Content

Course Code	Course Name	Semester	Theory	Practice	Lab	Credit	ECTS
INF402	Introduction to the Internet of Things	7	2	0	2	3	3

Prerequisites	
Admission Requirements	

Language of Instruction	French
Course Type	Compulsory
Course Level	Bachelor Degree
Objective	1. Managing and analyzing data produced by IoT systems 2. architecture of embedded processors and how to design and build them 3. design and optimization of wireless communication systems using machine learning techniques 4. modern cryptography applications 5. signal processing and computer vision
Content	Fundamentals of Embedded IoT Systems Embedded Computing Methods IoT Networks Research Methods and Project Preparation IoT Device Management Secure Hardware and Embedded Devices Embedded Processors Sensor Fusion Technique IoT Applications in Industry Sensor Based Health Applications Smart Agriculture Applications Applied Internet of Things - Internet of Vehicles and Applications Embedded Machine Learning Algorithms
References	

Theory Topics

Week	Weekly Contents
1	Fundamentals of Embedded IoT Systems
2	Embedded Computing Methods
3	IoT Networks
4	Research Methods and Project Preparation
5	IoT Device Management
6	Secure Hardware and Embedded Devices
7	Embedded Processors
8	Midterm
9	Sensor Fusion Technique
10	IoT Applications in Industry
11	Sensor Based Health Applications
12	Smart Agriculture Applications

Week	Weekly Contents
13	Applied Internet of Things - Internet of Vehicles and Applications
14	Embedded Machine Learning Algorithms