

5.00 credits

45.0 h + 20.0 h

Q2

Teacher(s)	Fouss François ;Saerens Marco (compensates Fouss François) ;
Language :	French
Place of the course	Mons
Prerequisites	<i>The prerequisite(s) for this Teaching Unit (Unité d'enseignement – UE) for the programmes/courses that offer this Teaching Unit are specified at the end of this sheet.</i>
Main themes	<p><b><u>Theoretical part</u></b></p> <ul style="list-style-type: none"> <li>• Fundamental principles of algorithmics, structured programming, modularity and data structures common to the main programming languages;</li> <li>• Fundamental principles of object-oriented programming (classes and objects, encapsulation, inheritance, polymorphism, etc.).</li> </ul> <p><b><u>Exercises in object-oriented language</u></b></p> <ul style="list-style-type: none"> <li>• Formalise problems that can be solved by programming;</li> <li>• Programming solutions to these problems, applying the fundamental elements common to all programming languages as well as the fundamental elements of object-oriented programming.</li> </ul>
Learning outcomes	<p><b>At the end of this learning unit, the student is able to :</b></p> <p>Given the « competencies referential » linked to the LSM Bachelor in Management and Business Engineering, this course mainly develops the following competencies:</p> <ul style="list-style-type: none"> <li>• 2.1. Understand the basic concepts and theories in each of the fields of management and economics.</li> <li>• 2.2. Acquire a knowledge base in human science and law.</li> <li>1 • 3.1. Understand and selectively use scientific texts and works in French and English.</li> </ul> <p>At the end of the class, the student will be able to:</p> <ul style="list-style-type: none"> <li>• formalize problems that can be solved with programming;</li> <li>• solve and program solutions to these problems.</li> </ul>
Bibliography	<ul style="list-style-type: none"> <li>• HARO C. (2015), Algorithmique: Raisonner pour concevoir (2th Edition), Editions ENI.</li> <li>• SWINNEN G. (2012), Apprendre à programmer avec Python 3 (<a href="http://inforef.be/swi/python.htm">http://inforef.be/swi/python.htm</a>), Licence Creative Commons.</li> </ul>
Faculty or entity in charge	CLSM

<b>Programmes containing this learning unit (UE)</b>				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Bachelor : Business Engineering	<a href="#">INGM1BA</a>	5	<a href="#">MQANT1109</a>	