

Winter Semester - Lectures in English Language (To be updated)

PLEASE NOTE:

- The lectures are listed according to the faculty/study program that offers them. If you fulfill the prerequisites you can take any course from any faculty/study program.
- If you take courses from different programs and semesters, there might be conflicts in the time table. The time table, however, will only be announced shortly before the lecture period starts.
- The list is provisional and subject to change.
- The **red numbers** refer to our Campus Management System LSF and allow you to find detailed course descriptions, see https://www.lsf.hs-weingarten.de.
- "hrs/week" = hours per week per semester, 1 hour = 45 minutes.
- With the exception of "Technology Management and Optimization", the lectures offered in the frame of Master programs are also open for advanced Bachelor students.

ELECTRICAL ENGINEERING AND INFORMATION TECHNOLOGY (BACHELOR PROGRAM)

Second semester

1396 Mathematics 3: Analysis 2 with exercises (Fechter)

4 hrs/week 5 FCTS credits

4912 Module Physics 2: Electrodynamics (Doderer)

4 hrs/week 5 ECTS credits

Module Metrology 1, 5 ECTS credits

2117 Metrology 1 (Pfeil)

2 hrs/week

2121 Metrology, Practical Training (Pfeil)

2 hrs/week Total 5 ECTS credits

7079 Basic Practical Course - Electric Eng. 2 - Implementation and verification (Pfeil)

2 hrs/week 2 ECTS credits

5 ECTS together with 5891 Basic Practical Electrical Engineering 1: Basic Circuits: Module Electrical Engineering Practical (offered in WS in German and in SS in English)

6048 Object-Oriented Programming (Zeller)

4 hrs/week 5 ECTS credits

1438 Digital Technology, Practical Training (Brümmer)

2 hrs/week 2 ECTS credits

5 ECTS together with 1809 Computer Technology, Practial Training: Module Digital Practical (offered in WS in German and in SS in English)

3947 Computer Technology (?)

4 hrs/week 5 ECTS credits

Fourth semester

1910 Computer-Aided Circuit Design 2: Circuit Design - (Siggelkow)

4 hrs/week 5 ECTS credits

2168 Communication Technology (Fechter)

4 hrs/week 5 ECTS credits

4651 Power Electronics (Farkas)

4 hrs/week 5 ECTS credits

1501 Communication technology Module 1: Internet (Fechter)

4 hrs/week 5 ECTS credits

5298 Automation Module 1: Power Train Engineering (Farkas)

4 hrs/week 5 ECTS credits

=5298 Electric Drives (EM4)

Automation Module 2, Module: 5 ECTS credits

1494 Real Time Programming (Pfeil)

4 hrs/week

1904 Real Time Programming Lab (Weissensbühler)

4 hrs/week 5 ECTS credits

4367 Intro to PSPICE/MATLAB with emphasis on communications circuits (Klotzbücher)

4 hrs/week 5 ECTS credits

E-MOBILITY AND GREEN ENERGY (BACHELOR PROGRAM) - ENGLISH TAUGHT STUDY PROGRAM (AS OF SS 2018)

Second Semester

1396 Mathematics 3: Analysis 2 with Exercises (Fechter)

4 hrs/week 5 ECTS credits

4912 Module Physics 2: Electrodynamics (Doderer)

4 hrs/week 5 ECTS credits

Module Metrology 1 - 5 ECTS credits

2117 Metrology 1(Pfeil)

2 hrs/week

2121 Metrology, Practical Training (Pfeil)

2 hrs/week Total 5 ECTS credits

7079 Basic Practical Course - Electric Eng. 2 - Implementation and verification (Pfeil)

2 hrs/week 2 ECTS credits

5 ECTS together with 5891 Basic Practical Electrical Engineering 1: Basic Circuits: Module Electrical Engineering Practical (offered in WS in German and in SS in English)

Design - Module: 5 ECTS credits

1438 Digital Design, Digital Technology Practical (Brümmer)

2 hrs/week 2 ECTS credits

Module together with xx Machinery Design and xx Analog Design: Electronics Practical offered in SS in English

1421 Materials Science (Reick)

4 hrs/week 5 ECTS credits

7086 Machinery Design (Reick)

4 hrs/week 5 ECTS credits

Fourth Semester

2152 Digital Signal Processing (Siggelkow)

4 hrs/week 5 ECTS credits

1910 Computer-Aided Circuit Design 2: Circuit Design (Siggelkow)

4 hrs/week 5 ECTS credits

4651 Power Electronics (Farkas)

4 hrs/week 5 ECTS credits

5298 Electric Drives (Farkas)

4 hrs/week 5 ECTS credits =5298 Power Train Engineering (EI4)

PHYSICAL ENGINEERING AND INFORMATION TECHNOLOGY (BACHELOR PROGRAM) - ENGLISH TAUGHT STUDY PROGRAM (NEW AS OF SS 2019)

Second Semester

1396 (Analysis 2) Differential Equations and Vector Analysis (Fechter)

4 hrs/week 5 ECTS credits

1418 (Physics 2) Electrodynamics (Klemt)

