Study programmes: Bachelor studies - Mathematics

Course name: RM17 - Computer Networks

Lecturers: Miroslav Marić and other lecturers at Department of computer Science

Status: Compulsory

ECTS: 6

Attendance prerequisites: RM01, RM02

Course aims: Mastering general and specific knowledge about theory and principles of computer networks.

Course outcome: After completion of the course, the students have adopted the elementary concepts of computer networks: basic principles, maintenance, and principles of functioning.

Course content:

- Computer networks history. Local and global computer networks.
- Virtual circuits and packet switching.
- Communication and networking: network standards and organizations for standardization.
- ISO 7-layer reference model
- TCP/IP 4-layer reference model
- Tanenbaum's hybrid 5-layer model
- Security and protection in computer networks

Literature:

1. Andrew S. Tanenbaum, David J. Wetherall, Computer Networks, 5th edition, Pearson Education, 2011.

(The lecturer can choose another relevant current literature)

Number of hours: 5	**Lectures: 2**	**Tutorials: 3**	**Laboratory: -**	**Research: -**

Teaching and learning methods: Frontal lectures, group and exercises.

Assessment (maximal 100 points)

Course assignments	**points**	**Final exam**	**points**
Lectures	-	Written exam	70
Exercises / Tutorials	-	Oral exam	-
Colloquia	30	Written-oral exam	-
Essay / Project	-		