

Title Navigation systems	Code 1018371010108320252
Field Electronics and Telecommunications	Year / Semester 5 / 10
Specialty Telecommunication Systems	Course elective
Hours Lectures: 2 Classes: - Laboratory: 2 Projects / seminars: -	Number of credits 0
	Language polish

Lecturer:

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Status of the course in the study program:

Obligatory course for students of Electronics and Telecommunications

Assumptions and objectives of the course:

Making students familiar with basic principles of satellite navigation systems and their applications

Contents of the course (course description):

Needs and goals of navigation; history of navigation systems; satellite orbits; time scales; navigation equations; required quality of navigation; sources of navigation errors; relativistic effects and their importance for navigation; architecture, signals and working of global navigation satellite systems (GNSS): GPS, GLONASS, Galileo; differential and supporting systems: DGPS, WASS, EGNOS, SBAS, GBAS, ABAS; GNSS receivers; examples of GNSS applications.

Introductory courses and the required pre-knowledge:

Signal theory, telecommunication systems

Courses form and teaching methods:

Lectures, laboratory exercises

Form and terms of complete the course - requirements and assessment methods:

Written egzam

Basic Bibliography:

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Additional Bibliography:

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