

Bachelor of Science in Engineering Management with Concentration in Information Technology
Course Areas, Courses, and Examinations

Sem.			Course Areas	ECTS Credits	Courses	Courses		Sem. Hours
						Status	Type	
EM 1	IT	EM-1.111	Mathematics	6	Mathematics	Required	Lecture	3
EM 1	IT				Mathematics	Required	Tutorial	2
EM 1	IT	EM-1.112	Physics	3	Physics	Required	Lecture	2
EM 1	IT				Physics	Required	Tutorial	1
EM 1	IT	EM-1.113	Computer Science	3	Computer Science	Required	Lecture	2
EM 1	IT				Computer Science	Required	Practicum	1
EM 1	IT	EM-1.114	Electrical Engineering	3	Electrical Engineering	Required	Lecture	2
EM 1	IT				Electrical Engineering	Required	Tutorial	1
EM 1	IT	EM-1.115	Introduction to Automation Engineering	3	Introduction to Automation Engineering	Required	Seminar	2
EM 1	IT				Introduction to Automation Engineering (Special Topics)	Required	Seminar	1
EM 1	IT	EM-1.116	Introduction to Business Admin. and Economics	6	Introduction to Business Admin. and Economics	Required	Lecture	4
EM 1	IT				Introduction to Business Admin. and Economics	Required	Tutorial	2
EM 1	IT	EM-1.117	Scholarship, Academic Writing, Presentations	3	Scholarship, Academic Writing, Presentations	Required	Seminar	2
EM 1	IT	EM-1.118	Design Engineering I	3	Design Engineering I	Required	Tutorial	2
EM 2	IT	EM-1.121	Applied Mathematics	6	Applied Mathematics	Required	Seminar	2
EM 2	IT				Applied Mathematics	Required	Tutorial	1
EM 2	IT				Operations Research	Required	Lecture	1
EM 2	IT				Operations Research	Required	Tutorial	1
EM 2	IT	EM-1.112	Physics	3	Physics	Required	Seminar	2
EM 2	IT				Physics	Required	Practicum	1
EM 2	IT	EM-1.223	Programming I/Software Engineering I	6	Programming I	Required	Seminar	2
EM 2	IT				Programming I	Required	Tutorial	1
EM 2	IT				Software Engineering I	Required	Seminar	1
EM 2	IT				Software Engineering I	Required	Tutorial	1
EM 2	IT	EM-1.114	Electrical Engineering	3	Electrical Engineering	Required	Tutorial	1
EM 2	IT	EM-1.122	Business Administration	6	Production and Investment	Required	Lecture	2
EM 2	IT				Production and Investment	Required	Tutorial	1
EM 2	IT				Marketing	Required	Seminar	2
EM 2	IT				Marketing	Required	Tutorial	1
EM 2	IT	EM-1.123	Accounting	3	Financial Accounting	Required	Lecture	2
EM 2	IT				Financial Accounting	Required	Tutorial	1
EM 2	IT	EM-1.124	Business Law	3	Business Law I	Required	Seminar	3
EM 3	IT	EM-1.131	Statistics	3	Statistics	Required	Lecture	2
EM 3	IT				Statistics	Required	Practicum	1
EM 3	IT	EM-1.232	Electronics	6	Electronics	Required	Lecture	2
EM 3	IT				Electronics	Required	Tutorial	1
EM 3	IT				Electronics	Required	Practicum	2
EM 3	IT	EM-1.233	Programming II/Software Engineering II	3	Programming II	Required	Seminar	2
EM 3	IT				Programming II	Required	Tutorial	1
EM 3	IT			3	Software Engineering II	Required	Seminar	1
EM 3	IT				Software Engineering II	Required	Tutorial	1

