

Title Introduction to Technique (Wprowadzenie do techniki)	Code 1010401111010240609
Field EDUCATION IN TECHNOLOGY AND INFORMATICS	Year / Semester 1 / 1
Specialty -	Course core
Hours Lectures: 2 Classes: - Laboratory: - Projects / seminars: -	Number of credits 2
	Language polish

Lecturer:

prof. dr hab. inż. Michał Szweyca
Instytut Technologii Materiałów
Poznań, ul. Piotrowo 3
tel.: (61) 665-2415 e-mail:hannaszweyca@inea.pl

Faculty:

Faculty of Technical Physics
ul. Nieszawska 13A
60-965 Poznań
tel. (061) 665-3160, fax. (061) 665-3201
e-mail: office_dtpf@put.poznan.pl

Status of the course in the study program:

Core course of the study for Education in Technology and Informatics, Faculty of Technical Physics.

Assumptions and objectives of the course:

Knowledge of basic terms connected with techniques, factors of techniques evolution, evolution of selected technology domains. Terms of functioning and use of selected groups of machines and cycle of existence of technical objects.

Contents of the course (course description):

Basic laws of physics connected with technology. Units of measure. Standardization. Technology and factors of its evolution. Science, knowledge, innovation. Sustainable manufacturing. Evolution of selected technology domains: materials, energy, transport. Machine knowledge: energetic machines, pumps, engines, technological and working machines, terms of functioning and use. Cycle of existence of technical object: conception, designing, manufacturing, exploitation, liquidation (and recycling).

Introductory courses and the required pre-knowledge:

Basic knowledge of physics and chemistry

Courses form and teaching methods:

lecture

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

written test, examination

Basic Bibliography:

1. Maszynoznawstwo, Kijewski J. i inni, WSiP, Warszawa, 1993
2. Inżynieria materiałowa, Grabski M.W., Kozubowski J.A., Oficyna Wyd. Politechniki Warszawskiej, Warszawa, 2003
3. Encyklopedia techniki PWN

Additional Bibliography:

1. Podstawy eksploatacji maszyn i urządzeń, Legutko S., WSiP, Warszawa, 2004
2. Projektowanie procesów technologicznych podstawowych części maszyn, Feld M., WNT, W-wa, 2000

