

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

| Industrial Engineering and Management – World Track | | | | | | | | | | | | | |
|--|--|---------------------|----------|---|--|--|--|----------|----------|--------------------|------------|-----|---|
| Matriculation Fall 2017 | | | | | | | | | | | | | |
| Program-Specific Modules | | | | | Jacobs Track Modules (General Education) | | | | | | | | |
| | Type | Status ¹ | Semester | Credits | | Type | Status ¹ | Semester | Credits | | | | |
| Year 1 - CHOICE | | | | | 45 | | | | | 20 | | | |
| <i>Take the mandatory CHOICE module listed below, this is a requirement for the IEM program.</i> | | | | | | | | | | | | | |
| CH11-GenIEM | Module: General Industrial Engineering and Management | | | m | | | | | | 15 | | | |
| CH11-050103 | Industrial Engineering | Lecture | m | 1 | 5 | JT-ME-MethodsMath | Module: Methods / Mathematics | | | m | 7,5 | | |
| CH11-050111 | Industrial Engineering Lab | Lab | m | 1 | 2,5 | JT-ME-120106 | Applied Calculus I | Lecture | m | 1 | 2,5 | | |
| CH11-050262 | Basics of Manufacturing Technology (Intersession) | Seminar | m | 1 | 2,5 | JT-ME-120107 | Applied Calculus II | Lecture | m | 1 | 2,5 | | |
| CH11-050101 | Introduction to Logistics & SCM | Lecture | m | 2 | 5 | JT-ME-990113 | Data Analysis and Statistical Inference with R | Lecture | m | 2 | 2,5 | | |
| | | | | Module: CHOICE (own selection) | e | 1/2 | | | | 30 | | | |
| <i>Students take two further CHOICE modules from those offered for all other study programs. ²</i> | | | | | | | | | | | | | |
| Year 2 - CORE | | | | | 45 | | | | | 20 | | | |
| <i>Take the <u>two</u> mandatory modules listed below and one CORE module from a different study program. ²</i> | | | | | | | | | | | | | |
| CO30-ProductEng | Module: Production & Engineering | | | me | | | | | | 15 | | | |
| CO30-050232 | Production Planning & Control | Lecture | m | 3 | 5 | JT-ME-MethodsMath | Module: Methods / Mathematics | | | m | 7,5 | | |
| CO30-050131 | Fundamentals of Engineering Design | Lab | m | 3 | 2,5 | JT-ME-990203 | Statistical Modeling with R | Lecture | m | 3 | 2,5 | | |
| CO30-052102 | Production & Technology Management | Lecture | m | 4 | 5 | JT-ME-120201 | Elements of Probability | Lecture | m | 3 | 2,5 | | |
| CO30-050222 | Advanced Production System Design | Seminar | m | 4 | 2,5 | JT-ME-120213 | Matrix Algebra | Lecture | m | 4 | 2,5 | | |
| CO29-ProcessEng | Module: Process Engineering | | | me | | | | | | 15 | | | |
| CO29-080202 | Operations Research | Lecture | m | 3 | 5 | JT-TA-TriArea | Module: Triangle Area | | | m | 7,5 | | |
| CO29-050332 | Advanced Lean Methods | Seminar | m | 3 | 2,5 | Take three courses from the triangle (BUSINESS, TECHNOLOGY & INNOVATION, SOCIETAL CONTEXT) area. Each counts 2,5 ECTS ³ | | | | | | | |
| CO29-050212 | Process Modelling & Simulation | Lab | m | 4 | 5 | | | | | | | | |
| CO29-050252 | Supply Chain Management | Seminar | m | 4 | 2,5 | JT-LA-Language | Module: Language | | | m | 5 | | |
| | | | | Module: CORE (own selection) | | | | | | | | | |
| | | | | | Take two German courses (2,5 ECTS each). Native German speakers take courses in another offered language | | | | | Seminar | me | 3/4 | 5 |
| | | | | | | | | | | CA01-CarAdv | | | |
| Year 3 - CAREER | | | | | 45 | | | | | 5 | | | |
| CA02 / CA03 | Module: Internship / Study Abroad | | | m | 5 | | | | | | 20 | | |
| CA17-IEM | Module: Project/Thesis IEM | | | m | | | | | | 15 | | | |
| CA17-050303 | Project IEM | m | 6 | 5 | JT-TA-TriArea | Module: Triangle Area | | | m | 5 | | | |
| CA17-050304 | Thesis IEM | m | 6 | 10 | Take two courses from the triangle (BUSINESS, TECHNOLOGY & INNOVATION, SOCIETAL CONTEXT) area. Each counts 2,5 ECTS ³ | | | | | | | | |
| CA-S-IEM | Module: Specialization Area IEM | | | m | | | | | | | | | |
| | | | | Take four specialization courses (2,5 ECTS each) 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.

