

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	Design
9	Sensor Fusion Technique
10	IoT Applications in Industry
11	Sensor Based Health Applications
12	Smart Agriculture Applications
13	Applied Internet of Things - Internet of Vehicles and Applications
14	Embedded Machine Learning Algorithms