Appendix 1a - Mandatory Module and Examination Plan for World Track

Industrial Engineering and Management – World Track

Matriculation Fall 2018

	Program-Specific Modules	Type	Status[1]	Semester	Credits		Jacobs Track Modules (General Education)	Type	Status[1]	Semester	Credits
Year 1 - CHOICE					**45**						**20**
Take the mandatory CHOICE module listed below, this is a requirement for the IEM program.											
CH11-GenIEM	**Module: General Industrial Engineering and Managment**		**m**		**15**		**JT-ME-MethodsMath**	**Module: Methods / Mathematics**	**m**		**7,5**
CH11-050103	Industrial Engineering	Lecture	m	1	5		JT-ME-120106	Applied Calculus I	Lecture	m	1	2,5
CH11-050111	Industrial Engineering Lab	Lab	m	1	2,5		JT-ME-120107	Applied Calculus II	Lecture	m	1	2,5
CH11-050262	Basics of Manufacturing Technology (Intersession)	Seminar	m	1	2,5		JT-ME-990113	Data Analysis and Statistical Inference with R	Lecture	m	2	2,5
CH11-050101	Introduction to Logistics & SCM	Lecture	m	2	5		**JT-SK-Skills**	**Module: Skills**		**m**		**5**
	Module: CHOICE (own selection)		**e**	**1/2**	**30**		JT-SK-350111	Programming in Python	Lecture	m	1	2,5
Students take two further CHOICE modules from those offered for all other study programs. [2]							JT-SK-350112	Advanced Programming in Python	Lecture	m	2	2,5
							JT-TA-TriArea	**Module: Triangle Area**		**m**		**2,5**
								Take one course from the triangle (BUSINESS, TECHNOLOGY & INNOVATION, SOCIETAL CONTEXT) area. Each counts 2,5 ECTS [3]		me	1/2	2,5
							JT-LA-Language	**Module: Language**		**m**		**5**
								Take two German courses (2,5 ECTS each). Native German speakers take courses in another offered language	Seminar	me	1/2	5
							CA01-CarAdv	**Career Advising[4]**		**m**		
Year 2 - CORE					**45**						**20**
Take the <u>two</u> mandatory modules listed below and one CORE module from a different study program. [2]											
CO30-ProductEng	**Module: Production & Engineering**		**me**		**15**		**JT-ME-MethodsMath**	**Module: Methods / Mathematics**		**m**		**7,5**
CO30-050232	Production Planning & Control	Lecture	m	3	5		JT-ME-990203	Statistical Modeling with R	Lecture	m	3	2,5
CO30-050131	Fundamentals of Engineering Design	Lab	m	3	2,5		JT-ME-120201	Elements of Probability	Lecture	m	3	2,5
CO30-052102	Production & Technology Management	Lecture	m	4	5		JT-ME-120213	Matrix Algebra	Lecture	m	4	2,5
CO30-050222	Advanced Production System Design	Seminar	m	4	2,5							
CO29-ProcessEng	**Module: Process Engineering**		**me**		**15**		**JT-TA-TriArea**	**Module: Triangle Area**		**m**		**7,5**
CO29-080202	Operations Research	Lecture	m	3	5			Take three courses from the triangle (BUSINESS, TECHNOLOGY & INNOVATION, SOCIETAL CONTEXT) area. Each counts 2,5 ECTS [3]		me	3/4	7,5
CO29-050332	Advanced Lean Methods	Seminar	m	3	2,5							
CO29-050212	Process Modelling & Simulation	Lab	m	4	5							
CO29-050252	Supply Chain Management	Seminar	m	4	2,5							
	Module: CORE (own selection)						**JT-LA-Language**	**Module: Language**		**m**		**5**
Students take one further CORE module from those offered for all other study programs. [2, 5]								Take two German courses (2,5 ECTS each). Native German speakers take courses in another offered language	Seminar	me	3/4	5
							CA01-CarAdv	**Career Advising[4]**		**m**		
Year 3 - CAREER					**45**						**5**
CA02 / CA03	**Module: Internship / Study Abroad**		**m**	**5**	**20**		**JT-TA-TriArea**	**Module: Triangle Area**		**m**		**5**
								Take two courses from the triangle (BUSINESS, TECHNOLOGY & INNOVATION, SOCIETAL CONTEXT) area. Each counts 2,5 ECTS [3]		me	6	5
CA17-IEM	**Module: Project/Thesis IEM**		**m**		**15**							
CA17-050303	Project IEM		m	6	5		**CA01-CarAdv**	**Career Advising[4]**		**m**		
CA17-050304	Thesis IEM		m	6	10							
CA-S-IEM	**Module: Specialization Area IEM**		**m**		**10**							
	Take 10 ECTS of specialization courses [2]		me	5/6	10							
Total ECTS												**180**

[1] Status (m = mandatory, e = elective, 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 module handbook (on our website).

[3] You are required to take six Triangle Area courses in total. Select two from each of the three triangle areas (BUSINESS, TECHNOLOGY & INNOVATION, SOCIETAL CONTEXT).

[4] Mandatory component of the Jacobs University's Counseling and Advising Scheme. [5] Some CORE modules have CHOICE modules as prerequisites. The selection of modules in the 1st year therefore determines your accessible choices of CORE modules.

