

## Doctorado en Ciencia de Materiales (2022-23)

<b>Código:</b> E007	<b>Fecha de aprobación:</b> 12/06/2014	<b>Precio:</b> 270 € por curso académico
<b>Créditos:</b> Not defined	<b>Título:</b> Doctorate (ECTS)	

### RAMA

Sciences

### PLAN

PHD IN MATERIALS SCIENCE

### TIPO DE ENSEÑANZA

Not defined

### CENTROS DONDE SE IMPARTE

International Doctoral School

### ESTUDIO IMPARTIDO CONJUNTAMENTE CON

Solo se imparte en esta universidad

### FECHAS DE EXAMEN

[Acceda al listado de fechas de examen para esta titulación.](#)

**PLAN DE ESTUDIOS OFERTADO EN EL CURSO 2022-23**

Leyenda: No ofertada Sin docencia

**ÚNICO**

**TESIS DOCTORAL**

1 créditos

Curso	Título	Créditos	Subject
-	THESIS	0	<a href="#">66666 - THE DOCTORAL THESIS</a>

**COMPLEMENTS FORMATIUS**

Curso	Título	Créditos	Subject
-	COMPLEMENTOS DE FORMACIÓN EN INVESTIGACIÓN	6	<a href="#">35803 - CHARACTERISATION TECHNIQUES I: X-RAY SCATTERING, NEUTRON AND ELECTRON MICROSCOPY</a>
-	COMPLEMENTOS DE FORMACIÓN EN INVESTIGACIÓN	6	<a href="#">35804 - CHARACTERISATION TECHNIQUES II: SPECTROSCOPY AND SURFACE TECHNIQUES</a>
-	COMPLEMENTOS DE FORMACIÓN EN INVESTIGACIÓN	6	<a href="#">35805 - PHYSICAL CHEMISTRY OF SURFACES</a>
-	COMPLEMENTOS DE FORMACIÓN EN INVESTIGACIÓN	3	<a href="#">35807 - INTRODUCTION TO THE SCIENCE AND TECHNOLOGY OF CARBON MATERIALS</a>
-	COMPLEMENTOS DE FORMACIÓN EN INVESTIGACIÓN	3	<a href="#">35808 - APPLICATIONS OF CARBON MATERIALS</a>
-	COMPLEMENTOS DE FORMACIÓN EN INVESTIGACIÓN	3	<a href="#">35810 - FUNDAMENTALS OF ADSORPTION AND CATALYSIS</a>
-	COMPLEMENTOS DE FORMACIÓN EN INVESTIGACIÓN	3	<a href="#">35811 - HETEROGENEOUS CATALYSIS</a>
-	COMPLEMENTOS DE FORMACIÓN EN INVESTIGACIÓN	3	<a href="#">35812 - TRANSIENT TECHNIQUES APPLIED TO THE STUDY OF SOLID-GAS INTERACTIONS</a>
-	COMPLEMENTOS DE FORMACIÓN EN INVESTIGACIÓN	3	<a href="#">35813 - THERMAL ANALYSIS</a>
-	COMPLEMENTOS DE FORMACIÓN EN INVESTIGACIÓN	3	<a href="#">35816 - IN SITU VIBRATIONAL SPECTROSCOPY FOR THE CHARACTERISATION OF INTERFACES</a>
-	COMPLEMENTOS DE FORMACIÓN EN INVESTIGACIÓN	3	<a href="#">35817 - MAGNETIC AND SUPERCONDUCTOR MATERIALS: PHENOMENOLOGY AND FUNDAMENTALS</a>
-	COMPLEMENTOS DE FORMACIÓN EN INVESTIGACIÓN	3	<a href="#">35820 - SEMICONDUCTORS: FUNDAMENTALS AND DEVICES</a>
-	COMPLEMENTOS DE FORMACIÓN EN INVESTIGACIÓN	3	<a href="#">35821 - COMPOSITE MATERIALS</a>
-	COMPLEMENTOS DE FORMACIÓN EN INVESTIGACIÓN	3	<a href="#">35822 - CONDUCTIVE POLYMERS: FUNDAMENTALS AND APPLICATIONS</a>
-	COMPLEMENTOS DE FORMACIÓN EN INVESTIGACIÓN	3	<a href="#">35823 - MATERIALS FOR ENVIRONMENTAL AND ENERGY APPLICATIONS</a>
-	COMPLEMENTOS DE FORMACIÓN EN INVESTIGACIÓN	3	<a href="#">35824 - ANALYTICAL METHODS FOR POLYMERIC MATERIALS</a>
-	COMPLEMENTOS DE FORMACIÓN EN INVESTIGACIÓN	3	<a href="#">35826 - POLYMER SCIENCE</a>
-	COMPLEMENTOS DE FORMACIÓN EN INVESTIGACIÓN	3	<a href="#">35827 - SURFACE ELECTROCHEMISTRY</a>
-	COMPLEMENTOS DE FORMACIÓN EN INVESTIGACIÓN	3	<a href="#">35828 - ELECTROCHEMISTRY OF SEMICONDUCTOR MATERIALS</a>
-	COMPLEMENTOS DE FORMACIÓN EN INVESTIGACIÓN	3	<a href="#">35829 - ELECTROCATALYSIS, ELECTROCATALYTIC MATERIALS AND APPLICATIONS IN ELECTROCHEMISTRY</a>
-	COMPLEMENTOS DE FORMACIÓN EN INVESTIGACIÓN	3	<a href="#">35830 - CORROSION AND PROTECTION</a>
-	COMPLEMENTOS DE FORMACIÓN EN INVESTIGACIÓN	3	<a href="#">35831 - MODELLING IN MATERIALS SCIENCE: INTRODUCTION TO ATOMIC SIMULATION AND MONTE CARLO METHODS</a>
-	COMPLEMENTOS DE FORMACIÓN EN INVESTIGACIÓN	3	<a href="#">35833 - COMPUTATIONAL DETERMINATION OF MOLECULAR STRUCTURES</a>
-	COMPLEMENTOS DE FORMACIÓN EN INVESTIGACIÓN	3	<a href="#">35834 - INTRODUCTION TO DENSITY FUNCTIONAL THEORY</a>
-	COMPLEMENTOS DE FORMACIÓN EN INVESTIGACIÓN	3	<a href="#">35835 - NUMERICAL CALCULATION TECHNIQUES APPLIED TO PHYSICS AND CHEMISTRY</a>
-	COMPLEMENTOS DE FORMACIÓN EN INVESTIGACIÓN	3	<a href="#">35836 - NEW MATERIALS AND NANOMATERIALS IN CHEMICAL ANALYSIS</a>
-	COMPLEMENTOS DE FORMACIÓN EN INVESTIGACIÓN	3	<a href="#">35837 - ADHESION AND UNION PROCESSES OF MATERIALS</a>

