



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
Knowledge		
CELO1	Apply the concepts of probability and the rules of probability calculation to solve practical problems.	ELO1
CELO2	Apply knowledge of probability distributions to identify a number of common probability distributions and to calculate their numerical characteristics.	ELO1
CELO3	Apply knowledge of descriptive statistics, interval estimation, hypothesis testing, correlation and regression to solve practical problems.	ELO5
Skills		
CELO4	Apply simple statistical models to practical problems, analyze and process data.	ELO10
Self-Control and Responsibility		
CELO5	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.

