University of Oum El Bouaghi

Bachelor's degree in Computer Science & Information Systems

1. Program Description:

With the aim of providing high quality education through a balanced combination of theory and practice, the "Computer Systems" license training aims to provide students with knowledge, skills and behaviors allowing them, on the one hand, to be competitive in the world of work and on the other hand to pursue research and higher education. In particular, this training aims to target the core pillars of the software aspect of various computer systems, namely networks, programming (desktop, client/server and mobile), computer security, etc. The detailed program is given on the Table below.

2. Modules

Level	Semester	Subjects taught (modules)	
1st year	S1	- Algebra 1 - Analysis 1 - Algorithms and data structure 1 - Physics 1	- Machine structure 1 - Scientific terminology and written expression - Foreign Language 1
	S2	- Algebra 2 - Analysis 2 - Algorithms and data structure 2 - Physics 2 - Programming tools for mathematics	- Machine structure 2 - Introduction to probability and descriptive statistics - Information and Communication Technology
2nd year	S3	- Computer architecture - Algorithms and data structure 3 - Information systems - Graph theory	- Numerical methods - Mathematical logic - Foreign Language 2
	S4	- Theory of languages - Operating systems 1 - Databases - Communication networks	- Oriented-object programming - Web application development - Foreign Language 3
3rd year	S5	- Operating systems 2 - Compilation - Software engineering - Human-machine interface	- Linear programming - probability and statistics Digital economy and business intelligence
	S6	- Mobile apps - IT security - Artificial intelligence - Semi-structured data	- Project - Scientific writing - Create and develop a startup