

Tárgytematika / Course Description

Internal Combustion Engines II.

AJNM_BMTA020

Tárgyfelelős neve /

Teacher's name: dr. Tóth-Nagy Csaba

Félév / Semester: 2022/23/1

Beszámolási forma /

Assesment: Vizsga

Tárgy heti óraszám /

Teaching hours(week): 2/0/2

Tárgy féléves óraszám /

Teaching hours(sem.): 0/0/0

OKTATÁS CÉLJA / AIM OF THE COURSE

AIM OF THE COURSE

The course aims to provide students with the skills needed to work effectively in group projects and innovative product development. In this course, students work together on analysing case studies, comparing and critically evaluating aspects of a technical problem of internal combustion engine.

TANTÁRGY TARTALMA / DESCRIPTION

DESCRIPTION

Fundamentals of how the design and operation of internal combustion engines affects their performance, operation, fuel requirements, and environmental impact. Examination of design features and operating characteristics of different types of internal combustion engines.

Students have to take part in a group project and complete tasks which contribute to reaching the goal of the project throughout the semester. Each project contains a main goal and several subgoals. Each team member will be assigned two subgoals, one in connection with the main goal of the project, and one that serves as a stand-alone assignment.

Week 1.: Discussion of the aim and methodology of the course and the project

Week 2-13.: Case study analysis and presentation of progression

Week 14.: Presentation of results and summary

SZÁMONKÉRÉSI ÉS ÉRTÉKELÉSI RENDSZERE / ASSESSMENT'S METHOD

ASSESSMENT'S METHOD

Semester project with continuous progress tracking and presentation at the end of the semester.

GRADING POLICY

Students performance will be graded based on the completion of the project. Reaching one of the subgoals is required but not sufficient to complete the subject.

| Project completion | | Grade | |
|--------------------------------------|------------|------------------|---|
| Activity | Percentage | - 49.4% | 1 |
| Reaching subgoal #1 | 43.75% | 49.5% - 62.4% | 2 |
| Reaching subgoal #2 | 43.75% | 62.5% - 74.4% | 3 |
| Reaching project goal (as a team) | 12.50% | 74.5% - 87.4% | 4 |
| | | 87.5% | 5 |

KÖTELEZŐ IRODALOM / OBLIGATORY MATERIAL

John B. Heywood: Internal Combustion Engine Fundamentals, ISBN 0-07-028637-X, McGraw-Hill

Everything on the internet