



IDENTIFYING DATA

Quantum mechanics II

Subject	Quantum mechanics II		
Code	V05M198V01102		
Study programme	(*)Máster Universitario en Ciencia e Tecnoloxías de Información Cuántica		
Descriptors	ECTS Credits	Choose	Year
	3	Mandatory	1st
Teaching language			
Department			
Coordinator			
Lecturers	Fernández Veiga, Manuel		
E-mail			
Web	http://www.usc.gal/gl/estudos/masteres/ciencias/master-universitario-ciencia-tecnoloxias-informacion-cuantica/20232024/mecanica-cuantica-ii-19342-18435-2-103723		
General description			

Training and Learning Results

Code	
A1	Understand the domain, concepts, methods and basic techniques of quantum mechanics: mathematical formalism, postulates, operators, matrices, Bloch sphere, photonic states.
A2	Know and acquire competence in experimental techniques for the processing of quantum information: interactions, measurements, oscillations, interference, communication systems, ...
A3	Understanding and knowledge of the fundamentals of Quantum Information Theory, as well as two basic aspects of two four types of quantum technologies: computing, communications, metrology, simulation.
B2	To acquire knowledge about quantum systems with many degrees of freedom as a means of storing and processing information.
B10	Knowledge about new solid-state quantum materials, their physical and topological properties.
C1	To analyze and break down a complex concept, examine each part and see how they fit together
C2	To classify and identify types or groups, showing how each category is different from the others
C3	To compare and contrast and point out similarities and differences between two or more topics or concepts

Expected results from this subject

Expected results from this subject	Training and Learning Results
New	A14
	A1
	A14
	A2
	A3
	A14
	B2
	B10
	C1
	C18
	C2
	C3
	C18
	C18
	C18
	D18
	D18

Contents

Topic

Planning

Class hours

Hours outside the
classroom

Total hours

*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

Methodologies

Description

Personalized assistance

Assessment

Description

Qualification

Training and Learning Results

Other comments on the Evaluation

Sources of information

Basic Bibliography

Complementary Bibliography

Recommendations