PHD PROGRAMME TABLE 37TH CYCLE

PROGRAMME'S NAME	PHILOSOPHY, SCIENCE, COGNITION AND SEMIOTICS				
	(PSCS)				
DURATION	3 years				
PROGRAMME START DATE	01/11/2021				
LANGUAGE	Italian and English				
MANDATORY STAY ABROAD	6 months				
COORDINATOR	Prof. Claudio Paolucci (c.paolucci@unibo.it)				
CURRICULA	1. Philosophy and Science Studies				
	2. Semiotics				
	3. Cognitive Science				
RESEARCH TOPICS	Detailed list at the bottom of the present document				
PhD POSITIONS	7				
ADMISSION PROCEDURE	Qualifications and research proposals evaluation				
	Oral examination				

Available Positions and Scholarships

Pos. n.	Financial support	Description	Positions linked to research topics		
1	PhD Scholarship	Totally funded by the University of Bologna general budget			
2	PhD Scholarship	Totally funded by the University of Bologna general budget			
3	PhD Scholarship	Totally funded by the University of Bologna general budget			
4	PhD Scholarship	Totally funded by the University of Bologna general budget			
5	PhD Scholarship	Funded by the University of Bologna general budget and co-funded by the Philosophy and Communication Studies Department within the framework of the Erasmus+ project "Fakespotting" – Convention n. 2020-1-IT02-KA203-079902; (04.10.2020-03.08.2023)	Online Enunciation, Fakes and Digital Information Literacy		
6	PhD Scholarship	Totally funded by the University of Bologna general budget under the "Progetti di Sviluppo Strategico dei Dipartimenti (PSSD)" initiative	Kant and the unconscious. Origins and influence of a misunderstood theory		
7	Research Grant	Funded by the Computer Science and Engineering Department with funds from the Horizon 2020 Project "TAILOR - Foundations of Trustworthy AI - Integrating Reasoning, Learning and Optimization" (ICT-48-2020 - Towards a vibrant European network of AI excellence centres; Grant Agreement 952215; 1.09.2020-31-08.2023) - PI Prof. Michela Milano, Computer Science and Engineering Department. The Research Grant has a duration of 12 months, renewable up to a maximum of 36 months, the gross amount of the recipient is 19,367 euros	The role of Big Data in analysis, construction, and assessment of Trustworthy Al		

Admission Exams

	DATE AND TIME	RESULTS
Qualifications and research proposal evaluation	Applicants' participation is not required	Available from 05/06/2021 **
Oral examination	Time: starting from 09/06/2021 – 09.00 a.m. CEST* Place: Remotely, using Microsoft Teams	Available from 21/06/2021 **

^{*} In case that the oral examination cannot be completed in one day due to the large number of applicants, the oral examination detailed schedule shall be made available on the webpage <u>Studenti Online</u> together with the results of the qualifications evaluation. **During the oral examination applicants may express their interest in one or more positions linked to specific research topics.**

Required and Supporting Documents to be attached to the Application

(only documents in Italian, English, French, German and Spanish shall be considered as valid and be assessed by the Admission Board)

Only qualifications obtained during the last 5 calendar years shall be taken into consideration, except for the University Degree. The Admission Board will assess the relevance of the supporting documents to the PhD Programme.

REQUIRED DOCUM	MENTS						
Identity document	Valid identity document with photo (i.e. identity card, passport)						
Curriculum Vitae	No specific CV format is required						
Degrees	Documents attesting the awarding of the first and second cycle degrees, the exams taken and the marks obtained (see Art. 3 of the Call for Applications)						
SUPPORTING DOC	UMENTS						
Research proposal	 Multi-annual research proposal, with special emphasis on the activities to be completed during the first-year course. The proposal must meet the following requirements: It must mention on the cover page the curriculum of the PhD Programme the applicant is interested in and that covers the research project proposal; it cannot exceed 20,000 characters, including spaces and formulas, if present. This figure does not include: the title, the outline, references and images (such as graphs, diagrams, tables etc - where present); It must include: the state of the art; description and structure of the project; expected results; lead-time for implementation; (proposed) criteria to be used to assess the findings obtained; references. 						
Thesis Abstract	Abstract of the second cycle degree thesis . Applicants who are yet to obtain their second cycle degree may submit the draft of their thesis (abstracts cannot exceed 5,000 characters, including spaces and formulas, if present. The above figure does not include: title, outline, images such as graphs, diagrams, tables etc. if present).						
Reference letter/s	No more than 3 reference letters signed by Italian and/or International academics and professionals in the research field, which do not form part of the Admission Board, attesting the suitability of the applicant and his/her interest for the scientific research. Letters shall be uploaded following the procedure on Studenti Online , detailed in the Call for Applications (Art. 3.2).						
Personal Statement	Motivation Letter describing the reasons why the applicant wants to attend the doctoral programme as well as the experiences carried out and the research interests that make him/her suitable for the doctoral programme (max 3,000 characters, including spaces).						

^{**} The results of the admission exams will be available on the webpage <u>Studenti Online</u> (select "summary of the requests in progress" > "see detail" and open the .pdf file at the bottom of the page. **No personal written** communication will be sent to applicants concerning the examinations results.

Publications	List of scientific publications (i.e. monographs, articles on scientific journals, volume chapters).			
Other documents	 1st or 2nd level Professional Courses (Master di primo e secondo livello) relevant to the PhD Programme Teaching activity and tutorship carried out at university level Research activity of any kind - whether basic, applied, translational, etc carried out in any capacity, including when covered by research grants, and as a staff member of research projects. Documents attesting the knowledge of foreign languages Study periods spent abroad (e.g. Erasmus programme or other similar mobility 			
	programmes). Other qualifications attesting the suitability of the applicant (scholarships, prizes, etc).			

