

## PHYSICS DEGREE

### Institutional Accreditation



ECTS CREDITS	
Basic training (FB)	60
Compulsory (OB)	120
Optional (OP)	48
End-of-degree Project (TFG)	12
<b>Total</b>	<b>240</b>

Centre ([see](#))



**CLICK ON THE CODE OF EACH SUBJECT TO ACCESS THE COURSE HANDBOOK**

### FIRST YEAR

Code	Subject	Credits	Type	Semester
<a href="#">16393</a>	EXPERIMENTAL TECHNIQUES I	6	OB	Annual
<a href="#">16394</a>	COMPUTATION I	6	FB	Annual
<a href="#">16385</a>	FUNDAMENTALS OF PHYSICS I	6	FB	1
<a href="#">16386</a>	FUNDAMENTALS OF PHYSICS II	6	FB	1
<a href="#">16389</a>	ANALYSIS I	6	FB	1
<a href="#">16391</a>	ALGEBRA I	6	FB	1
<a href="#">16387</a>	FUNDAMENTALS OF PHYSICS III	6	FB	2
<a href="#">16388</a>	FUNDAMENTALS OF CHEMISTRY	6	FB	2
<a href="#">16390</a>	ANALYSIS II	6	FB	2
<a href="#">16392</a>	ALGEBRA II	6	FB	2

### SECOND YEAR

Code	Subject	Credits	Type	Semester
<a href="#">16401</a>	EXPERIMENTAL TECHNIQUES II	6	OB	Annual
<a href="#">16395</a>	MATHEMATICAL METHODS I	6	OB	1
<a href="#">16397</a>	MECHANICS AND WAVES I	9	OB	1
<a href="#">16399</a>	ELECTROMAGNETISM I	6	OB	1
<a href="#">16402</a>	COMPUTATION II	6	FB	1
<a href="#">16396</a>	MATHEMATICAL METHODS II	6	OB	2
<a href="#">16398</a>	MECHANICS AND WAVES II	6	OB	2
<a href="#">16400</a>	ELECTROMAGNETISM II	9	OB	2
	OPTIONAL SUBJECTS	6	OP	2

### THIRD YEAR

Code	Subject	Credits	Type	Semester
<u>16409</u>	EXPERIMENTAL TECHNIQUES III	6	OB	Annual
<u>16403</u>	MATHEMATICAL METHODS III	6	OB	Annual
<u>16404</u>	OPTICS	6	OB	1
<u>16407</u>	QUANTUM MECHANICS I	6	OB	1
<u>16420</u>	CLASSICAL ELECTRODYNAMICS	6	OB	1
<u>20732</u>	THERMODYNAMICS	6	OB	1
<u>20733</u>	STATISTICAL PHYSICS	6	OB	2
<u>16408</u>	QUANTUM MECHANICS II	6	OB	2
	OPTIONAL SUBJECTS	12	OP	2

### FOURTH YEAR

Code	Subject	Credits	Type	Semester
<u>16416</u>	END-OF-DEGREE PROJECT	12	TFG	Annual
<u>16411</u>	ATOMICAL AND MOLECULAR PHYSICS	6	OB	1
<u>16412</u>	SOLID STATE PHYSICS	6	OB	1
<u>16414</u>	NUCLEAR PHYSICS AND ELEMENTARY PARTICLES	6	OB	1
	OPTIONAL SUBJECT	6	OP	1
	OPTIONAL SUBJECTS	24	OP	2

### OPTIONAL SUBJECTS

### SECOND YEAR

Code	Subject	Credits	Type	Semester
<u>16417</u>	PHYSICS OF FLUIDS	6	OP	2
<u>16418</u>	BIOPHYSICS	6	OP	2
<u>20734</u>	MODELLING COMPLEX SYSTEMS	6	OP	2

### THIRD YEAR

Code	Subject	Credits	Type	Semester
<u>16417</u>	PHYSICS OF FLUIDS	6	OP	2
<u>16418</u>	BIOPHYSICS	6	OP	2
<u>16419</u>	ADVANCED MATHEMATICAL METHODS	6	OP	2
<u>16421</u>	ENERGY SOURCES	6	OP	2
<u>16422</u>	ADVANCED COMPUTING	6	OP	2
<u>20734</u>	MODELLING COMPLEX SYSTEMS	6	OP	2
<u>20735</u>	ARTIFICIAL INTELLIGENCE IN PHYSICS	6	OP	2
<u>20736</u>	ADVANCED HAMILTONIAN DYNAMICS	6	OP	2

### FOURTH YEAR

Code	Subject	Credits	Type	Semester
<u>16410</u>	ELECTRONICS	6	OP	1
<u>16415</u>	ASTROPHYSICS AND COSMOLOGY	6	OP	1

Code	Subject	Credits	Type	Semester
<u>20738</u>	ADVANCED EXPERIMENTAL TECHNIQUES	6	OP	1
<u>20739</u>	ADVANCED QUANTUM MECHANICS	6	OP	1
<u>16417</u>	PHYSICS OF FLUIDS	6	OP	2
<u>16418</u>	BIOPHYSICS	6	OP	2
<u>16419</u>	ADVANCED MATHEMATICAL METHODS	6	OP	2
<u>16421</u>	ENERGY SOURCES	6	OP	2
<u>16422</u>	ADVANCED COMPUTING	6	OP	2
<u>16424</u>	STATISTICAL MECHANICS	6	OP	1
<u>16425</u>	NANOPHYSICS	6	OP	2
<u>16426</u>	MATERIALS SCIENCE	6	OP	2
<u>16428</u>	CONDENSED MATTER PHYSICS	6	OP	2
<u>16429</u>	HIGH ENERGY PHYSICS	6	OP	2
<u>16430</u>	PHYSICS OF COSMOS	6	OP	2
<u>16431</u>	PHOTONICS	6	OP	2
<u>20734</u>	MODELLING COMPLEX SYSTEMS	6	OP	2
<u>20735</u>	ARTIFICIAL INTELLIGENCE IN PHYSICS	6	OP	2
<u>20736</u>	ADVANCED HAMILTONIAN DYNAMICS	6	OP	2
<u>20740</u>	LIGHT & MATTER: FUNDAMENTALS AND APPLICATIONS	6	OP	2
<u>20741</u>	TECHNOLOGIES FOR QUANTUM INFORMATION	6	OP	2
<u>20742</u>	QUANTUM OPTICAL INTERACTIONS	6	OP	2
<u>20743</u>	LIVING MATTER PHYSICS	6	OP	2
<u>20744</u>	INSTRUMENTATION AND MEASUREMENT IN PHYSICS	6	OP	2
<u>20746</u>	PHYSICS OF SEMICONDUCTOR DEVICES	6	OP	2
<u>20747</u>	ADVANCED SOLID STATE PHYSICS	6	OP	2
<u>16433</u>	EXTERNAL PRACTICAL	6	OP	Annual

## CENTRE

### Faculty of Sciences

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