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EM 3	IT	EM-1.132	Personnel and Project Management	6	Personnel Management	Required	Seminar	1
EM 3	IT				Personnel Management	Required	Tutorial	2
EM 3	IT				Introduction to Project Management	Required	Lecture	2
EM 3	IT				Introduction to Project Management	Required	Practicum	1
EM 3	IT	EM-1.234	Design Engineering II	3	Design Engineering II	Required	Seminar	2
EM 3	IT				Design Engineering II	Required	Tutorial	1
EM 3	IT	EM-1.123	Accounting	3	Managerial Accounting	Required	Seminar	2
EM 3	IT				Managerial Accounting	Required	Practicum	1
EM 3	IT	EM-1.124	Business Law	3	Business Law II	Required	Seminar	2
EM 4	IT	EM-1.241	Data Bases	6	Data Bases	Required	Seminar	2
EM 4	IT				Data Bases	Required	Tutorial	2
EM 4	IT	EM-1.242	Communications Engineering	6	Communications Engineering	Required	Seminar	2
EM 4	IT				Communications Engineering	Required	Tutorial	3
EM 4	IT	EM-1.243	Programming III/Software Engineering III	6	Programming III	Required	Seminar	2
EM 4	IT				Programming III	Required	Tutorial	1
EM 4	IT				Software Engineering III	Required	Seminar	2
EM 4	IT				Software Engineering III	Required	Tutorial	1
EM 4	IT	EM-1.141	Production Logistics	6	Inventory Management	Required	Lecture	1
EM 4	IT				Inventory Management	Required	Tutorial	1
EM 4	IT				Production Planning and Operations Control	Required	Seminar	2
EM 4	IT				Production Planning and Operations Control	Required	Practicum	1
EM 4	IT	EM-1.244	Information Systems	6	Information Systems	Required	Seminar	3
EM 4	IT				Information Systems	Required	Practicum	2
EM 5	IT	EM-1.061	Supervised Internship and Workshop	30	Supervised Internship and Workshop	Required		
EM 5	IT							
EM 6	IT	EM-1.261	System Integration and IT Security	6	System Integration	Required	Seminar	2
EM 6	IT				System Integration	Required	Practicum	1
EM 6	IT				IT Security	Required	Seminar	2
EM 6	IT				IT Security	Required	Practicum	1
EM 6	IT	EM-1.262	E-Business and IT Law	6	E-Business	Required	Seminar	2
EM 6	IT				IT Law	Required	Seminar	3
EM 6	IT	EM-1.161	Controlling	6	Controlling I	Required	Seminar	2
EM 6	IT				Controlling I	Required	Tutorial	1
EM 6	IT				Controlling II	Required	Seminar	2
EM 6	IT				Business Simulations	Required	Practicum	1
EM 6	IT	EM-1.263	ERP Systems	6	Introduction to ERP Systems	Required	Practicum	2
EM 6	IT				ERP Systems and Business Process Implementation	Required	Practicum	2
EM 6	IT	EM-1.264	International Economic Theory and Policy	3	International Economic Theory and Policy	Required	Seminar	1
EM 6	IT				International Economic Theory and Policy	Required	Practicum	1
EM 6	IT	EM-1.163	Foreign Trade	3	Foreign Trade	Required	Seminar	3
EM 7	IT		Elective Course Area I	6	Elective Course Area I	Required	Practicum	1
EM 7	IT		Elective Course Area II	3	Elective Course Area II	Required	Seminar	2
EM 7	IT		Elective Course Area III	3	Elective Course Area III	Required	Seminar	2
EM 7	IT		Elective Course Area IV	3	Elective Course Area IV	Required	Seminar	2
EM 7	IT	EM-1.071	Undergraduate (Bachelor's) Thesis and Defence	15	Undergraduate (Bachelor's) Thesis and Defence	Required		

