



IDENTIFYING DATA

Advanced quantum mechanics

Subject	Advanced quantum mechanics		
Code	V05M198V01119		
Study programme	(*)Máster Universitario en Ciencia e tecnoloxías de información cuántica		
Descriptors ECTS Credits	Choose	Year	Quadmester
3	Optional	1st	1st
Teaching language			
Department			
Coordinator			
Lecturers			
E-mail			
Web	http://www.usc.gal/gl/estudios/masteres/ciencias/master-universitario-ciencia-tecnoloxias-informacion-cuantica/20232024/mecanica-cuantica-avanzada-19346-18439-3-103753		
General description			

Training and Learning Results

Code	
A9	Know and know how to apply advanced aspects of quantum computing: quantum learning, efficient quantum architecture, mode of operation of two quantum accelerators, high-performance computing, quantum systems based on rules and applications to numerical calculation.
A10	Know scenarios of practical application of quantum computing in problems of scientific, technological and financial interest. Identify domains that exhibit quantum advantage. Know the institutions and companies that are actors in quantum computing, acquiring a perspective of the agenda that is reasonable to expect in the coming years.
B1	To know the theoretical foundations of quantum mechanics, the mathematical formalism, the axioms and simpler systems.
B2	To acquire knowledge about quantum systems with many degrees of freedom as a means of storing and processing information.
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	A9 A10 B1 B2 C1 C2 C3 D18

Contents

Topic

Planning

	Class hours	Hours outside the classroom	Total hours
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*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