Evaluation Criteria*

Scores will be expressed in points out of 100, as follows.

1. Qualifications and research proposal evaluation – Minimum score for admission to the oral examination: 30 points, Maximum score: 50 points

Qualification evaluation	Graduation final mark. Applicants who are yet to obtain their second cycle degree shall be evaluated on the basis of the Weighted Average Mark (WAM)	10 points max
	Publications and other qualifications	10 points max
Research proposal	Scientific value and innovative nature of the proposal	10 points max
evaluation	Description and structure of the proposal	10 points max
	Proposal feasibility	10 points max

2. Oral examination – Minimum score for eligibility: 30 points, Maximum score 50 points

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English proficiency						10 points max
Research Project presentation						30 points max
General knowledge of issues encompassed by	the F	hD P	rograi	nme		10 points max

Oral examination includes the presentation of the research project and is intended to assess the suitability of the applicant for scientific research as well as the general knowledge of issues encompassed by the PhD Programme (see the list of research topics at the bottom of the present document). During the oral examination, the Admission Board will assess the applicant's proficiency in the English language. The oral examination is carried out in Italian and/or in English.

Final Ranking List and Enrollment

Considering the expressions of interest for **topic-specific positions**, the Admission Board will establish if the applicants can be considered eligible for the allocation of the positions linked to specific research subjects, taking into account their skills, experience and aptitude.

A **sub-ranking list** for each topic-specific position shall be drawn up. In case of vacancies, only after having scrolled the whole sub-ranking list, vacant positions shall be proposed to eligible applicants following the general ranking list. After the publication of the results of the oral examination, the **final ranking list** will be available on the <u>University</u> website, selecting the relevant PhD Programme > "More information", section "Notices" at the bottom of the page. Following the publication of the final ranking list, successful applicants shall **enroll** on <u>Studenti Online</u> by the deadline indicated on the <u>University website</u>, selecting the relevant PhD Programme > "More information".

If a successful applicant withdraws from a position, the following applicant in the ranking list, who is also eligible for the specific position, will be contacted. During the replacement procedure, the new terms of enrollment shall be communicated via e-mail to the chosen applicant.

^{*}Possible further evaluation criteria will be available on the <u>University website</u>, selecting the relevant PhD Programme > "More information", at the bottom of the page in the section "Notices".

Research Topics

Curriculum 1: Philosophy and Science Studies

The curriculum in Philosophy and Science Studies deals with:

- a) aesthetics, regarding the structures of human experience and the question of sensitivity, the expressive practices of taste and the knowledge of different traditions of the Arts;
- b) moral philosophy, which include knowledge and skills relating to human action in its ethical-social, normative, political, anthropological and communicative dimensions;
- c) philosophy of law, in its deontological, historical-doctrinal and political dimensions;
- d) theoretical philosophy, which concern the activity of thought in its genesis, the structuring of concepts and the different forms of experience, in particular the theory of knowledge, phenomenology, metaphysics, ontology, hermeneutics and religion;
- e) logic and philosophy of science, which address the forms of scientific knowledge, logic and natural languages, the representation of knowledge and computation, the methodological and foundational issues specific to the individual sciences;
- f) historical-philosophical studies, which include the forms and development of philosophical thought from antiquity to the present day, also extending to political philosophy, philosophy of history, Italian philosophy and the cultural expressions of philosophical doctrines:
- g) social studies of science and sociology, inherent in the dynamics of production, dissemination and use of expert knowledge, technological artifacts and socio-technical infrastructures;
- h) studies of the history of science and techniques, which aim in a diachronic and synchronic sense at the historical-critical reconstruction of the development of sciences, techniques and scientific institutions, also understood in their social, communicative and gender implications;
- i) philosophy of language and mind, which address language as an eminently theoretical object of investigation, also including the most recent trends in cognitive semiotics and analytical philosophy.

Curriculum 2: Semiotics

The educational goals of the curriculum in semiotics are to develop theoretical and practical competencies in semiotics both from a theoretical-philosophical perspective, and in terms of their practical-methodological application. In particular, from a theoretical perspective, we shall examine relevant themes related to the development of philosophical and linguistic theories of signs and semiosis, key elements in the history of semiotics, as well as comparisons between different sign systems: linguistic, visual, multimodal, etc. On the application plane, necessary methodological tools will be provided to carry out in depth analyses of different types of textual objects: verbal, visual, behavioral, musical, audiovisual, etc. To this end the principal theoretical and methodological currents characterizing the semiotic tradition, from structuralism to interpretational semiotics, will be examined in depth.

Curriculum 3: Cognitive Science

The main research topics of the curriculum on Cognitive science are:

- Attention
- Objects and action, affordances
- Role of the body in cognition, sense of body
- Language grounding in the perception, action and emotion systems
- Emotions and sensorimotor system
- Numerical cognition and its relationship with embodied cognition
- Social cognition Students are required to learn to perform experiments in the lab

Applicants will have to learn to plan them, to execute them and to analyze the data. They will be required to learn to realize classical behavioral experiments, in which reaction times and errors are recorded. In addition, they will be invited to learn to use at least one of the three instruments that we possess - eye tracking, motion tracking or TMS. In order to discuss with students, the experiments they are conducting, from their planning to the data analysis, we will organize a lab meeting to be held every month. Students and professors will discuss together research projects, and students will have the opportunity to learn how to present a study. We will also organize periodical meetings to discuss some scientific papers. Students will be invited to present to the others an overview of the main topics and open issues in their area. Compared to other doctoral curricula in cognitive science, our curriculum is characterized by a higher attention paid to psychology (especially cognitive psychology and communication psychology).