Superado este bloque se obtiene  
**DOCTOR BY THE UNIVERSITY OF ALICANTE**

## CONTACT INFORMATION

PhD in Materials Science

### **Academic Commission:**

Coordinator: DIEGO CAZORLA AMORÓS

Secretary: M<sup>a</sup> DEL CARMEN ROMÁN MARTÍNEZ

### **Proposing body:**

University Institute of Materials

iuma@ua.es ciencia.materiales@ua.es

### **Doctoral School:**

EDUA-Doctoral School of the University of Alicante

Germán Bernácer building, ground floor.

Telephone number 965 90 3466

Contact EDUA

## **BASIC AND GENERAL COMPETENCES**

### **BASIC**

- CB11 - Systematic comprehension of a field of study and mastery of the skills and research methods related to said field.
- CB12 - Ability to conceive, design or create, put into practice and adopt a substantial research or creation process.
- CB13 - Ability to contribute to the expansion of knowledge barriers through original research.
- CB14 - Ability to carry out a critical and evaluative analysis and synthesize new and complex ideas.
- CB15 - Ability to communicate with the academic and scientific community as well as society in general regarding your fields of knowledge in the modes and languages used normally in your international scientific community.
- CB16 - Ability to foment scientific, technological, social, artistic or cultural advances within a knowledge-based society in academic and professional contexts.

### **PERSONAL SKILLS AND ABILITIES**

- CA01 - To cope with contexts in which there is little specific information.
- CA02 - To find the key questions that must be answered to solve a complex problem.
- CA03 - To design, create, develop and carry out innovating projects in your field of knowledge.
- CA04 - To be able to work as a team and as an individual in an international and multidisciplinary context.
- CA05 - To process knowledge, cope with complexity and formulate judgements with limited information.
- CA06 - To criticise and defend solutions intellectually.

## COMMON COMPULSORY TRANSVERSAL TRAINING ACTIVITIES

All students will have to do a series of transversal activities; some are common to all doctoral programs whereas others are specific to each individual program.

Classes are structured into two sessions and will be taught in a computer room (indicated when necessary) during the afternoon schedule with the goal of making it easier for both, full-time and part-time students to attend.

The vehicular languages will be Spanish and Valencian.

