

Academic staff (as of July 2010):

Paulo J. S. Cruz, School of Architecture, University of Minho
 Peter Bohlin, Bohlin Cywinski Jackson, USA
 Niccolò Baldassini, RFRParis, FR
 Javier Cimadevilla, School of Architecture, University of La Corunha, SP
 Gerardo Wadel, School of Architecture La Salle, University Ramon Llull, Barcelona, SP
 Paulo Mendonça, School of Architecture, University of Minho
 Manuela Almeida, School of Engineering, University of Minho
 Luísa Caldas, Faculty of Architecture, Technical University of Lisbon
 Teresa Heitor, Department of Civil Engineering and Architecture, IST, Lisbon
 Vítor Murtinho, Department of Architecture, University of Coimbra
 André Tavares, School of Architecture, University of Minho
 Ana Luísa Rodrigues, School of Architecture, University of Minho
 Pedro Bandeira, School of Architecture, University of Minho

Schedule

The courses on “Research Methodology in Practice”, “Seminar on Advanced Knowledge” and “Thesis Project” will have after-work classes on Fridays. Nevertheless, classes on that day may be subjected to the external faculty members’ availability. Flexible schedules which will depend on the coordination and programming of each specific area.

Admission

Candidates must fulfil one of the following requirements:

- a) Be holders of a master degree or legally equivalent qualification in the field of Architecture;
- b) Be holders of a higher education degree in the field of Architecture and a relevant academic or scientific curriculum reviewed by the Scientific Council of the School of Architecture of the University of Minho to ensure that candidates are able to undertake this cycle of studies;
- c) Be holders of an academic, scientific or professional curriculum reviewed by the Scientific Council of the School of Architecture of the University of Minho to ensure that candidates are able to undertake this cycle of studies.

Vacancies (minimum and maximum):

7 (min.) to 20 (max.)

Fee:

2.750,00 euros.

Applications:

Application Deadlines: August, 10th to September, 7th

Results of Application: September, 21st

Documentation required for application:

The documents and information required for the submission of application are:

- a) Application form;

- b) Certificate of education degrees;
- c) Curriculum Vitae (consisting of general information, academic and/or professional background, scientific production and other production, according to the model of the application form);
- d) Letter of motivation (limited to 1,500 words), which is an important element of selection and ranking of candidates. The letter should include the area of specialization you are applying for and the reasons for submitting the application. Focus on objective scientific and professional issues (not personal), showing the congruence between objectives and future personal projects and objectives of the Doctoral Programme in Architecture. Avoid listing curricular data and describing the activities already mentioned in the CV;
- e) Photocopy of ID card and VAT number card;
- f) Letter of recommendation or contact information of two professors / researchers who can provide information on the candidates.

Application fee

Bank: Caixa Geral de Depósitos

Address: Avenida Central, 4700 Braga, Portugal

Beneficiary name: Universidade do Minho

Address of the recipient: Largo do Paço, 4704-553 Braga, Portugal

IBAN: PT50003501710016732263015

NIB 003501710016732263015

Account: CGD 0171167322630

SWIFT: CGDIPTPL

Reference: EAUM-3Ciclo / Name and Surname

Evaluation Criteria for Candidates

The candidates will be evaluated accordingly to the following criteria:

- Average classification of the pre-Bologna bachelor and/or master degrees;
- Scientific and professional production;
- Additional production.

In the case that the candidate has not a consensual evaluation by the evaluation panel, an interview may be necessary.

Registration

Deadline for registration: September, 30th to October, 8th.

Place: Division of Graduate Studies – Guimarães

Documents required:

- Photocopies of Identity Card / Citizen Card or Passport (for foreign students);
- Photocopy of VAT number Card;
- 2 photos

Fees

- 100,00 euros (education)

- 26,00 euros (registration fee)

Doctoral programme in Architecture – Sustainability, Innovation and Technology

coordination: Pedro Bandeira and Paulo J. S. Cruz

degree awarded: Doctor

qualification field of study: Architecture – Construction and Technology

duration: 6 semesters

credits: 180 ECTS

e-mail: 3ciclo@arquitectura.uminho.pt

www.arquitectura.uminho.pt



**School of Architecture
 University of Minho (EAUM)
 Guimarães, Portugal**

Subject

Architecture is repeatedly asserted as a discipline of synthesis of different knowledge, covering the ethical, cultural, scientific, artistic, technical and professional dimensions. The specialization in “Construction and Technology” of the Doctoral Programme in Architecture will contribute to the valorisation of the design methodologies, promoting interdisciplinarity and cooperation as essential keys to creativity and innovation in construction.

Innovation requires intuition, confidence, talent, knowledge, critical sense and sagacity. In the Seminar on Advanced Knowledge in “Architecture – Sustainability, Innovation and Technology” a critical and entrepreneurial attitude will be fostered, fitting it in the social, economical and de eco-sustainability contexts. This seminar will enhance the adequate knowledge of the construction and rehabilitation technologies, the physical aspects and the procedures implied in this process, to endow the buildings of the most advanced comfort and functionality patterns.

