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| Assessment method | Lecture - written exam,
Laboratory class - evaluation of reports, class preparedness tests, |
| Symbol of learning outcome | Learning outcomes | Reference to the learning outcomes for the field of study |
| LO1 | classifies and describes the structure and operation of various engine systems | M1_W06, M1_W12, M1_U01, M1_W19, M1_W20 |
| LO2 | defines and characterizes types of fuels used to power engines | M1_W03 |
LO3 identifies able to analyze methods of determining the characteristics of the engines

LO4 assesses the current operation of the engine using different methods

LO5 applies safety rules

LO6 can operate in one a team, successfully developed the measurement results

Symbol of learning outcome | Methods of assessing the learning outcomes | Type of tuition during which the outcome is assessed
--- | --- | ---
LO1 exam, pass the theoretical part of the exercise laboratory report laboratory exercises | L, LC
LO2 exam | L
LO3 exam, pass the theoretical part of the exercise laboratory report laboratory exercises | L, LC
LO4 exam, pass the theoretical part of the exercise laboratory report laboratory exercises | L, LC
LO5 report on the exercise, observation of the work in the classroom laboratory | LC
LO6 discussion on the report of the exercise, observation of the work in the classroom laboratory | LC

Student workload (in hours) | No. of hours
--- | ---
lecture attendance | 15×2h=30
participation in classes, laboratory classes, etc. | 15×1h=15
preparation for laboratory classes | 15
preparation for the exam and the presence on it | 28h+2h=30
preparing to pass laboratory classes (including the drafting of the report) | 25
participation in student-teacher sessions related to the lecture/laboratory | 5
TOTAL: | 120

Quantitative indicators | HOURS | No. of ECTS credits
--- | --- | ---
Student workload – activities that require direct teacher participation | 50 | 2
Student workload – practical activities | 60 | 2

Basic references

Supplementary references

Organisational unit conducting the course | Katedra Budowy i Eksplatacji Maszyn
Author of the programme | Andrzej Borawski, PhD
Date of issuing the programme | 17.03.2021
L – lecture, C – classes, LC – laboratory classes, P – project, SW – specialization workshop, FW - field work,
S – seminar

Please notice!
Depending on number of students enrolled for the subject hours of tuition are as follows (for each 30 hours given in course description card):
1 – 2 students - 5 hours of tuition hours;
3 – 4 students - 8 hours of tuition;
5 – 6 students - 11 hours of tuition;
7 – 8 students - 15 hours of tuition;
9 and more students - hours of tuition given by a teacher as regular classes.