### Field of study
Computer Science

### Degree level and programme type
Engineer's degree full-time programme

### Specialization/ diploma path

### Course name
Mathematical Statistics

### Course code
FCS-00065

### Course type
obligatory

### Forms and number of hours of tuition
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### Semester
3

### No. of ECTS credits
6

### Entry requirements
To familiarize students with the basic methods of mathematical statistics. Literacy education from the corresponding theorems and formulas. Learning how to verify their calculations. Focusing on the need to draw conclusions and to formulate and justify opinions. Education ability to use Excel statistical functions, data analysis tools in Excel, R and in Python's libraries.

### Course objectives
Elements of descriptive statistics, probability distributions occurring in the statistics, point estimates and compartments, confidence intervals, hypothesis verification parametric compatibility tests, tests of independence, ANOVA, estimators of the correlation coefficient and the regression coefficient.

### Course content
- Elements of descriptive statistics, probability distributions occurring in the statistics, point estimates and compartments, confidence intervals, hypothesis verification parametric compatibility tests, tests of independence, ANOVA, estimators of the correlation coefficient and the regression coefficient.

### Teaching methods
Informative lecture, lecture problem, discussion related to the lecture, laboratory exercises, project method,

### Assessment method
- Lecture - written exam.
- Specialist workshop - quizzes on the e-learning platform, reports on subsequent topics, observation of work during classes

### Symbol of learning outcome

### Learning outcomes

### Reference to the learning outcomes for the field of study

### Symbol of learning outcome

### Methods of assessing the learning outcomes

### Type of tuition during which the outcome is assessed

### Student workload (in hours)

### Calculation

### Quantitative indicators

### Student workload - activities that require direct teacher participation

### Student workload - practical activities

### Basic references

### Supplementary references

### Organisational unit conducting the course
Software Department

### Author of the programme
dr inż. Magdalena Topczewska

### Date of issuing the programme
Feb. 17, 2022