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:	Prof. dr hab. inż. Leon Kukiełka Dr hab. inż. A. Kułakowska
E-MAIL ADDRESS OF THE LECTURER:	Leon.kukielka@tu.koszalin.pl
COURSE CODE (USOS):	7S
ECTS POINTS FOR THE COURSE:	2 ECTS
ACADEMIC YEAR:	2024/2025
SEMESTER: (W – winter, S – summer)	S
HOURS IN SEMESTER:	15
LEVEL OF THE COURSE: (1st cycle, 2nd cycle, 3rd cycle)	1st cycle
TEACHING METHOD: (lecture, laboratory, group tutorials, seminar, other- what type?)	Project
LANGUAGE OF INSTRUCTION:	**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:	Statistical verification of the experimental data. Eliminationof results burdened with gross mistake. Checking homogeneity of variance of a random variable. Statistical grouping. Building a distribution table of a random variable and building the histogram and cumulative distribution charts. Descriptive statistics. Classic means (arithmetic, geometricand harmonic average); Position measures (dominant, second quartile, third quartile); Measures of variation (variance, standard deviation); Value range; Classic coefficient of variation; Relative asymmetry measures; focus factor (kurtosis). Examination of compliance of the theoretical random variable distribution with the empirical distribution. Calculus of moments (absolute, relative, ordinary and central moments). Statistical analysis of the experimental data and development of conclusions from the analysis. Parametric and nonparametric random variable estimation.Intervals of variation for the mean value, variance and standard deviation. Covariance, correlation and linear regression between dependent and independent variables. Pearson's

	linear correlation coefficient.
ADDITIONAL INFORMATION:	-

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