



Course name	Industrial Technologies
Entity running the course	Faculty of Interior Architecture and Design
Entity for which the course has been prepared	Department of Design
Course type	Basic / obligatory
Year of study / semester, type of studies	Year II, sem. IV, full-time bachelor's degree
ECTS credits	1 point ECTS
Academic tutor	Sen. lect. Bogdan Kochan, MFA
Aim of the course	Knowledge about basic laws of physics and mechanics, classical technologies and specific features of old and new materials, which are useful for designers who make projects in the area of industrial design.
Prerequisites	Having completed the 1st year of Material Science and 3rd semester of Industrial Technologies
Learning outcomes:	
- knowledge	Student has a basic knowledge in the area of techniques and technologies of making products, as well as features and use possibilities of traditional and new construction materials. Understands basic laws of physics and can utilize them in realizing their tasks. Can recognize different materials and tell the differences between them.
- skills	Student can select the most suitable technologies and materials for specific purposes, consciously applies technical and technological knowledge. Can independently compare features and qualities of construction materials and

	technological solutions being used.
- personal and social competence	
Course content	Classes are about problems of using materials such as wood, paper, glass, metals, polymers, ceramics and composites as well as basic and more advanced technologies used in production. Students learn about basic rules and laws of physics and selected construction questions, which are necessary for a designer.
Course form and number of course hours	Illustrated lectures, discussions; 30 hours per semester.
Assessment methods and criteria	10% participation in classes 15% activity during classes 75% written exam
Assessment type	Graded pass
Literature	„Wprowadzenie do technologii materiałów dla projektantów”; Nawrot C. Mizera J. Kurzydłowski K.J.; WPW; „Technologia tworzyw sztucznych”; Pielichowski Jan, Puszyński Andrzej; „Inżynieria nanomateriałów i struktur ultradrobnoziarnistych”; Maria Richert; Wydawnictwa AGH; „Materiałoznawstwo”; A. Ciszewski , T. Radomski , A. Szummer; Oficyna Wydawnicza Politechniki Warszawskiej; „Kompozyty”; A. Boczkowska, J. Kapuściński , Z. Lindemann , D. Witemberg-perzyk , S. Wojciechowski; Oficyna Wydawnicza Politechniki Warszawskiej; „Kompozyty metalowe”; Jerzy Sobczak; Instytut Transportu Samochodowego; „Zaawansowane technologie współczesnych systemów produkcyjnych”; E.Pająk; Wyd. Politechniki Poznańskiej;
Teaching aids	Computer, projector
Language of instruction	Polish; communication in English possible