

Type of studies:	Second-cycle studies (full-time engineering studies)																															
Program:	Management and Production Engineering																															
Specialization:	Common part for all specialties (A)																															
Course ID	Course	UNIT	ECTS	B	NUMBER OF HOURS						Division of hours into semesters																					
					Total	W	Ć	L	S	P	Semester I					ECTS		Semester II					ECTS		Semester III					ECTS		
											W	Ć	L	S	P	O	B	W	Ć	L	S	P	O	B	W	Ć	L	S	P	O	B	
ROZ_ZIP_S2Ms3_W_01	Foreign language	SPNJO	4	2	60	0	0	60	0	0			2			2	1			2			2	1								
ROZ_ZIP_S2Ms3_W_02	Strategic management	ROZ4	3	1	30	15	0	0	0	15	1	E			1	3	1															
ROZ_ZIP_S2Ms3_W_03	Organization of production systems	ROZ4	1	1	15	15	0	0	0	0	1					1	1															
ROZ_ZIP_S2Ms3_W_04	Integrated management system	ROZ3	1	1	15	15	0	0	0	0	1					1	1															
ROZ_ZIP_S2Ms3_W_05	Forecasting and simulation in the enterprise	ROZ1	3	1	30	15	0	15	0	0	1		1			3	1															
ROZ_ZIP_S2Ms3_W_06	Project management	ROZ4	3	1	30	15	0	0	0	15	1				1	3	1															
ROZ_ZIP_S2Ms3_W_07	Innovation management	ROZ4	3	1	30	15	15	0	0	0	1	E	1			3	1															
ROZ_ZIP_S2Ms3_W_08	Business finance management	ROZ1	3	1	30	15	15	0	0	0	1	E	1			3	1															
ROZ_ZIP_S2Ms3_W_09	Quality control systems in production processes	ROZ3	3	1	30	15	15	0	0	0	1	1				3	1															
ROZ_ZIP_S2Ms3_W_10	Managerial accounting	ROZ1	1	1	15	15	0	0	0	0	1					1	1															
ROZ_ZIP_S2Ms3_W_11	Steering and monitoring of production processes	ROZ3	3	2	45	30	0	15	0	0	2		1			3	2															
ROZ_ZIP_S2Ms3_W_12	Material technologies	ROZ3	2	1	30	15	15	0	0	0	1	1				2	1															
ROZ_ZIP_S2Ms3_W_13	Engineering workflow in industrial enterprise	ROZ3	2	1	30	15	0	0	0	15	1				1	2	1															
ROZ_ZIP_S2Ms3_W_14	System analysis in production engineering	ROZ3	2	1	30	15	0	15	0	0								1	E		1			2	1							
ROZ_ZIP_S2Ms3_W_15	Monographic course	ROZ3	2	1	30	30	0	0	0	0																2				2	1	
(A)	Number of hours of common subjects (A)				Σ	36	17	450	240	60	105	0	45	13	4	4	0	3	30	14	1	0	3	0	0	4	2	2	0	0	2	1
	Number of exams from common subjects (A)										3					S	30	1					S	4	0					S	2	
	Number of hours during a week (A)											24							4							2						

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Specialization:	Production and Logistic Systems in Industrial Enterprises																															
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					Total	W	Ć	L	S	P	Semester I					ECTS		Semester II					ECTS		Semester III					ECTS		
											W	Ć	L	S	P	O	B	W	Ć	L	S	P	O	B	W	Ć	L	S	P	O	B	
ROZ_ZIP_S2Ms3_F1_01	Logistics enterprises management	ROZ4	4	2	60	15	0	30	0	15								1	E		2		1	4	2							
ROZ_ZIP_S2Ms3_F3_02	Safety in logistics	ROZ4	2	2	30	15	0	0	0	15								1					1	2	2							
ROZ_ZIP_S2Ms3_F3_03	Technical preparation of production	ROZ4	2	2	75	30	30	15	0	0								2	2	1				2	2							
ROZ_ZIP_S2Ms3_F3_04	Quantitative methods in logistics	ROZ4	2	2	60	30	30	0	0	0								2	2					2	2							
ROZ_ZIP_S2Ms3_F3_05	Waste logistics	ROZ4	2	2	30	30	0	0	0	0								2	2					2	2							
ROZ_ZIP_S2Ms3_F3_06	New product project management	ROZ4	2	2	45	30	0	15	0	0																2		1			2	2
ROZ_ZIP_S2Ms3_F3_07	GIS technologies in logistic processes	ROZ3	2	1	60	15	0	30	0	15																1		2		1	2	1
ROZ_ZIP_S2Ms3_F3_08	Modeling of production and logistics systems	ROZ4	3	2	60	30	15	15	0	0																2	1	1			3	2
ROZ_ZIP_S2Ms3_F3_09	Logistics services	ROZ4	3	2	45	15	30	0	0	0																1	2				3	2
ROZ_ZIP_S2Ms3_F3_10	Automatic identification systems	ROZ3	4	2	60	15	0	30	0	15																1	1			2	4	2
ROZ_ZIP_S2Ms3_F3_11	Industry 4.0 in logistics	ROZ3	2	1	45	15	0	0	0	30																1				2	2	1
ROZ_ZIP_S2Ms3_F3_12	Diploma seminar	ROZ4	20	8	60	0	0	0	60	0											2		10	3					2		10	5
ROZ_ZIP_S2Ms3_F3_13	Diploma practice	Praktyka	6	0	0	0	0	0	0	0														6	0							
(B)	Number of hours of specialty subjects (B)		Σ	54	28	630	240	105	135	60	90	0	0	0	0	0	0	8	4	3	2	2	28	13	8	4	4	2	5	26	15	
	Number of exams from specialny subjects (A)							0					S	0	1					S	28	0					S	26				
	Number of hours of specialmy subjects during a week (A)							0							21						23											
(A+B)	Total number of hours of subjects (A+B)		Σ	90	45	1080	480	165	240	60	135	13	4	4	0	3	30	14	9	4	6	2	2	32	15	10	4	4	2	5	28	16
	Total number of exams (A+B)							3					S	30	2					S	32	0					S	28				
	Total number of hours during a week (A+B)							24							25							25										

LEGEND: type of classes: W - Lecture, Ć - Exsercises, L - Laboratory, S - Seminar, P - Projekt, E - Egzam