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

| Industrial Engineering and Management – Campus Track | | | | | | | | | | | | |
|---|--|---------------------|----------|---------------------------------------|--|--|--|----------|----------|--------------------|--|---|
| Matriculation Fall 2017 | | | | | | | | | | | | |
| Program-Specific Modules | | | | | Jacobs Track Modules (General Education) | | | | | | | |
| | Type | Status ¹ | Semester | Credits | | 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 Management | | | m | | | | | | 15 | | |
| CH11-050103 | Industrial Engineering | Lecture | m | 1 | 5 | JT-ME-MethodsMath | Module: Methods / Mathematics | | | m | 7,5 | |
| CH11-050111 | Industrial Engineering Lab | Lab | m | 1 | 2,5 | JT-ME-120106 | Applied Calculus I | Lecture | m | 1 | 2,5 | |
| CH11-050262 | Basics of Manufacturing Technology (Intersession) | Seminar | m | 1 | 2,5 | JT-ME-120107 | Applied Calculus II | Lecture | m | 1 | 2,5 | |
| CH11-050101 | Introduction to Logistics & SCM | Lecture | m | 2 | 5 | JT-ME-990113 | Data Analysis and Statistical Inference with R | Lecture | m | 2 | 2,5 | |
| | | | | Module: CHOICE (own selection) | e | 1/2 | | | | 30 | | |
| Students take two further CHOICE modules from those offered for all other study programs. ² | | | | | | | | | | | | |
| 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 | | |
| CO30-050232 | Production Planning & Control | Lecture | m | 3 | 5 | JT-ME-MethodsMath | Module: Methods / Mathematics | | | m | 7,5 | |
| CO30-050131 | Fundamentals of Engineering Design | Lab | m | 3 | 2,5 | JT-ME-990203 | Statistical Modeling with R | Lecture | m | 3 | 2,5 | |
| CO30-052102 | Production & Technology Management | Lecture | m | 4 | 5 | JT-ME-120201 | Elements of Probability | Lecture | m | 3 | 2,5 | |
| CO30-050222 | Advanced Production System Design | Seminar | m | 4 | 2,5 | JT-ME-120213 | Matrix Algebra | Lecture | m | 4 | 2,5 | |
| CO29-ProcessEng | Module: Process Engineering | | | me | | | | | | 15 | | |
| CO29-080202 | Operations Research | Lecture | m | 3 | 5 | JT-TA-TriArea | Module: Triangle Area | | | m | 7,5 | |
| CO29-050332 | Advanced Lean Methods | Seminar | m | 3 | 2,5 | Take three courses from the triangle (BUSINESS, TECHNOLOGY & INNOVATION, SOCIETAL CONTEXT) area. Each counts 2,5 ECTS ³ | | | | | | |
| CO29-050212 | Process Modelling & Simulation | Lab | m | 4 | 5 | | | | | | | |
| CO29-050252 | Supply Chain Management | Seminar | m | 4 | 2,5 | JT-LA-Language | Module: Language | | | m | 5 | |
| | | | | Module: CORE (own selection) | | | | | | | | |
| | | | | | Take two German courses (2,5 ECTS each). Native German speakers take courses in another offered language | | | | | me | 3/4 | 5 |
| | | | | | | | | | | CA01-CarAdv | Module: Career Advising⁴ | |
| Year 3 - CAREER | | | | | 45 | | | | | 5 | | |
| COXX | Module: Additional (4th) CORE module | | | m | 5/6 | | | | | | 15 | |
| CA17-IEM | Module: Project/Thesis IEM | | | m | | | | | | 15 | | |
| CA17-050303 | Project IEM | m | 5 | 5 | JT-TA-TriArea | Module: Triangle Area | | | m | 5 | | |
| CA17-050304 | Thesis IEM | m | 6 | 10 | Take two courses from the triangle (BUSINESS, TECHNOLOGY & INNOVATION, SOCIETAL CONTEXT) area. Each counts 2,5 ECTS ³ | | | | | | | |
| CA-S-IEM | Module: Specialization Area IEM | | | m | | | | | | | | |
| | | | | 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.