

## **Course Descriptions CiE**

**Course code:**

**Course title :** Material Science/Quality Control

**Hours per week:**4h/w

**Number of ECTS Credits allocated:** 4 cr.

**Semester:** from 1<sup>st</sup> semester

**Course contents:**

1. Properties and Structure
2. Examples: Strength materials (Fe,Al,Ti)
3. Examples: Conductors (Cu, Al, Nobel metals)
4. Material testing
5. New materials
6. Magnetic materials
7. Superconductors
8. Quality control

**Prerequisites:** Basic Knowledges

**Objective of the course/learning outcome:** How to divide and apply materials, quality aspects and tests

**Recommended Reading:** Material Sciences, Engineering handbook

**Teaching methods:** Seminar- style, lectures with experiments (built- in practicals)

**Assessment methods:** Examination(certificat), written, 90 min. (grade assessment)

**Language of instruction:** English

**Name of lecturer:** Prof. Dr.- Ing. Wolfram Heller

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**Link:**