Subject card

Subject name and code	Internet Technology in Infosystems, PG_00048675
Field of study	Electronics and Telecommunications

Date of commencement of studies	February 2023	Academic year of realisation of subject	2023/2024
Education level	second-cycle studies	Subject group	Optional subject group Subject group related to scientific research in the field of study
Mode of study	Full-time studies	Mode of delivery	at the university
Year of study	1	Language of instruction	Polish
Semester of study	2	ECTS credits	1.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Department of Metrology and Optoelectronics -> Faculty of Electronics, Telecommunications and Informatics		
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Arkadiusz Szewczyk	
	Teachers	dr inż. Arkadiusz Szewczyk	

Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	0.0	0.0	0.0	15
	E-learning hours included: 0.0						

Learning activity and number of study hours	Learning activity	Participation in didactic classes included in study plan	Participation in consultation hours	Self-study	SUM
	Number of study hours	15	2.0	8.0	25

Subject objectives	Familiarize students with issues relating to the use of Internet technologies that can be implemented in infosystem. Familiarize students with languages and tools for creating websites. Familiarize students with transmission and application protocols.

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K7_W04] Knows and understands, to an advanced extent, the principles, methods and techniques of programming and the principles of computer software development or programming devices or controllers using microprocessors or programmable elements or systems specific to the field of study, and organisation of systems using computers or such devices	Student knows the principles of programming of web applications and pages. Student knows internet protocols and technologies and their applications.	[SW1] Assessment of factual knowledge [SW2] Assessment of knowledge contained in presentation
	[K7_W03] Knows and understands, to an increased extent, the construction and operating principles of components and systems related to the field of study, including theories, methods and complex relationships between them and selected specific issues - appropriate for the curriculum.	knows and understands in greater depth the principles of using communication and application protocols as well as components of websites and internet applications	[SW1] Assessment of factual knowledge

Subject contents	1. Itroduction to the lecture 2. Architecture of infosystems using Internet network 3. Application of internet technology in infosystems 4. Designing of static WWW documents aimed at measurement visualiza-tion using HTML 5. Designing of dynamic WWW documents aimed at measurement visu-alization using JavaScript 6. Designing of WWW measurement applications using PHP 7. SQL database in measurement applications 8. ActiveX components designing for internet clients 9. Application of the SOCKET interface 10. Application of internet protocols: TCP, UDP 11. Application of internet protocols: FTP, HTTP 12. Application of internet protocols: POP3, SMTP and IMAP 13. Special measurement protocols design for infosystems 14. Methodology of design of infosystems with using internet technology 15. Designing of infosystems with LabView software 16. Examples of infosystems based on internet technology part I 17. Examples of infosystems based on internet technology part II
Prerequisites and co-requisites	No requirements

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Written exam	50.0%	100.0%

Recommended reading	Basic literature	Elizabeth Castro, "Po prostu HTML, XHTML i CSS", Helion 2008 Wiesław Tłaczała, "Środowisko LabVIEW w eksperymencie wspomaganym komputerowo", WN-T 2002
	Supplementary literature	No requirements
	eResources addresses	Adresy na platformie eNauczanie: Technologie internetowe w infosystemach - wykład 2023/24 - Moodle ID: 30677 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=30677

Example issues/ example questions/ tasks being completed	
Work placement	Not applicable