

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Integrated Management Systems		Code 1010535111011133356
Field of study Automatic Control and Robotics	Profile of study (general academic, practical) general academic	Year /Semester 1 / 1
Elective path/specialty Automatic Control and Robotics Systems	Subject offered in: Polish	Course (compulsory, elective) obligatory
Cycle of study: Second-cycle studies	Form of study (full-time, part-time) part-time	
No. of hours Lecture: 12 Classes: - Laboratory: 12 Project/seminars: -		No. of credits 3
Status of the course in the study program (Basic, major, other) major		(university-wide, from another field) from field
Education areas and fields of science and art technical sciences Technical sciences		ECTS distribution (number and %) 3 100% 3 100%
Responsible for subject / lecturer: prof.dr hab. inż. Józef Fraś email: jozef.fras@put.poznan.pl tel. 61 6653417 Faculty of Engineering Management) ul. Strzelecka 11 60-965 Poznań		
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	knows and understands the basic concepts and principles in the field of management
2	Skills	can use the basic knowledge of the basics of management
3	Social competencies	is aware of the need to shape management systems taking into account the requirements
Assumptions and objectives of the course: Submission of basic knowledge in the field of quality, environment and management security, especially modern system solutions used in the world based on ISO 9000, ISO 14000 and PN-N / OHSAS 18000 standards and the acquisition of skills effective use of modern model solutions in the integrated field management systems in the organization.		
Study outcomes and reference to the educational results for a field of study		
Knowledge:		
1. has the knowledge necessary to understand economic, legal and social aspects - [[K_W14]]		
Skills:		
1. is able to formulate and solve tasks involving the design of automation systems - [[K_U14]]		
Social competencies:		
1. can think and act in a creative and enterprising way - [[K_K5]]		
Assessment methods of study outcomes		
Forming rating: a) laboratories: evaluation of the current progress of the exercise work, b) lectures: answers to questions about the content of previous lectures, Summary rating: a) laboratories: presentation of the solution of the task, which was the subject of the exercises, b) lectures: written colloquium (answers to 3 open questions) from the content presented during the lecture; every question scored on the rating scale from 2 to 5; result evaluation is the average of partial grades; colloquium passed after obtaining at least grade 3.0.		

Course description		
<p>The essence and importance of integrated management systems in a market economy. Standardization and certification. Principles of pro-quality management. Standards for quality management, environment and occupational health and safety in accordance with ISO 9000, ISO 14000 and PN-N / OHSAS 18000 standards. Integration of quality, environment and safety management systems. Audit of integrated systems. Improving integrated systems. Assumptions of the TQM (Total Quality Management) concept.</p>		
<p>Basic bibliography: 1. Frąś J., (2015), Normalizacja i zarządzanie jakością w logistyce, Wyd. Naukowe Politechniki Poznańskiej, Poznań</p>		
<p>Additional bibliography: 1. . Frąś J. (2013), Kompleksowe zarządzanie jakością w logistyce, Wydawnictwo Instytutu Technologii Eksploatacji w Radomiu, Radom</p>		
Result of average student's workload		
Activity	Time (working hours)	
1. Lecture	12	
Student's workload		
Source of workload	hours	ECTS
Total workload	75	3
Contact hours	34	2
Practical activities	12	1