Industrial Engineering and Management (IEM) BSc

Matriculation Fall 2021

Program-Specific Modules

	Type	Assessment	Period	Status[1]	Sem.	CP
Year 1 - CHOICE						**45**
Take the mandatory CHOICE modules listed below, this is a requirement for IEM program.						
Unit: General Industrial Engineering and Logistics (Default minor)						15
CH-241 Module: General Logistics				m	1	7.5
CH-241-A Introduction to Logistics & SCM	Lecture	Written examination and	Final exam period			5
CH-241-B Logistics Lab	Lab	project	During the semester			2.5
CH-240 Module: General Industrial Engineering				m	2	7.5
CH-240-A Industrial Engineering	Lecture	Written examination and	Examination period			5
CH-240-B Basics of Manufacturing Technology	Lab	project	During the semester			2.5
CH-300 Module: Introduction to International Business				m	1	7.5
CH-300-A Introduction to International Business Lecture	Lecture	Written examination and	Examination period			5
CH-300-B Introduction to International Business Seminar	Seminar	case studies	During the semester			2.5
CH-301 Module: Introduction to Finance and Accounting				m	2	7.5
CH-301-A Introduction to Finance	Lecture					2.5
CH-301-B Introduction to Accounting	Lecture	Written examination	Final exam period			2.5
CH-301-C Finance and Accounting Tutorial	Tutorial					2.5
Unit: CHOICE (own selection)					1/2	15
Take two further CHOICE modules from those offered for all other study programs.[2]						
Year 2 - CORE						**45**
Take all CORE modules listed below.						
Unit: Advanced Industrial Engineering (Default minor)						15
CO-582 Module: Process Modelling & Simulation				m	3	5
CO-582-A Process Modelling & Simulation	Lab	Project	During the semester			5
CO-581 Module: Product & Production System Design				m	3+4	5
CO-581-A Fundamentals of Engineering Design	Lab	Written examination and	Examination period	3		2.5
CO-581-B Advanced Production System Design	Lecture	project	During the semester	4		2.5
CO-580 Module: Production Planning & Control				m	4	5
CO-580-A Production Planning & Control	Lecture	Written examination	Examination period			5
Unit: Advanced Industrial Management						15
CO-583 Module: Operations Research				m	3	5
CO-583-A Operations Research	Lecture	Written examination	Examination period			5
CO-584 Module: Lean Supply Management				m	3+4	5
CO-584-A Advanced Lean Methods	Seminar	Written examination and	Examination period	3		2.5
CO-584-B Purchasing & Supply Management	Seminar	term paper	During the semester	4		2.5
CO-586 Module: Data Management and Analytics in Industry 4.0				m	4	5
CO-586-A Data Management and Analytics in Industry 4.0	Lecture	Project	During the semester			5
Unit: Management						15
CO-600 Module: Applied Project Management				m	3	7.5
CO-600-A Applied Project Management Lecture	Lecture	Presentation	During the semester			5
CO-600-B Applied Project Management Seminar	Seminar					2.5
CO-601 Module: International Strategic Management				m	4	7.5
CO-601-A International Strategic Management Lecture	Lecture	Term paper	During the semester			5
CO-601-B International Strategic Management Seminar	Seminar					2.5
Year 3 - CAREER						**60**
Module Code — Module: Guided Industrial Project / Mandatory Internship				m	5	30
CA-INT-901 Guided Industrial Project / Mandatory Internship	Internship	Report and poster presentation (Business plan)	During the 5th semester			
CA-IEM-800 Module: Thesis / Seminar IEM				m	6	15
CA-IEM-800-T Thesis IEM	Thesis	Thesis	15th of May			12
CA-IEM-800-S Seminar IEM	Seminar	Poster presentation	During the semester			3
Unit: Specialization IEM				m	6	15
Take a total of 15 CP of specialization modules						
CA-S-IEM-801 Industry 4.0 and Blockchain Technologies	Lecture/Seminar	Project	During the semester	me		5
CA-S-IEM-802 Advanced Product Design	Lab	Project	During the semester	me		5
CA-S-IEM-803 Supply Chain Design	Seminar	Project	During the semester	me		2.5
CA-S-IEM-804 Integrated Decision Making in Supply Chain Management	Seminar	Project	During the semester	me		2.5
CA-S-IEM-805 Distribution & E-Commerce	Lecture	Project	During the semester	me		2.5
CA-S-IEM-806 Law of Transportation, Forwarding and Logistics	Lecture	Written examination	Examination period	me		2.5
Total CP						**180**

Jacobs Track Modules (General Education)

	Type	Assessment	Period	Status[1]	Sem.	CP
Year 1						**15**
Unit: Methods / Skills						10
Take one of the two mandatory elective methods modules listed below.						
JTMS-MAT-08 Module: Applied Calculus				m	1	5
JTMS-08 Applied Calculus	Lecture	Written examination	Examination period			
JTMS-MAT-11 Module: Finite Mathematics				m	2	5
JTMS-11 Finite Mathematics	Lecture	Written examination	Examination period			
Unit: Language						5
German is the default language. Native German speakers take modules in another offered language.						
JTLA-xxx Module: Language 1				m	1	2.5
JTLA-xxx Language 1	Seminar	Various	Various	me		
JTLA-xxx Module: Language 2				m	2	2.5
JTLA-xxx Language 2	Seminar	Various	Various	me		
Year 2						**15**
Unit: Methods / Skills						10
JTMS-SKI-14 Module: Programming in Python				m	3	5
JTMS-14 Programming in Python	Lecture	Written examination	Examination period			
JTMS-MET-03 Module: Applied Statistics with R				m	4	5
JTMS-03 Applied Statistics with R	Lecture/Lab	Written examination	Examination period			
Unit: Language						5
German is the default language. Native German speakers take modules in another offered language.						
JTLA-xxx Module: Language 3				m	3	2,5
JTLA-xxx Language 3	Seminar	Various	Various	me		
JTLA-xxx Module: Language 4				m	4	2,5
JTLA-xxx Langauge 4	Seminar	Various	Various	me		

[1] Status (m = mandatory, me = mandatory elective)

[2] For a full listing of all CHOICE / CORE / CAREER / Jacobs Track modules please consult the CampusNet online catalogue and/or the study program handbooks