

Content

Course Code	Course Name	Semester	Theory	Practice	Lab	Credit	ECTS
MAT132	Computer Programing II	2	3	0	0	3	3

Prerequisites	
Admission Requirements	

Language of Instruction	French
Course Type	Compulsory
Course Level	Bachelor Degree
Objective	To teach students Python programming language Abstract Data Types for data structures and their use in algorithms.
Content	<p>1) Basic Python Programming (review)- as a remainder of BP 1 (MAT131)</p> <p>2) An overview of Collections</p> <p>3) Searching, Sorting and Complexity Analysis</p> <p>4) Arrays and Link Structures</p> <p>5) Interfaces, Implementations, and Polymorphism</p> <p>6) Inheritance and Abstract Classes</p> <p>7) Stacks</p> <p>8) Queues</p> <p>9) Lists</p> <p>10) Trees</p> <p>11) Sets and Dictionaries</p> <p>12) Graphs</p>
References	Kenneth A. Lambert,"Fundamentals of Python Data Structures".

Theory Topics

Week	Weekly Contents
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