

TYPE & FIELD OF STUDIES: MSc IN MECHANICS AND MACHINE DESIGN**PROGRAMME TITLE: COMPUTER AIDED DESIGN IN MECHANICAL ENGINEERING**

Faculty/ Department; Faculty of Mechanical Engineering
Institute of Applied Informatics

Duration: 4 semesters

ECTS credits 120

Programme description: This is a MSc course for BSc graduates. It is mainly focused on improving students' skills in application of computer science: CAD, CAM and CAE systems, programming, artificial intelligence, computer networks. Nowadays engineers must be skilled in many fields of computer science. The study gives a professional knowledge which allows our graduates for efficient using of CAD 2D and 3D systems as AutoCad, Intercad, Pro/E, Inventor, Solid Works. The students will be able to carry out computation of structural strength using Pro/Mechanica or Cosmos Works and develop computer programs using Delphi, C++ or Java. They will know how to solve construction problems with the most modern software and automatize their work using programming environments. Our graduates can work in a big sector of engineering industry including machine building, automotive companies, aircraft industry and many others.

Programme of studies:	Hours	ECTS
1st semester		
Computer Methods using software Maple	60	6
CAD 2D systems	60	5
CAD 3D systems	60	5
Simulation of drives and control systems	30	4
Advanced computer networks	30	5
Basics of programming	60	5
2nd semester		
Computer graphics	30	4
Advanced CAD systems	60	7
FEM systems	60	6
Object oriented programming	60	5
Integrated CAD systems: Pro/E	60	5
Computer networks	30	3
3rd semester		
Administration and security of informatic systems	30	4
Design of mechanisms	75	6
CFD systems	60	6
Automation of CAD systems	30	4
FEM systems – Pro/Mechanica	60	6
Intelligent systems	45	4
4th semester		
Image analysis	30	5
Diploma seminar	30	5
Diploma thesis	0	20

Web page: <http://www.m7.mech.pk.edu.pl>

Eligibility / Admission: Students who have completed Bachelor Program in Mechanics and Machine Design or related and who obtained Bachelor's Degree

Tuition fee: 2000 Euro per semester

Contact person: Edward Lisowski, Prof. DSc, PhD; phone #: +48 12 628 33 51,
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Application procedures & deadlines: Scans of the following documents are to be submitted by persons applying for admission by 31 May: - Application Form (available to be downloaded from www.bwm.pk.edu.pl), - bachelor's diploma, - Official Transcript, passport (page with the holder's photo), - doctor's report (available to be downloaded from www.bwm.pk.edu.pl). Note: Both diploma and Official Transcript are to be officially translated into Polish language. Please send all documents via e-mail to Ms. Kamila Rościszewska at kamir@pk.edu.pl.