

FACULTY:	Department of Mechanical Engineering
FIELD OF STUDY:	Mechanics and Machine Building
ERASMUS COORDINATOR OF THE FACULTY:	Dr hab. inż. Agnieszka Kułakowska, Prof. PK
E-MAIL ADDRESS OF THE COORDINATOR:	agnieszka.kulakowska@tu.koszalin.pl
COURSE TITLE:	Engineering statistics
LECTURER'S NAME:	dr hab. inż. Agnieszka Kułakowska, prof. PK
E-MAIL ADDRESS OF THE LECTURER:	agnieszka.kulakowska@tu.koszalin.pl
COURSE CODE (USOS):	10
ECTS POINTS FOR THE COURSE:	5 ECTS
ACADEMIC YEAR:	2026/2027
SEMESTER: (W – winter, S – summer)	W
HOURS IN SEMESTER:	15+15
LEVEL OF THE COURSE: (1 st cycle, 2 nd cycle, 3 rd cycle)	1 st cycle
TEACHING METHOD: (lecture, laboratory, group tutorials, seminar, other-what type?)	Lecture, practice
LANGUAGE OF INSTRUCTION:	<ul style="list-style-type: none"> • English full time scheme for classes with 5 and more international Erasmus+ students enrolled/accepted; • English 50% individually with the teacher + Polish 50% with Polish students or individual project work-scheme for classes with less than 5 international Erasmus+ students enrolled/ accepted;
ASSESSMENT METOD: (written exam, oral exam, class test, written reports, project work, presentation, continuous assessment, other – what type?)	Written exam
COURSE CONTENT:	<p>Grouping statistical and graphical representation of a random variable.</p> <p>Descriptive statistics.</p> <p>The calculus of moments.</p> <p>Frequency distribution, histogram and cumulative distribution.</p> <p>Random variable distributions.</p> <p>Parameter estimation random variable.</p> <p>Verification of statistical hypotheses.</p> <p>Correlation and linear regression between the dependent variable and independent.</p> <p>Determination of confidence intervals for linear regression function.</p> <p>Calculations in Excel program.</p> <p>Calculations in the program Statistica.</p> <p>Measures of volatility and location.</p> <p>The ranks of statistical charts.</p> <p>Descriptive statistics of a random variable, invoice moments.</p> <p>Analysis of statistical group, checking compliance of the distribution of the normal distribution.</p> <p>Point and interval estimation.</p> <p>Parametric and nonparametric tests.</p>

	Linear regression and correlation, determination of confidence intervals for linear regression. Analyses in program Excell and Statistica.
ADDITIONAL INFORMATION:	

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