

# Course: Internet of Things Fundamentals

credits: 5

Course code ELVH20AIOT

Name Internet of Things Fundamentals

**Study year** 2022-2023

ECTS credits 5
Language English
Coordinator P.J. Kamphuis

Modes of delivery Education

Assessments Internet of Things Fundamentals -

Assignment

## Learning outcomes

- The student has an overview of an Internet of Things (IoT) architecture
- The student can state in which cases an IoT system can be implemented
- The student can describe the different components of an IoT system
- The student can use the components of an IoT system
- The student has a thorough understanding of standard protocols used in Internet of Things (IoT) Core system
- The student can choose and setup the different components of an IoT Core system

#### Content

In this course the basics of an IoT system will be addressed.

- Introduction of a Microsoft IoT system Architecture
- Example of an IoT system based on Microsoft (Edge computer, IoT hub, streams, database, AI)
- IAAS, PAAS and SAAS
- Using Microsoft IoT system SDK
- Storing data in no-SQL databases
- Realise software for IoT Edge computer and IoT hub

## Included in programme(s)

Electrical Engineering Major Sensor Technology

### School(s)

Institute of Engineering