

## **Course Descriptions CiE**

**Course code:**

**EH746**

**Course title :**

**Fieldbus Systems**

**Hours per week:**

**4h/w**

**Semester:**

**1**

**Number of Credits allocated/work load:**

**4**

**Course contents:**

**Application fields of Fieldbuses in automation and vehicles.**

**Fundamentals of communications systems, ISO/OSI reference model**

**Actual fieldbuses in specs and application for manufacturing industry and use in vehicles.**

**Seminar on developments in vehicle networking.**

**Configuration and operation of fieldbuses.**

**Prerequisites:**

**Fundamentals in Electrical Engineering**

**Objective of the course/learning outcome:**

**Fundamental knowledge of communication principles. Understanding the basics of existing fieldbus solutions in manufacturing and vehicles**

**Recommended Reading:**

**(German) Schnell G.: Bussysteme in der Automatisierungstechnik, Vieweg Verlag, Wiesbaden**

**Teaching methods:**

**Seminar-style lecture with built-in laboratory hours**

**Assessment methods:**

**Written exam (90min)**

**Language of instruction:**

**english**

**Name of lecturer:**

**Prof. Dr. Egon Sommer**

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**Link:**

**[www.ee.hm.edu/fk/prof/sommer.html](http://www.ee.hm.edu/fk/prof/sommer.html)**