CURRICULUM B.Eng. INDUSTRIAL ENGINEERING AND MANAGEMENT

myStudies

| Semester | Presence timeframe | Module | Course Code | Course | ECTS | Type of Exam | |
|-------------------|-----------------------|-------------------------------------------|-----------------|-------------------------------------------|--------|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Semester | Oct/Nov/Dec | Scientific and technical fundamentals | DLBINGNAG01_E | Scientific and technical fundamentals | 5 | Exam | |
| | Oct/Nov/Dec | Introduction to Robotics | DLBROIR01_E | Introduction to Robotics | 5 | Exam/Written Assessment: Written Assignment | UNIVERSITY OF APPLIED SCIENCES |
| | Oct/Nov/Dec | Management Accounting | DLBMAE01 | Management Accounting | 5 | Exam/Written Assessment: Written Assignment | |
| | Jan/Feb/Mar | Technical Drawing | DLBROTD01_E | Technical Drawing | 5 | Exam | \checkmark |
| | Jan/Feb/Mar | Collaborative Work | DLBCSCW01 | Collaborative Work | 5 | Oral Assignment | Here you can see a suggestion for the order of the modules that you can study one after the other in presence. The IU International University of Applied Sciences offers you the flexibility to study on Campus for one semester or more and switch to online or the other way around. |
| | Jan/Feb/Mar | International Marketing | DLBDSEIMB01 | International Marketing | 5 | Exam | |
| 2. Semester | Apr/May/Jun | Mathematics II | DLBCSM201 | Mathematics II | 5 | Exam | |
| | Apr/May/Jun | Business 101 | DLBBAB01_E | Business 101 | 5 | Exam/Written Assessment: Written Assignment | |
| | Apr/May/Jun | Managerial Economics | DLBBWME01_E | Managerial Economics | 5 | Exam | |
| | Jun/Jul/Aug | Introduction to Academic Work | DLBCSIAW01 | Introduction to Academic Work | 5 | Workbook (passed / not passed) | |
| | Jun/Jul/Aug | Introduction to the Internet of Things | DLBINGEIT01_E | Introduction to the Internet of Things | 5 | Exam | V |
| | Jun/Jul/Aug | Production Engineering | DLBDSEAR01 | Production Engineering | 5 | Exam | |
| | Oct/Nov/Dec | Entrepreneurship and Innovation | DLBBAEI01_E | Entrepreneurship and Innovation | 5 | Written Assignment | Each semester consists of two blocks, so that the examination phases are |
| 3. Semester | Oct/Nov/Dec | Supply Chain Management I | DLBDSESCM01 | Supply Chain Management I | 5 | Exam | better distributed over the year. In each block, there are 9 weeks of attendance to deepen the content in direct exchange with fellow students and lecturers. Each block concludes with a two-week examination phase. |
| | Oct/Nov/Dec | Intercultural and Ethical Decision-Making | DLBCSIDM01 | Intercultural and Ethical Decision-Making | 5 | Case Study | |
| | Jan/Feb/Mar | Electrical Engineering | DLBINGET01-01_E | Electrical Engineering | 5 | Exam | |
| | Jan/Feb/Mar | Project: Design Thinking | DLBINGDT01_E | Project: Design Thinking | 5 | Project Report | |
| | Jan/Feb/Mar | Sensor Technology | DLBROST01_E | Sensor Technology | 5 | Exam | |
| 4. Semester | Apr/May/Jun | Mechatronic Systems | DLBROMSY01_E | Mechatronic Systems | 5 | Exam | $\overline{\mathbf{A}}$ |
| | Apr/May/Jun | Automation Technology | DLBROEIRA02_E | Automation Technology | 5 | Exam | |
| | Apr/May/Jun | Data Analytics and Big Data | DLBINGDABD01_E | Data Analytics and Big Data | 5 | Case Study | Attention: Attendance times may vary slightly depending on public holidays and the federal state holidays the campus is located in. |
| | Jun/Jul/Aug | Corporate Finance and Investment | DLBCFIE01 | Corporate Finance and Investment | 5 | Written Assignment | |
| | Jun/Jul/Aug | Principles of Management | DLBBAPM01_E | Principles of Management | 5 | Case Study | |
| | Jun/Jul/Aug | Product Development in Industry 4.0 | DLBINGPE01_E | Product Development in Industry 4.0 | 5 | Exam | |
| 5. Semester | Oct/Nov/Dec | Digital Business Models | DLBLODB01_E | Digital Business Models | 5 | Exam | |
| | Oct/Nov/Dec | Agile Project Management | DLBCSAPM01 | Agile Project Management | 5 | Project Report | \checkmark |
| | Oct/Nov/Dec | Project: Smart Product Solutions | DLBIEPSPS01 | Project: Smart Product Solutions | 5 | Oral Project Report | |
| | Jan/Feb/Mar | Seminar: Human-Robot Interaction | DLBROSHRI01_E | Seminar: Human-Robot Interaction | 5 | Research Essay | * Electives: Choose one module from the Elective A , one module from the |
| | online | ELECTIVE A* | | e.g. Applied Robotics | 10 | | Elective B and one module from the Elective C. Every elective module can |
| 6. Semester | online | ELECTIVE B* | | e.g. Project: Hackathon | 10 | | only be chosen once. |
| | online | ELECTIVE C* | | e.g. Applied Sales | 10 | | Note: Except for the "Practice Project: Industrial Engineering 4.0", the Electives will only be held in distance learning (online). |
| | online | Bachelor Thesis | | Bachelor Thesis Thesis Defense | 9 1 | Bachelor Thesis Presentation: Colloquium | |
| Total 180 ECTS | | | | | | | |

| Elective A | Elective B | Elective C |
|------------------------------------|--------------------------------------------------------------------------------------------|------------------------------------|
| Applied Robotics | Practice Project: Industrial Engineering 4.0 (NOTE: offered on campus only in Jan/Feb/Mar) | Applied Robotics |
| Applied Sales | Project: Hackathon | Applied Sales |
| Autonomous Driving | | Autonomous Driving |
| Control Engineering | | Control Engineering |
| Introduction to Cognitive Robotics | | Introduction to Cognitive Robotics |
| Microcontroller | | Microcontroller |
| Object-oriented Programing | | Object-oriented Programing |
| Programming of Robotic Systems | | Programming of Robotic Systems |
| Service Robotics | | Service Robotics |
| Smart Devices | | Smart Devices |
| Smart Factory | | Smart Factory |
| Smart Mobility | | Smart Mobility |
| Smart Services | | Smart Services |