

FACULTY OF ELECTRICAL
ENGINEERING**SUBJECT CARD**

Name in Polish: **Etyka inżynierska**
 Name in English: **Engineering Ethics**
 Main field of study (if applicable): **Electrical Engineering**
 Specialization (if applicable):
 Level and form of studies: **1st level, part-time**
 Kind of subject: **optional / university-wide**
 Subject code: **FLR050812**
 Group of courses: **NO**

	Lecture	Classes	Laboratory	Project	Seminar
Number of hours of organized classes in University (ZZU):	10				
Number of hours of total student workload (CNPS):	30				
Form of crediting:	crediting with grade				
For group of courses mark (X) final course:					
Number of ECTS points:	1				
including number of ECTS points for practical (P) classes :					
including number of ECTS points for direct teacher-student contact (BK) classes:	0.70				

PREREQUISITES RELATING TO KNOWLEDGE, SKILLS AND OTHER COMPETENCES

1. Humanistic knowledge at the level of secondary education.

SUBJECT OBJECTIVES

- C1. Obtaining knowledge on general and professional ethics.
 C2. Learning how to identify and analyze moral dilemmas related to engineering professions.
 C3. Introducing and analyzing the content of professional codes of ethics for engineers.

SUBJECT LEARNING OUTCOMES*relating to knowledge:*

- PEU_W01 Students acquire essential knowledge from the fields of general and professional ethics.
 PEU_W02 The student has knowledge that is essential to understanding and interpreting social and ethical considerations of engineer's activity.

*relating to skills:**relating to social competences:*

- PEU_K01 The student is aware of the importance of understanding non-technical aspects and of engineer's activity, its consequences and responsibility for undertaken decisions. The student correctly identifies and analyzes dilemmas related to their profession.

PROGRAMME CONTENT

Form of classes - lecture		Number of hours:
Lec 1	Introduction: morality, ethics, law.	1
Lec 2	Main ethical theories: criteria for justification of moral judgments.	1
Lec 3	Structure of a moral dilemma.	1
Lec 4	Status, goals and functions of professional engineering ethics.	1
Lec 5	Structure and functions of professional codes of ethics for engineering professions.	1
Lec 6	Professional obligations and responsibilities of engineers in ethical perspective.	1
Lec 7	Engineers responsibility toward society.	1
Lec 8	Analysis of selected codes of engineering ethics; case study analyses.	1
Lec 9	Ethical dilemmas in engineering professions: case study analyses.	1
Lec 10	Social responsibility of science and technology	1
Total hours:		10

TEACHING TOOLS USED

N1. Multimedia presentation.
N2. Lecture
N3. Discussion

EVALUATION OF SUBJECT LEARNING OUTCOMES ACHIEVEMENT

Evaluation <i>F – forming (during semester)</i> <i>P – concluding (at semester end)</i>	Educational effect number	Way of evaluating educational effect achievement
F1(w)	PEU_W01 PEU_W02 PEU_K01	Written test or a case analysis; active participation in lectures
P(w)	P=F1	

PRIMARY AND SECONDARY LITERATURE**PRIMARY LITERATURE:**

- [1] Chyrowicz B., O sytuacjach bez wyjścia w etyce, Kraków 2008
- [2] Budinger T.F., Budinger M. D., Ethics of Emerging Technologies: Scientific Facts and Moral Challenges, Hoboken, New Jersey 2006.
- [3] Galewicz W. [red.], Moralność i profesjonalizm. Spór o pozycję etyk zawodowych, Kraków 2010.
- [4] Harris C., Pritchard M., Rabins M., Engineering Ethics. Concepts and Cases, Wadsworth 2009.

SECONDARY LITERATURE:

- [1] Chyrowicz B. [red.], Etyka i technika w poszukiwaniu ludzkiej doskonałości, Lublin 2004.
- [2] Jonas H., Zasada odpowiedzialności. Etyka dla cywilizacji technologicznej, tłum. M. Klimowicz, Kraków 1996.
- [3] Małek M., Mazurek E., Serafin K., Etyka i technika. Etyczne, społeczne i edukacyjne aspekty działalności inżynierskiej, Wrocław 2014.
- [4] Ossowska M., Normy moralne. Próba systematyzacji, Warszawa 2003.

SUBJECT SUPERVISOR

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