Appendix 1b - Mandatory Module and Examination Plan for Campus Track

JACOBS UNIVERSITY

Industrial Engineering and Management – Campus Track

Matriculation Fall 2018

	Program-Specific Modules	Type	Status[1]	Semester	Credits		Jacobs Track Modules (General Education)	Type	Status[1]	Semester	Credits
Year 1 - CHOICE					**45**						**20**
Take the mandatory CHOICE module listed below, this is a requirement for the IEM program.											
CH11-GenIEM	**Module: General Industrial Engineering and Managment**		**m**		**15**		**JT-ME-MethodsMath**	**Module: Methods / Mathematics**	**m**		**7,5**
CH11-050103	Industrial Engineering	Lecture	m	1	5		JT-ME-120106	Applied Calculus I	Lecture	m	1	2,5
CH11-050111	Industrial Engineering Lab	Lab	m	1	2,5		JT-ME-120107	Applied Calculus II	Lecture	m	1	2,5
CH11-050262	Basics of Manufacturing Technology (Intersession)	Seminar	m	1	2,5		JT-ME-990113	Data Analysis and Statistical Inference with R	Lecture	m	2	2,5
CH11-050101	Introduction to Logistics & SCM	Lecture	m	2	5		**JT-SK-Skills**	**Module: Skills**		**m**		**5**
	Module: CHOICE (own selection)		**e**	**1/2**	**30**		JT-SK-350111	Programming in Python	Lecture	m	1	2,5
Students take two further CHOICE modules from those offered for all other study programs. [2]							JT-SK-350112	Advanced Programming in Python	Lecture	m	2	2,5
							JT-TA-TriArea	**Module: Triangle Area**		**m**		**2,5**
								Take one course from the triangle (BUSINESS, TECHNOLOGY & INNOVATION, SOCIETAL CONTEXT) area. Each counts 2,5 ECTS [3]		me	1/2	2,5
							JT-LA-Language	**Module: Language**		**m**		**5**
								Take two German courses (2,5 ECTS each). Native German speakers take courses in another offered language	Seminar	me	1/2	5
							CA01-CarAdv	**Career Advising[4]**		**m**		
Year 2 - CORE					**45**						**20**
Take the <u>two</u> mandatory modules listed below and one CORE module from a different study program. [2]											
CO30-ProductEng	**Module: Production & Engineering**		**me**		**15**		**JT-ME-MethodsMath**	**Module: Methods / Mathematics**		**m**		**7,5**
CO30-050232	Production Planning & Control	Lecture	m	3	5		JT-ME-990203	Statistical Modeling with R	Lecture	m	3	2,5
CO30-050131	Fundamentals of Engineering Design	Lab	m	3	2,5		JT-ME-120201	Elements of Probability	Lecture	m	3	2,5
CO30-052102	Production & Technology Management	Lecture	m	4	5		JT-ME-120213	Matrix Algebra	Lecture	m	4	2,5
CO30-050222	Advanced Production System Design	Seminar	m	4	2,5							
CO29-ProcessEng	**Module: Process Engineering**		**me**		**15**		**JT-TA-TriArea**	**Module: Triangle Area**		**m**		**7,5**
CO29-080202	Operations Research	Lecture	m	3	5			Take three courses from the triangle (BUSINESS, TECHNOLOGY & INNOVATION, SOCIETAL CONTEXT) area. Each counts 2,5 ECTS [3]		me	3/4	7,5
CO29-050332	Advanced Lean Methods	Seminar	m	3	2,5							
CO29-050212	Process Modelling & Simulation	Lab	m	4	5							
CO29-050252	Supply Chain Management	Seminar	m	4	2,5							
	Module: CORE (own selection)						**JT-LA-Language**	**Module: Language**		**m**		**5**
Students take one further CORE module from those offered for all other study programs. [2, 5]								Take two German courses (2,5 ECTS each). Native German speakers take courses in another offered language	Seminar	me	3/4	5
							CA01-CarAdv	Career Advising[4]		m		
Year 3 - CAREER					**45**							**5**
COXX	**Module: Additional (4th) CORE module**		**m**	**5/6**	**15**		**JT-TA-TriArea**	**Module: Triangle Area**		**m**		**5**
								Take two courses from the triangle (BUSINESS, TECHNOLOGY & INNOVATION, SOCIETAL CONTEXT) area. Each counts 2,5 ECTS [3]		me	5	5
CA17-IEM	**Module: Project/Thesis IEM**		**m**		**15**							
CA17-050303	Project IEM		m	6	5		**CA01-CarAdv**	**Career Advising[4]**		**m**		
CA17-050304	Thesis IEM		m	6	10							
CA-S-IEM	**Module: Specialization Area IEM**		**m**		**15**							
	Take 15 ECTS of specialization courses [2]		me	5/6	15							
Total ECTS												**180**

[1] Status (m = mandatory, e = elective, 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 module handbook (on our website).

[3] You are required to take six Triangle Area courses in total. Select two from each of the three triangle areas (BUSINESS, TECHNOLOGY & INNOVATION, SOCIETAL CONTEXT).

[4] Mandatory component of the Jacobs University's Counseling and Advising Scheme. [5] Some CORE modules have CHOICE modules as prerequisites. The selection of modules in the 1st year therefore determines your accessible choices of CORE modules.