

# QUANTUM COMPUTING, MASTER OF PROFESSIONAL STUDIES (MPS)

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Course	Title	Credits
<b>Core courses</b>		
MSQC601	(The Mathematics and Methods of Quantum Computing)	3
MSQC602	(The Physics of the Very Small and its Technological Ramifications)	3
MSML/MSQC603	Principles of Machine Learning	3
MSQC604	(Quantum Computing Architectures and Algorithms)	3
MSQC605	(Advanced Quantum Computing and Applications)	3
MSQC606	(Practical Quantum Computing)	3
MSQC607	(Advanced Topics in Quantum Computing)	3
<b>Elective courses</b>		<b>9</b>
MSQC610	(Quantum Machine Learning)	
MSQC611	(Quantum Networks)	
MSQC612	(Quantum Computing Hardware)	
MSQC613	(Quantum Monte Carlo and Applications)	
MSQC614	(Quantum Information Theory)	
MSCQ615	(Quantum Thermodynamics)	
<b>Total Credits</b>		<b>30</b>

The Masters of Professional Studies in Quantum Computing requires 30 credits, of which 21 comprise credits of 7 core courses, and 9 credits of 3 out of 6 possible electives.