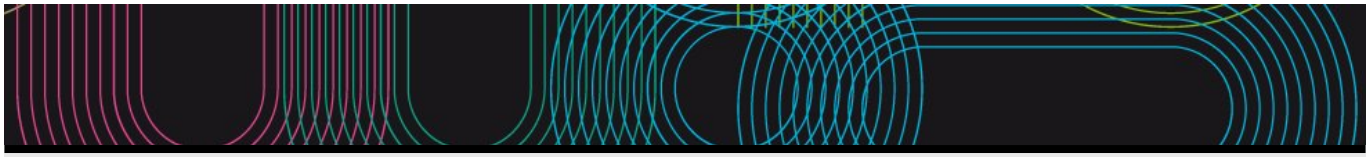
Universidade Vigo

Subject Guide 2023 / 2024



IDENTIFYING DATA				
Physical systems for quantum information				
Subject	Physical systems for quantum information			
Code	V05M198V01113			
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/estudos/masteres/ciencias/master-universitario-ciencia-tecnoloxias-informacion-cuantica/20232024/sistemas-fisicos-informacion-cuantica-19345-18438-3-103744			
General description				

Training and Learning Results	
Code	
A4	Know and be able to apply the physical theories inherent to the understanding of systems for quantum information processing, including quantum thermodynamics as well as advanced aspects of magnetism and quantum mechanics.
A6	Know and understand the nature of the physical platforms for the processing of quantum information in photonic systems: quantum optics, integrated optical systems, opto-atomic systems, detection and measurement systems, semiconductor photonics.
B6	To acquire knowledge about physical systems capable of implementing information processing in quantum degrees of freedom.
B7	To have knowledge of quantum optics and the role and properties of light and its manipulation in quantum information processing and communications.
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	A4 A6 B6 B7 B10 C1 C18 C2 C3 C18 C18 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