The different approaches to this subject will turn to the innovative use of the traditional materials (glass, timber, steel or concrete among others) and their judicious combination, the exploration of the different structural types, the ability to establish effective collaborations with other players in the construction sector and the capacity to challenge the construction industry, traditionally conservative, to overcome the pre-established barriers and to find out new directions.

Presentation of the programme

The programme is designed to combine courses taught jointly with follow-up sessions and individual supervision, so that the students can enjoy the benefits of collective learning in an advanced scientific community, individual guidance and bibliographical support and systematic participation in scientific meetings and appropriate for its international work plan.

The programme is organized so that the students can build an appropriate training path to their thesis theme, ensuring a sufficient coverage and an adequate flexibility. The supervision and coaching will be conducted by a PhD faculty member.

The general aims of the programme comprise not only the use of methodological and conceptual frameworks within the sciences that contribute to the vast field of Architecture, according to a precise subject of research, applying them to pertinent and scientifically relevant original research, but also the development of skills and research methods to be applied in architecture.

The programme follows a rigorous and critical profile, which aims to prepare future doctors with expertise in architecture, more specifically in the area of construction and technology, to:

a) Design, adapt and perform an original scientific research, meaningful and socially relevant, respecting the requirements imposed by the standards of academic quality and integrity;

b) Analyze reality, evaluate and synthesize knowledge;
c) Communicate with the academic community and with society on matters in which they specialize;
d) Build a critical view of knowledge and reality;

The thesis developed under the framework of this doctoral programme may take the form of a thesis (focused on a methodology of theoretical research) or of a project (focused on a practical research, which is structured in an architectural project together with the specification and justification to accurately demonstrate the relevance and originality of the dissertation as a proposition which is demonstrated by logical deduction).

The completion of the curricular component without the elaboration of the thesis, corresponding to a minimum of 45 ECTS, entitles the Diploma in Advanced Studies in Architecture. The conclusion of the thesis grants the title of Doctor of Architecture by the University of Minho.

Programme Structure

The Doctoral Programme in Architecture has duration of six semesters, corresponding to a total of 180 ECTS (30 ECTS per semester). It integrates a curricular component and the elaboration of a thesis or a dissertation-format project. In exceptional situations, the completion of the programme can be carried out in part time, and its duration may be extended for two extra years.

The seminar “Architecture – Sustainability, Innovation and Technology”

The seminar, which will have the support of renowned specialists, will provide advanced training the essence of which will not be merely the conscious of the constructive aspects, but also the critical reflection on emerging issues and key contemporary thinking in architecture and construction, such as: the sustainability, the eco-efficiency, the performance and the rehabilitation of buildings.

It is not intended that constructive and environmental requirements restrict the conceptual freedom, but that they open new perspectives for architectural practice. The technological component, through the systematization of construction knowledge, should give ground to the tectonic and functional aspects.

It is intended that training encourages the creativity to generate innovative solutions, at the technical and functional levels, providing knowledge, expertise and tools that enable to project competently in this area, acquiring sensitivity to the following aspects: environmental quality of buildings, efficiency, bioclimatic design, thermal behaviour, natural lighting, comfort of the occupants, new processes and techniques of construction, industrialized construction, combination of traditional materials, new materials, structural design and its interaction with the architecture, facade systems, etc.

1st Semester (30 ECTS)

course	ects	description
Methodology and Research Practice *	5	It aims to identify epistemological paradigms of research by promoting the acquisition of research methods, the use of tools and practices of research and application of acquired knowledge to the research process.
Optional 1*	5	Selected from the courses provided by the School of Architecture and other schools or institutes.
Seminar on Advanced Knowledge	20	Apart from reviewing the latest technologies and key concepts of efficiency and sustainability (applicable to the architectural design of new buildings or rehabilitation of existing buildings), the seminar will reflect on the adequacy of the basic principles of traditional architecture and will address a very broad spectrum topics, including ventilation, lighting, the active and passive solar strategies, structural systems, facades, components and materials, among others.

2nd Semester (30 ECTS)

course	ects	description
Preparation and presentation of the thesis plan	5	It aims to identify and develop the contextualization of research, ensuring the application of its procedures and practices for the construction of the thesis plan.
Optional 2*	5	Selected from the courses provided by the School of Architecture and other schools or institutes.
Optional 3*	5	Selected from the courses provided by the School of Architecture and other schools or institutes.
Thesis	15	For the development of individual work leading to doctoral dissertation.

3rd to 6th Semester (120 ECTS)

course	ects	description
Supervision	5	Ensure support for the development of research work in progress. In this respect will be also promoted presentation sessions and collective discussions.
Seminar 1 to 4		
Thesis 2 to 5	25	For the development of individual work leading to doctoral dissertation.