| a) General | | | | | |
|----------------------|---------------------------|------------------------|------|--|--|
| School | ENGINEERING | | | | |
| Academic unit | MECHANICAL ENGINEERING | | | | |
| Level of studies | Undergraduate | | | | |
| Course code | MM006Y06 | Semester | 6 | | |
| Course title | English Language | &Technical Terminology | | | |
| Independent teaching | activities | Weekly teaching hours | ECTS | | |
| Lectures | | 3 | 4 | | |
| Laboratory exercise | es | - | 4 | | |
| | Course type | Special background | | | |
| | Course category | Compulsory | | | |
| | Prerequisite courses | - | | | |
| Language of inst | ruction and examinations | English | | | |
| Is the course of | fered to Erasmus students | Yes | | | |
| | Course website (url) | | | | |

b) Learning outcomes and general competences

b1. Learning outcomes

Upon successful completion of this course, the student will be able to:

- Acquire and use technical vocabulary, terminology and structure connected to the field of Mechanical Engineering
- Extract specific information from texts about components, devices, structures, and processes
- Identify devices, components, structures, processes and explain their function
- Understand the structure and function of devices and components
- Recognize differences between types of devices and components
- Understand the relation between structures, components and processes
- Understand the features and technical specifications of different components and devices
- Describe devices, components, structures, and processes
- Discriminate between different types of processes

b2. General competences

- Search for, analysis and synthesis of data and information with the use of the necessary technology
- Adapting to new situations
- Working independently
- Team work
- Working in an international environment
- Respect for difference and multiculturalism
- Respect for the natural environment
- Showing social, professional and ethical responsibility and sensitivity to gender issues
- Criticism and self-criticism
- Production of free, creative and inductive thinking
- Others

c) Syllabus

Energy, Heat and Work, Material Properties, Stress analysis, Boiler operation, Stationary/Moving Parts of an Engine, Principles of an Internal Combustion Engine, Tribology, Lubricating Systems,

Fluid Heat Transfer, Thermodynamics, Computer-aided Manufacturing – Computer Numerical Control, Mechatronics, Control Systems, Dc Generators, Clean Coal Technology, Alternative Sources of Energy, Flat Plate Collectors-Collecting the heat, Solar Radiation-Solar Radiation Measurement, Engineering and the Earth's Resource, Air conditioning systems, Refrigeration systems

| 41 | Teaching | 1 | 1 : | | Dane | 14: |
|----|----------|-----|----------|-----------|-------|---------|
| a) | Teaching | and | iearning | methods - | · Eva | iuaiion |
| | | | | | | |

| Delivery | Face-to-face, Distance learning, etc. | | | |
|--|---|-------------------|--|--|
| Use of information and communications technology | - Multimedia applications - eclass | | | |
| | Activity | Semester workload | | |
| | Lectures | 39 | | |
| | Tutorials | | | |
| Teaching methods | Laboratory exercises | 0 | | |
| | Computational exercises | 0 | | |
| | Individual work | 65 | | |
| | Course total | 104 | | |
| Student performance evaluation | Intermittent assessment and final written examination | | | |

e) Suggested bibliography

- 1 Authentic Reading Texts
- 2 E.A. Avallone and T. Baumeister, 1987, Mark's standard handbook for Mechanical Engineers, 9th edition
- 3 M.W. Zemansky, 1981, Heat and Thermodynamics, 6th edition
- 4 Robert L. Norton, 1998, Machine design, Ed. Prentice Hall
- 5 CM and Johnson, 1989, General Engineering, Ed. Cassell.....