

Postgraduate Specialist Studies
“Development of products and technologies”

Programs:

- Application of Manufacturing Processes
- Production Management
- Design and Numerical Analysis of Constructions
- Engineering of Materials

The duration of the postgraduate specialist study is 3 semesters valued at a minimum of 90 credit points. Upon completion of Postgraduate Specialist Study student is awarded title University Specialist of Mechanical Engineering (univ. spec. mech. eng.)

Core common subjects

1. semestar

Code	Head lecturer	Subject	Hours		ECTS	Status
			P	E		
PS101	Prof.dr.sc. Pero Raos Prof.dr.sc. Milan Kljajin	Product Development	30	0	10	O
PS102	Prof.dr.sc. Ivica Kladarić Prof.dr.sc. Goran Šimunović Prof.dr.sc. Roberto Lujčić Prof.dr.sc. Katica Šimunović	Program Engineering Support	5	25	10	O
PS103	Prof.dr.sc. Vlatko Marušić Prof.dr.sc. Ivica Kladarić	Modern Methods of Material Testing	15	15	10	I
PS104	Prof.dr.sc. Dražan Kozak Prof.dr.sc. Todor Ergić	Analysis of Bearing Constructions	30	0	10	I
PS105	Prof.dr.sc. Katica Šimunović	Operational Research	10	20	10	I
PS106	Prof.dr.sc. Ivan Samardžić Doc.dr.sc. Leon Maglić	Control and Quality Assurance	25	5	10	I
PS107	Prof.dr.sc. Željko Ivandić Prof.dr.sc. Marija Živić Prof.dr.sc. Marinko Stojkov	Internal Combustion Engines	20	10	10	I

P – lectures, E - laboratory and experimental work
O – obligatory, I – optional

Module: Engineering of materials

Module leader: Prof.dr.sc. Dragomir Krumes

2. semester

Code	Head lecturer	Subject	Hours		ECTS	Status
			P	E		
PS201	Prof.dr.sc. Dragomir Krumes Prof.dr.sc. Ivica Kladarić Prof.dr.sc. Božo Smoljan	Special Materials and Methods	20	10	10	O
PS202	Prof.dr.sc. Vlatko Marušić Prof.dr.sc. Dragomir Krumes	Tribology	20	10	10	O
PS203	Prof.dr.sc. Ivica Kladarić Prof.dr.sc. Vlatko Marušić	Selected Chapters from Materials	20	10	10	I
PS204	Prof.dr.sc. Dragomir Krumes Prof.dr.sc. Ivica Kladarić	Surface Engineering and Surface Heat Treatment	20	10	10	I
PS205	Prof.dr.sc. Ivica Kladarić Prof.dr.sc. Dragomir Krumes Prof.dr.sc. Vlatko Marušić	Modern Technologies of Heat Treatment	20	10	10	I
		Selected Subjects from other Modules			10	I

Module: Design and numerical analysis of products

Module leader: Prof.dr.sc. Željko Ivandić

2. semester

Code	Head lecturer	Subject	Hours		ECTS	Status
			P	E		
PS301	Prof.dr.sc. Franjo Matejiček Prof.dr.sc. Dražan Kozak	Numerical Analysis of Mechanical Systems	20	10	10	O
PS302	Prof.dr.sc. Milan Kljajin Prof.dr.sc. Željko Ivandić Doc.dr.sc. Mirko Karakašić	Modelling of Constructions and Constructible Process	20	10	10	O
PS303	Prof.dr.sc. Dražan Kozak Prof.dr.sc. Todor Ergić Prof.dr.sc. Franjo Matejiček	Fatigue Strength	20	10	10	I
PS304	Prof.dr.sc. Željko Ivandić Prof.dr.sc. Milan Kljajin	Selected Topics in the Area of Mechanical Engineering Elements	20	10	10	I
PS305	Prof.dr.sc. Dražan Kozak Prof.dr.sc. Franjo Matejiček Doc.dr.sc. Pejo Konjatić	Lifetime of Constructions	20	10	10	I
		Selected Subjects from other Modules			10	I

Module: Application of manufacturing processes

Module leader: Prof.dr.sc. Branko Grizelj

2. semestar

Code	Head lecturer	Subject	Hours		ECTS	Status
			P	E		
PS401	Prof.dr.sc. Ivan Samardžić Prof.dr.sc. Pero Raos Prof.dr.sc. Stjepan Aračić	Modern Manufacturing Procedures I	20	10	10	O
PS402	Prof.dr.sc. Ivan Budić Prof.dr.sc. Branko Grizelj Prof.dr.sc. Antun Stoić Doc.dr.sc. Daniel Novoselević	Modern Manufacturing Procedures II	20	10	10	O
PS403	Prof.dr.sc. Branko Grizelj	New Processes and Methods in Metal Forming	25	5	10	I
PS404	Prof.dr.sc. Ivan Budić Doc.dr.sc. Daniel Novoselević	Special Casting Procedures	30	0	10	I
PS405	Prof.dr.sc. Stjepan Aračić	Corrosion Damages of Structural Steel	30	0	10	I
PS406	Prof.dr.sc. Pero Raos Prof.dr.sc. Ivan Samardžić	Modern Joining Processes	20	10	10	I
PS407	Prof.dr.sc. Antun Stoić	High Efficiency Processes of Metal Cutting	30	0	10	I
		Selected Subjects from other Modules			10	I

Module: Production management

Module leader: Prof.dr. Katica Šimunović

2. semestar

Code	Head lecturer	Subject	Hours		ECTS	Status
			P	E		
PS501	Prof.dr.sc. Goran Šimunović Prof.dr.sc. Tomislav Šarić Prof.dr.sc. Katica Šimunović	Information system of production enterprises	5	25	10	O
PS502	Prof.dr.sc. Roberto Lujčić Prof.dr.sc. Tomislav Šarić Doc.dr.sc. Tomislav Galeta	Managerial Methods and Strategies	15	15	10	O
PS503	Prof.dr.sc. Maja Lamza-Maronić	Economics for managers	5	25	10	I
PS504	Prof.dr.sc. Roberto Lujčić Prof.dr.sc. Goran Šimunović	Preparation and Production Management	5	25	10	I
PS505	Prof.dr.sc. Goran Šimunović Prof.dr.sc. Tomislav Šarić Prof.dr.sc. Roberto Lujčić Doc.dr.sc. Tomislav Galeta	Information Technologies in Production	5	25	10	I
PS506	Prof.dr.sc. Tomislav Šarić Doc.dr.sc. Tomislav Galeta	Computer Support in Product Preparation	5	25	10	I
		Selected Subjects from other Modules			10	I

3. semester – for all modules

Code	Head lecturer	Subject	Sati		ECTS	Status
			P	E		
PS601	Potential supervisors	Final Specialist Work	0	0	30	O

