**Department**
06 Applied Sciences and Mechatronics

**Course title**
Fiber Optic Sensing Technology

**Hours per week (SWS)**
5

**Number of ECTS credits**
6

**Course objective**
Knowledge on Fiber Optic Sensing Technologies, ability to select, apply and develop advanced fiber optic sensing techniques

**Prerequisites**
Basics in Optics, Physics, Mathematics

**Recommended reading**

**Teaching methods**
Lecture

**Assessment methods**
written exam

**Language of instruction**
English

**Name of lecturer**
Minghong Yang

**Email**
minghong.yang@whut.edu.cn

**Link**

**Course content**
This course is aimed for master students with major of photonics, micro-nano technology and mechatronics/precision engineering. In this course the concept and basic review of optical wave guides and fiber-optic sensing technology will be offered, firstly the concept of fiber optics and fiber-optic sensing technology will be introduced, then different types of fiber-optic sensing technology will be reviewed including Fabry-Perot Interferometer, Distributed Fiber-Optic Sensing technology and Fiber Bragg Grating sensing technology. Finally applications of this technology in many industrial fields will be reviewed.

**Remarks**