## Universida<sub>de</sub>Vigo

Subject Guide 2023 / 2024

IDENTIFY	YING DATA				
Quantun	n computing tools				
Subject	Quantum computing tools				
Code	V05M198V01107				
Study	(*)Máster Universitario en				
programm	ne Ciencia e tecnoloxías de				
	información cuántica				
Descriptor	rs ECTS Credits		Choose	Year	Quadmester
	3		Optional	1st	1st
Teaching					
language					
Departme	nt				
Coordinate	or				
Lecturers					
E-mail					
Web	http://www.usc.gal/gl/estudos/ma 4/fundamentos-informacion-cuan			cnoloxias-info	rmacion-cuantica/2023202
General	.,.aa	200 .2 20 .00 2 200			
description	n				

## **Training and Learning Results**

Code

- A7 Acquire and know how to apply the basic principles of quantum computing: analyze, understand and implement quantum algorithms, master the appropriate computer languages as well as understand the paradigm of two quantum circuits.
- B3 To know the physical bases that allow encoding and processing information. Understanding of the new rules that Quantum Mechanics imposes for its processing.
- B4 To have knowledge of quantum computing, algorithms, circuits, its programming in different languages and accessible platforms.
- 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
- To compare and contrast and point out similarities and differences between two or more topics or concepts

Expected results from this subject	Training and
	Learning Results
New	A7
	B18
	B3
	B4
	C1
	C2
	C3
	C18

	C10
Contents	
Topic Topic	

Planning								
			Class hours	Hours o	outside the om	Tot	al hours	
1 1 C	 	 						 

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

Methodologies	
De	scription

Personalized assis	stance	
Assessment		
Description	Qualification	Training and Learning Results
Other comments o	on the Evaluation	
Sources of informa	ation	
Basic Bibliography	<del> </del>	
Complementary B		
Recommendations		