

Course title Podstawy aparatury chemicznej / Basics of chemical apparatus		ECTS code 13.3.0896	
Name of unit administrating study Faculty of Chemistry			
Studies			
Field of study	Type	Form	
Chemical Business	Bachelor / Engineer	Full-time studies	
Teaching staff Prof. dr hab. inż. Adriana Zaleska-Medynska			
Forms of classes, the realization and number of hours		ECTS credits 4	
A. Forms of classes, in accordance with the UG Rector's regulations lecture, auditorium classes, laboratory classes		classes - 45 h tutorial classes – 15 h student's own work – 40 h	
B. The realization of activities in-class learning		Total: 100 h - 4 ECTS	
C. Number of hours 45 h (15 h lecture, 15 h auditorium classes, 15 h laboratory classes)			
The academic cycle Second year, winter semester			
Type of course obligatory		Language of instruction Polish	
Teaching methods Auditorium exercises: project implementation Laboratory exercises: tests, practical work and presentation of results in the form of a written report Lecture: written exam with open questions		Form and method of assessment and basic criteria for evaluation or examination requirements A. Final evaluation, in accordance with the UG study regulations lecture – exam auditorium classes – course completion (with a grade) B. Assessment methods - lecture: written exam with open questions - auditorium exercises: project implementation - laboratory exercises: tests, practical work and presentation of results in the form of a written report C. The basic criteria for evaluation or exam requirements	
Required courses and introductory requirements Technical Drawing, mathematics, physics			
Aims of education • familiarize students with all the issues mentioned in the lecture's program content • developing skills of critical evaluation and interpretation of the work parameters of the discussed devices and analysis of source texts			
Bibliography of literature A. Literature required to pass the course Błasiński H., Młodziński B. - Aparatura przemysłu chemicznego, WNT 1983, Pikoń J., - Aparatura chemiczna, PWN 1978 Bieszk H., Urządzenia do realizacji procesów mechanicznych w technologii chemicznej, Wyd. PG. 2001, Bieszk H., Urządzenia do realizacji procesów cieplnych w technologii chemicznej, Wyd. PG. 2010. B. Extracurricular readings			

Knowledge

Student:

1. defines and presents the construction of typical technological devices
2. describes, illustrates and explains their functioning
3. characterizes the basic parameters of their work
4. understands the relationships and dependencies between their operation and construction

Skills

Student:

1. uses terminology to present (in written and oral form) the content of the subject
2. knows the operation of devices based on their graphic schemes
3. uses the basic computational techniques used in designing
4. analyzes the results of calculations, draws conclusions about the correctness of their operation

Social competence

Student:

1. Understands the need for continuous education,
2. is aware of the need for honest and reliable work,
3. appreciates the need to be able to work in a team in accordance with its role in it,
4. is aware of the need for a critical analysis of own work
5. shows cautious criticism in receiving information, especially available in the mass media