

E – Charakteristika studijního předmětu/Subject Specification					
Název studijního předmětu / Subject title	Laboratory 2 (follow-up of Laboratory 1)				
Typ předmětu / Subject type	Obligatory		dopor. ročník / semester/ recommended year / semester	1/2	
Rozsah studijního předmětu / Study load in hours and credits		hod. za týden / lectures per week	4	Kreditů / Credits	5
Jiný způsob vyjádření rozsahu / Other expression of study load	14 weeks, 4 hours of laboratory seminars				
Způsob zakončení / Assessment	credit		Forma výuky / Form of teaching	Lab. seminar	
Další požadavky na studenta / Other demands on students	Graduation of subject Laboratory 1				
Vyučující / Lecturers	Doc. Ing. Antonín Potěšil, CSc. (tutor), Ing. Jan Koprnický,				
Stručná anotace předmětu / Subject annotation					
<p>The objective of the advanced course is to introduce laboratory technology planning used for characteristics identification and electromagnetic systems responses to students. Through suitably chosen laboratory topics the theory and practical solutions of a variety of experimental work and functional telemetry is introduced to students.</p> <p>The part of the presentations is the characteristics and demonstration of measuring chains used in experimental and developing units of industrial subjects and engineering companies.</p>					
Informace ke kombinované nebo distanční formě / Information for students in external form of study					
Rozsah konzultací (soustředění) / Consultations, study meetings		hodin za týden / hours per week			
Rozsah a obsahové zaměření individuálních prací studentů a způsob kontroly / Individual student work – type, load, content and the way of checking					
<div>1. - 4. Automobile electronics, CAN protocol, Škoda Auto, a.s. cars measurement (4 units)</div> <div>5. Exact measurement and analysis of rotating velocity and acceleration of spinning units and machinery</div> <div>6. Measurement and analysis of power inputs and loads of controlled servo</div> <div>7. Optimization for reducing mechanism vibrations</div> <div>8. Increasing of qualitative and efficiency parameters of processing machines</div> <div>9. Experimental evaluation of designed crush elements, appraisal of constructions, experimental modal analysis</div> <div>10. Construction and properties of measure analyzers</div>					
Studijní literatura a studijní pomůcky / Reading list and study utilities					
<div>Composite authors: Collection of examples and topics for experiments in industry profession. Learning script for LA 2 for consequential master degree studies at the FM TUL. Liberec 2007. Editor Potěšil, A.</div> <div>Manuals and web pages of manufacturers and suppliers of measure technology and units.</div>					