

<b>STUDY MODULE DESCRIPTION FORM</b>		
Name of the module/subject <b>Introduction to Engineering</b>		Code <b>1011101211011100150</b>
Field of study <b>Engineering Management - Full-time studies -</b>	Profile of study (general academic, practical) <b>(brak)</b>	Year /Semester <b>1 / 1</b>
Elective path/specialty <b>-</b>	Subject offered in: <b>Polish</b>	Course (compulsory, elective) <b>obligatory</b>
Cycle of study: <b>First-cycle studies</b>	Form of study (full-time, part-time) <b>full-time</b>	
No. of hours Lecture: <b>30</b> Classes: <b>15</b> Laboratory: <b>-</b> Project/seminars: <b>-</b>		No. of credits <b>5</b>
Status of the course in the study program (Basic, major, other) <b>(brak)</b>		(university-wide, from another field) <b>(brak)</b>
Education areas and fields of science and art		ECTS distribution (number and %)
<b>Responsible for subject / lecturer:</b>  mgr Karolina Popławska email: karolina.poplawska@put.poznan.pl tel. 616653521 PUT Library ul. Piotrowo 2, 60-965		
<b>Prerequisites in terms of knowledge, skills and social competencies:</b>		
1	<b>Knowledge</b>	Basic rules for using library collections
2	<b>Skills</b>	The ability to search databases and the Internet
3	<b>Social competencies</b>	The awareness of the need to develop skills in receiving the necessary materials in the learning process
<b>Assumptions and objectives of the course:</b> Need for education of first-year students in the field of the ability to use the information resources of the own library and the resources of other libraries using the method of distance education		
<b>Study outcomes and reference to the educational results for a field of study</b>		
<b>Knowledge:</b> 1. Student knows: organization of library collections of his own library; principles of using printed and electronic library resources; principles of providing printed and electronic library resources on the outside and in the reading rooms on the spot; rules for importing missing library materials from other libraries - [K1A_W16] - [-]		
<b>Skills:</b> 1. Student acquires the ability to individual search for needed information materials (sub-links, monographs, articles in magazines, standards) in online library catalogs - [K1A_U05] - [-]		
<b>Social competencies:</b> 1. Student understands the need to know the possibilities of continuing to study second and third degree studies, postgraduate studies, courses) - raising professional, personal and social competences - [K1A_K01] - [-] 2. Student is able to search for education and training to supplement and improve knowledge and skills - [K1A_K06] - [-]		
<b>Assessment methods of study outcomes</b>		
Forming mark: - Summary mark: final test on the Moodle Platform		
<b>Course description</b>		
General information about the library collections.		

Computer catalogs of the PUT Library.  
 Sharing outdoor collections.  
 Sharing books, magazines and other materials on site.  
 Importing library materials from other libraries and providing a document or a its copy.  
 Compressors database: list of recommended literature for individual faculties, fields and years of study.  
 Services and additional information: rooms for group work; a position for students with dysfunctions; libraries of PUT organizational units.

Teaching methods: exercise method, information lecture

**Basic bibliography:**

1. Dobrzański T., Rysunek techniczny maszynowy, Wydawnictwo WNT, Warszawa 2015.
2. Filipowicz K., Kowal A., Kuczaj M., Rysunek techniczny, Wydawnictwo Politechniki Śląskiej, Gliwice 2016.
3. Zakres aktualnych aktów normatywnych z zakresu rysunku technicznego ? wymagania ogólne.
4. Wprowadzenie do techniki (Introduction to technology)- Tytyk Edwin, Butlewski Marcin, Wyd. Politechniki Poznańskiej, Poznań, 2009
5. Wprowadzenie do techniki - materiały do ćwiczeń i wykładów (Introduction to technology- materials for lectures and practice), Tomaszewski Zbigniew, Wyd. Politechniki Poznańskiej, Poznań, 2005
6. Encyklopedia technik wytwarzania stosowanych w przemyśle maszynowym (Encyclopaedia of production techniques in industry) , tom I, Erbel Jerzy, Oficyna Wydawnicza Politechniki Warszawskiej, Warszawa, 2001
7. Encyklopedia technik wytwarzania stosowanych w przemyśle maszynowym (Encyclopaedia of production techniques in industry), Tom II, Erbel Jerzy, Oficyna Wydawnicza Politechniki Warszawskiej, Warszawa, 2001

**Additional bibliography:**

1. Molasy R., Rysunek techniczny : chropowatość i falistość powierzchni, tolerancje geometryczne i tolerowanie wymiarów, Wydawnictwo Politechniki Świętokrzyskiej, Kielce, 2016.
2. Technologia maszyn (Technology of machines), Okoniewski Stefan, WSiP, Warszawa, 1999
3. Dawne wynalazki (Past inventions), James Peter, Thorpe Nick, Świat Książki, Warszawa, 1997
4. Powszechna historia techniki (Contemporary history of technology), Bolesław Orłowski, Oficyna Wydawnicza Mówią Wieki, Warszawa, 2010

**Result of average student's workload**

Activity	Time (working hours)	
<b>Student's workload</b>		
Source of workload	hours	ECTS
Total workload	1	0
Contact hours	0	0
Practical activities	1	0