

Bosch seminars

Sensor System

Goal: Explain to the attendants how to setup a sensor system. There will be two types of sensors presented: environmental sensors and motion sensors. This kind of sensors can be used in the application fields of Mobile devices, Wearables, IoT and Smart Home, Gaming, Imaging devices and various Health applications.

Benefits:

- ▶ Familiarize students with programming a smart sensor hub (embedded systems) making use of the required functionalities and collect the data.



Sensor System Concept

- ▶ Contact Person: Dr. Ing. Mihai Negru
- ▶ Subject: Programming of Microprocessors
- ▶ Seminar overview: 1h Introduction in the sensor topic
1h Communication protocol details
- ▶ Material needed: Digital package (Datasheet, Support documentation for the Laboratory Classes updated with the SW example for the Sensors)

Hardware-> 15 x BME280 (for Laboratory)

5 x BME280 (for Projects)

10 x BNO055 (for Projects)

10 x BMF055 (for Projects)

Home Projects free Hardware*

*Beginning with December the 3rd year students have to choose a project idea for their exam in January. They'll have 7 weeks time to develop a project based on their idea with our free Hardware (BME280, BNO055 or BMF055) if they choose so. Feedback will be collected from each Laboratory Assistant.

The Sensor System Concept will be presented to our contact person which will forward it to his Laboratory Assistants.