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Elective Courses

EM 7	IT	EM-1.801	Elective Course Area I	6	Microelectronics Project	Elective	Practicum	1
EM 7	IT	EM-1.802	Elective Course Area I	6	New Venture Creation	Elective	Practicum	1
EM 7	IT	EM-1.362	Elective Course Areas II-IV	3	Applied Economic Policy	Elective	Seminar	2
EM 7	IT	EM-1.463	Elective Course Areas II-IV	3	International Economic Integration	Elective	Seminar	2
EM 7	IT	EM-1.612	Elective Course Areas II-IV	3	Economic and Fiscal Policy	Elective	Seminar	2
EM 7	IT	EM-1.613	Elective Course Areas II-IV	3	Creative Processes Facilitation	Elective	Seminar	2
EM 7	IT	EM-1.614	Elective Course Areas II-IV	3	Industrial Property Rights and Technology Transfer	Elective	Seminar	3
EM 7	IT	EM-1.803	Elective Course Areas II-IV	3	Mobile Communications	Elective	Seminar	2
EM 7	IT	EM-1.804	Elective Course Areas II-IV	3	Web Design	Elective	Seminar	2
EM 7	IT	EM-1.805	Elective Course Areas II-IV	3	Content Management Systems	Elective	Seminar	2
EM 7	IT	EM-1.810	Elective Course Areas II-IV	3	Current Topics in Internet Applications	Elective	Seminar	2
EM 7	IT	EM-1.811	Elective Course Areas II-IV	3	Current Developments in the Economic Sciences	Elective	Seminar	2
EM 7	IT	EM-1.812	Elective Course Areas II-IV	3	Current Developments in the Engineering Sciences	Elective	Seminar	2
EM 7	IT	EM-1.813	Elective Course Areas II-IV	3	Business Simulations on Product Development and Positioning	Elective	Seminar	2
EM 7	IT	EM-1.814	Elective Course Areas II-IV	3	IT Specialists Report on the Solution of Current Questions	Elective	Seminar	2
EM 7	IT	EM-1.815	Elective Course Areas II-IV	3	Practical Circuit Engineering	Elective	Seminar	2
EM 7	IT	EM-1.728	Elective Course Areas II-IV	3	Software Practicum	Elective	Seminar	4
EM 7	IT	EM-1.816	Elective Course Areas II-IV	3	Business Analysis and Predictions Using Data Mining	Elective	Seminar	2
EM 7	IT	WI-1.730	Elective Course Areas II-IV	3	Technical English (English I)	Elective	Seminar	
EM 7	IT	WI-1.731	Elective Course Areas II-IV	3	Business English (English 2)	Elective	Seminar	
EM 7	IT	WI-1.735	Elective Course Areas II-IV	3	Spanish 1	Elective	Seminar	
EM 7	IT	WI-1.736	Elective Course Areas II-IV	3	Spanish 2	Elective	Seminar	

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Evaluation	Type
Examination	120 minutes
Exam Substitute	Test
Examination	120 minutes
Examination	90 minutes
Examination	90 minutes
Examination	120 minutes
Exam Substitute	Test
Exam Substitute	Test

Examination*	
Examination*	120 minutes
Exam Substitute	Test
Exam Substitute*	Oral Report
Exam Substitute*	Oral Report
Examination	90 minutes
Exam Substitute	Test
Exam Substitute	Test
Exam Substitute	Tests

Examination	90 minutes
Examination	90 minutes
Exam Substitute*	Oral Report
Exam Substitute*	Test

Exam Substitute	Test
Exam Substitute	Test
Exam Substitute	Term Paper
Exam Substitute	Specified by Instructor
Examination	120 minutes

Exam Substitute	Test
Examination	120 minutes
Exam Substitute*	Oral Report
Exam Substitute*	Oral Report
Examination	120 minutes
Exam Substitute	Test
	Written and Oral Internship Report

Exam Substitute	Oral Report
Examination	90 minutes
Exam Substitute	Oral Report
Examination	60 minutes
Exam Substitute	Specified by Instructor
Exam Substitute	Test
Exam Substitute	Team Presentation
Exam Substitute	Test
Exam Substitute	Test
Exam Substitute	Term Paper, Presentation
Exam Substitute	Test

Exam Substitute	Term Paper of 150 Hours Preparation
Exam Substitute	
Exam Substitute	
Exam Substitute	

Exam Substitute	Term Paper of 150 Hours Preparation
Exam Substitute	Term Paper of 150 Hours Preparation
Exam Substitute	Simulations and Group Presentations
Exam Substitute	Term Paper, Presentation
Exam Substitute	Test, Term Paper, Presentation
Exam Substitute	Term Paper, Oral Report
Exam Substitute	Term Paper, Oral Report
Exam Substitute	Test
Exam Substitute	Test
Exam Substitute	Test
Exam Substitute	Test
Exam Substitute	
Exam Substitute	
Exam Substitute	Presentation
Exam Substitute	Test
Exam Substitute	Test
Exam Substitute	Test
Exam Substitute	Specified by Instructor
Exam Substitute	
Exam Substitute	
Exam Substitute	
Exam Substitute	