

6.0 credits	45.0 h + 22.5 h	1q
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Teacher(s) :	Ringeval Christophe ;
Language :	Français
Place of the course	Louvain-la-Neuve
Main themes :	<ul style="list-style-type: none"> - Wave mechanics : principals, Schrödinger equation, example - Quantum mechanics : principals; quantum dynamics, symmetry - Disturbance theory
Aims :	<p>This course for students who already received an introduction to quantum ideas and to 1D wave mechanics will include a systematic exposition to non-relativist quantum mechanics, - who establishes it on strong but not too formal theoretical bases and - that offer a tool useful for the study of fields like atomic and molecular physics, nuclear and solid state physics.</p> <p><i>The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".</i></p>
Other infos :	<p>Prerequisites: General physics II, 2nd part: Quantum - Mathematical methods of physics II</p> <p>Support: This course is based on the book of E. Merzbacher, Quantum Mechanics, J. Wiley, N.Y. (1970), chapters 4, 8-10, 12-18. DIRAC P., The principles of quantum mechanics, 4th edition, Oxford, 1967. PAIS A., Inward Bound of Matter and Forces in the Physical World, Oxford, 1986. GALINDO A., PASCUAL P., Quantum Mechanics I, Springer Verlag, 1990. GALINDO A., PASCUAL P., Quantum Mechanics II, Springer Verlag, 1991. GASIRROWICZ S., Quantum Physics, Wiley, 1974. MANDL F., Quantum Mechanics, Wiley, 1992.</p>
Cycle and year of study :	<ul style="list-style-type: none"> > Bachelor in Mathematics > Bachelor in Physics > Bachelor in Geography : General > Bachelor in Economics and Management > Bachelor in Engineering > Master [120] in Physical Engineering
Faculty or entity in charge:	PHYS