The activities are the following:

- ACTIVITY 1: Tools for the management and recovery of information.
- ACTIVITY 2: Goals and objectives of research
- ACTIVITY 3: Scientific communication models
- ACTIVITY 4: Transfer of knowledge models

For more information check the [Doctoral School's webpage](#).

## SPECIFIC COMPULSORY TRANSVERSAL TRAINING ACTIVITIES

The activities are the following:

- ACTIVITY 1: Seminars related to the doctoral programme's topic
- ACTIVITY 2: Seminars for doctoral students
- ACTIVITY 3: Attendance to scientific meetings
- ACTIVITY 4: Mobility

## OPTIONAL TRANSVERSAL TRAINING ACTIVITY

The activities are the following:

- ACTIVITY 1: Stays at Universities and Higher Research Centres.

For more information contact the proposing body. [University Institute of Materials](#).

## RESEARCH AREAS

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1. Rubber adhesives and adhesion phenomena
2. Heterogeneous catalysis
3. Environmental decontamination
4. Electrochemistry: New materials
5. Semiconductor electrochemistry
6. Surfaces electrochemistry and electrocatalysis
7. Spectroelectrochemistry and modelling
8. Statistical physics and physics of condensed matter
9. Interaction of particles charged with matter
10. Carbon materials
11. Composite materials
12. Polymeric materials
13. Novel Nanoparticle-based Analytical Techniques
14. Electrochemical processes
15. Quantum and computational chemistry
16. Adsorbent solids
17. Analytical techniques for Materials Characterization
18. Smart Polymeric Materials
19. Adhesives for medical use
20. Organics Electronics and Photonics

## ADMISSION PROCEDURE

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1. To be admitted in a doctoral program at the University of Alicante, it is necessary to fill in an [electronic pre-registration form](#), available annually on the [EDUA website](#).
2. Before starting the pre-registration process, it is advisable to consult the website of the chosen doctoral program in order to know the admission requirements demanded by the program.
3. The Academic Commissions (AC) are in charge of the admission process in the different doctoral programs.
4. The academic commissions decide annually the offer of places in every doctoral program according to the preconditions established in its Verified Memory. The commission may determine not to offer places when not having directors or tutors at any research line.
5. If the resolution is of "no admission", in the computer application the reasons for the same will be detailed, having a calendar month to formulate an appeal before the AC; from the date of the resolution.

## ACCESS PROCEDURE

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1. In parallel with the admission process carried out by the AC, the Doctoral School (EDUA) verifies that the documentation provided is the one requested in the pre-registration form.
2. Applicants with higher studies attained in countries different from the EHEA\*, at the moment of pre-registration process should pay an administrative fee for the study of their documentation, (equivalence study). The price of the rate is fixed annually by the Government of the Generalitat Valencia, by Decree.
3. People who do not provide the documentation in the terms required in the access process, may rectify this incident within 15 calendar days, from EDUA communication or, exceptionally, within the period determined by EDUA according to the concurrent circumstances.
4. When the incidents detected have not been resolved in the form and time determined by EDUA, the originated file academic record will be closed, without further processing.
5. The Doctorate School will proceed to open academic records to those who have been admitted by the AC and have correctly provided the required documentation, sending them an email with instructions to complete the enrolment process.

**When the result is "no admission" it is possible to consult the grounds in the available electronic application. It is possible to raise administrative appeal (recurso de alzada) against AC resolution, within a month since resolution date.**

\*EHEA: European High Education Area



**Registered in the Record of Universities, Centres and Degrees (RUCT)**

Authorization Comunidad Valenciana: 28/03/2014

**Published BOE 12/06/2014**

**REGULATION**

Royal Decree 99/2011, January 28, which regulates official doctoral degrees ([Official State bulletin number 35, February 10 2011](#) )

[Verified Report](#)

[Resolution from the Universities Council: Positive verification](#)

[Resolution from the Universities Council: Accreditation renewal](#)

[Authorization from the Valencian Government](#)

## INTERNAL QUALITY ASSURANCE SYSTEM (SGIC) OF THE DEGREE

- Structure of the Centre for Quality
  - [Comission of Internal Quality Guarantee](#)
  - [Other Commissions](#)
- [SGIC Handbook](#)
- [Procedures](#)
  - [Strategic \(PE\)](#)
  - [Key \(PC\)](#)
  - [Support \(PA\)](#)
  - [Measurement \(PM\)](#)

[Management of the SGIC \(Acces to ASTUA\)](#)

## DEGREE MONITORING

- [Self-reports UA](#)
- [AVAP External reports](#)
- [Other reports](#)
- Improvement plans
- [Progress and learning outcomes](#)