualifications	<u>Written in English</u> and covering the candidate's university career and postgraduate experience (evidenced at least through substitute statement) (mandatory qualification)	Up to 8 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 doctorate program and at describing his/her specific research interests	Up to 5 points
Scientific publications	Articles on national and international journals, papers presented at conferences or symposia, book chapters etc.	Up to 5 points
Reference Letters	a maximum of 2 written by University Teachers, Researchers, Heads of Italian and foreign Research Centers	Up to 2 points

SCHEDULE OF THE ADMISSION EXAMS

ORAL EXAM	ORAL EXAM DATE: 20 September 2016 TIME: 9:00am PLACE: CLASSROOM A – Didactic Center of Department of Food Science (Building 19 Food Project University) Parco Area delle Scienze, 59/A – 43124 PARMA, ITALY
Oral Exam topics	The Oral Exam will consist: <ol style="list-style-type: none">1. Critical reading of a scientific publication chosen from among those proposed by the Commission within the themes of of research proposals;2. Next talk about the contents of the scientific publication chosen by each candidate3. English Language proficiency
OTHER INFORMATIONS	For foreign candidates, the admission examinations may be held in English at the candidate's choice.