

COMMUNICATIONS SYSTEMS (5 ECTS, S1 93001368):

Integrated communications systems: Fixed and mobile transmission technologies, channel coding and modulation; Traffic and capacity modelling (constraints, safety margins); Social and economic impact and sustainability.

Fixed communications systems; Backbone and access networks.

Mobile/wireless communications systems: Link regulation and planning; health and safety. Spectral efficiency and system design; Transmission techniques; 5G/6G communications.

Artificial Intelligence in the analysis and design of mobile communications networks and in communications components (antennas, subsystems, etc.).

Communication networks Satellite communication systems; Sizing of SatComs systems; Radar systems.

Practical work + project (assessed via group work: 20–25% and via group presentation: 10–15%)