

<b>TYPE &amp; FIELD OF STUDIES</b>	MSc in TRANSPORTATION		
<b>PROGRAMME TITLE:</b>	TRANSPORTATION MANAGEMENT AND RAILWAY VEHICLE ENGINEERING		
<b>Faculty/Department:</b>	Faculty of Mechanical Engineering Institute of Rail Vehicles		
<b>Duration:</b>	3 semesters		
<b>ECTS credits:</b>	90		
<b>Programme description:</b>	<p>The syllabus of Transportation Management and Railway Vehicle Engineering course meets a growing demand of the international market of transport services. The enrolled students acquire an extensive knowledge in the field of organization, management and operation of modern form of transportation. Special attention is given to the modern railway transportation as well as municipal rail transportation. The acquired competence let the graduates to take part in designing, implementation and also operation management of various transportation systems. It also includes knowledge of transportation systems of large municipal agglomerations, combined transportation and ecological aspects of transportation-environment interaction.</p> <p>The graduates will gain understanding of the modern management methods, planning and organization of transport infrastructure, maintenance, repair as well as implementation of the modern vehicle renewal strategies.</p> <p>During the study graduates will become familiar with software tools for computer aided management, operation, reliability monitoring, analysis of machines and vehicle parts wear, etc. They will be acquainted with methods and resources of prognostic investigations. They will use the modern computer technologies in information systems designing and information processing. They will be able to handle with computerized resources of communication as well as utilize computer simulation methods for transport processes and enterprise modeling.</p> <p>The gained general skills and knowledge in range of Transportation Management and Railway Vehicle Engineering allow the graduates to work in national and international transportation companies, research and development centers, maintenance, logistics as well as start their own business.</p>		
<b>Programme of studies:</b>	1 <sup>st</sup> semester	hours	ECTS
	Applied Mathematics in Transport	30	5
	Control and Management in Transport Systems	45	3
	Transport Systems and Processes Modeling	45	2
	Data Communication Systems in Transport	30	4
	Applied Mechanics	30	3
	FEM in Analysis of Transport Devices	30	1
	Modern Constructional Materials	15	4
	Technical Operation	30	2
	Lubrication Technology	30	2
	Ergonomics and Safety of Vehicles	30	2
	Energy Consumption of Transport Systems	30	2
	2 <sup>nd</sup> semester		
	Transport System Engineering	30	2
	Optimization of Material Handling and Storage	30	4
	Reliability and Safety of Systems	30	4
	Public Transport Vehicles	30	2
	Transport Vehicle Dynamics	30	2
	Wear Processes in Transport Means	30	2
	Computer Systems in Technical Operation	30	2
	Formal and Institutional Issues in Transport	30	2
	Multimodal Transport Organization and Engineering	30	2
	Transport of Hazardous Materials	30	2
	Econometric Models in Transport	30	2
	Initial Thesis	30	5
	3 <sup>rd</sup> semester		
	Regeneration and Recycling	30	1
	Technical Operation, Certification and Expertises	45	2
	Drive and Braking of Transport Vehicles	30	2
	Expert Systems in Transport Management	30	2
	Diploma Seminar	30	2
	Master Thesis		20
<b>Web page:</b>	m8.mech.pk.edu.pl		
<b>Eligibility/Admission:</b>	Students who have completed Bachelor Program in Transportation or related field and who earned Bachelor's Degree		
<b>Tuition fee:</b>	4000 Euro per year		
<b>Contact person:</b>	Grzegorz Zajac, PhD; phone #: +48 12 628 33 10, e-mail: gzajac@m8.mech.pk.edu.pl		
<b>Application procedures &amp; deadlines:</b>	Scans of the following documents are to be submitted by persons applying for admission by <b>13 FEB/14 JUL</b> for a spring or autumn semester beginning: - 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 Grzegorz Zajac (gzajac@m8.mech.pk.edu.pl)		