



# TH01007: PROBABILITY AND STATISTICS

Total credits 3: theory 3 - practice 0 - Self-study 9



## EXPECTED LEARNING OUTCOMES

Notation	Course expected learning outcomes After successfully completing this course, students are able to	Program expected learning outcomes
<b>Knowledge</b>		
K1	Apply the concepts of probability and the rules of probability calculation to solve practical problems.	ELO1
K2	Apply knowledge of probability distributions to identify a number of common probability distributions and to calculate their numerical characteristics.	ELO1
K3	Apply knowledge of descriptive statistics, interval estimation, hypothesis testing, correlation and regression to solve practical problems.	ELO5
<b>Skills</b>		
K4	Apply simple statistical models to practical problems, analyze and process data.	ELO10
<b>Self-Control and Responsibility</b>		
K5	Demonstrate ability of lifelong learning for continuously developing knowledge and skills.	ELO15

## COURSE DESCRIPTION

- This course provides basic knowledge of probability and statistics.
- Topics covered are: probability, random variables, descriptive statistics, parameter estimation, hypothesis testing, correlation and regression.

## STUDENT TASKS

- Attend at least 80% of the course contact hours.
- Complete at least 70% of homework.
- Take the midterm and final exam.



## ASSESSMENT METHODS

- Grading: 10
- Average score of course is the total points of rubrics multiplied by the respective weight of each rubric.
- Formative assessment: **Participation (10%) and midterm exam (30%)**
- Summative assessment: **Final exam/multiple choice or essay (60%)**

## LEARNING METHODS

- Learning in class
- Team work
- Self learning
- E-learning



## LECTURERS

All teachers in the Department of Mathematics.