4 hrs/week 5 ECTS credits

1408 Materials (Kolacyak)

4 hrs/week 5 ECTS credits

Design 1 - Module: 5 ECTS credits

7957 CAD Practical Training (Reick)

2 hrs/week

2166 Technical Mechanics (Pfeffer)

2 hrs/week

Electronics TE 1 - Module: 5 ECTS credits

6052 Electronics TE 1(Schmid)

2 hrs/week

2218 Practical Electrical Engineering/ Electronics (Schmid/ Sieber)

2 hrs/week

Software Development - Module: 5 ECTS credits

6053 Software Development (Eberhardt)

2 hrs/week

6054 Practical Software Development (Eberhardt/ Herzer)

2 hrs/week

ELECTRICAL ENGINEERING AND EMBEDDED SYSTEMS - EMM (MASTER PROGRAM)

1856 System Analysis and Simulation with LabVIEW for Master (Georgi, Hohl)

4 hrs/week 5 ECTS credits

Module Advanced Mathematics for Engineers

1876 Advanced Mathematics for Engineers 1(Ertel)

4 hrs/week 5 ECTS credits

6894 Advanced Mathematics for Engineers 1 - Lab (Ertel)

4 hrs/week 5 ECTS credits

1895 Simulation of Mechatronic Systems (Wöllhaf)

4 hrs/week 5 ECTS credits

2233 Electrical Drives (Paczynski)

4 hrs/week 5 ECTS credits

2236 Engineering Design and Materials (Niedermeier)

6 hrs/week 6 ECTS credits

2354 Engineering Mechanics (Stetter)

6 hrs/week 6 ECTS credits

3124 Embedded Computing (Brümmer)

4 hrs/week 2 ECTS credits? Part of Module Embedded Computing

4441 Power Electronics (Farkas)

4hrs/week 5 ECTS credits

6895 Circuit & Systems 1 - System-on-Chip (Pfeil)

4 hrs/week 5 ECTS credits

6896 Signal Processing 1 + Signal processing 1 Lab (Schulter)

4 hrs/week 5 ECTS credits

7110 Wireless Communication (Fechter)

4 hrs/week 5 ECTS credits

7421 Implementation of Close Loop Digital Control Systems IDCS (Altmann)

4 hrs/week 5 ECTS credits

Module Embedded Control - in total 5 ECTS

7118 Embedded Control Seminar (Berger)

2 hrs/week

7453 Embedded Control Lab (Berger)

2 hrs/week

7455 Advanced Software Dev. for autonomous mobile robots for master (Ertel, Stähle)

4 hrs/week 5 ECTS credits

7553 Robocup Software architecture Project (Ertel, Stähle)

4 hrs/week 5 ECTS credits

7945 Lidar and Radar Systems (Elser)

4 hrs/week 5 ECTS credits

MECHATRONICS - MM (MASTER PROGRAM)

1856 System Analysis and Simulation with LabVIEW for Master (Georgi, Hohl)

4 hrs/week 5 ECTS credits

Module Advanced Mathematics for Engineers

1876 Advanced Mathematics for Engineers 1 (Ertel)

4 hrs/week 5 ECTS credits

6894 Advanced Mathematics for Engineers 1 - Lab (Ertel)

4 hrs/week 5 ECTS credits

1905 Process Interface Equipment (Ruf)

4 hrs/week 5 ECTS credits

8 ECTS together with Lab on Process Interface Equipment offered in SS

1895 Simulation of Mechatronic Systems (Wöllhaf)

4 hrs/week 5 ECTS credits

2233 Electrical Drives (Paczynski)

4 hrs/week 5 ECTS credits

2236 Engineering Design and Materials (Niedermeier)

6 hrs/week 6 ECTS credits

2354 Engineering Mechanics (Stetter)

6 hrs/week 6 ECTS credits

3124 Embedded Computing (Brümmer)

4 hrs/week 5 ECTS credits

4441 Power Electronics (Farkas)

4hrs/week 5 ECTS credits

6807 Processes and Automation in Photovoltaics (Niedermeier, Fath)

4 hrs/week 5 ECTS credits

6895 Circuit & Systems 1 - System-on-Chip (Pfeil)

4 hrs/week 5 ECTS credits

7421 Implementation of Close Loop Digital Control Systems IDCS (Altmann)

4 hrs/week 5 ECTS credits

7455 Advanced Software Dev. for autonomous mobile robots for master (Ertel, Stähle)

4 hrs/week 5 ECTS credits

7553 Robocup Software architecture Project (Ertel, Stähle)

4 hrs/week 5 FCTS credits

! TECHNOLOGY MANAGEMENT AND OPTIMIZATION (MASTER PROGRAM)

Lectures offered in the frame of the TM&O Master program are open for Master students only Held in English only if students of Y Schools attend!

1856 System Analysis and Simulation with LabVIEW for Master (Georgi, Hohl)

4 hrs/week 5 ECTS credits

Module Production Optimization 1

6345 Production System Optimization (Pufall)*

2 hrs/week 3 ECTS credits

6346 Modern Production Engineering Tools (Pufall)*

2 hrs/week 2 ECTS credits

This module consists of 6345, 6346 and 6911 (German), in LSF it it mentioned "one exam only". Mr. Pufall will grant ECTS for each part of the module and also partially grade the exam.

Module Product Optimization 1

6343 Development Methodology (TMO Research & Development) (Philippi-Beck)*

4 hrs/week 3 ECTS credits

6344 Technology & Innovation Management (Ermark)*

2 hrs/ week 2 ECTS credits

Business Management

6620 Management systems (Philippi-Beck)*

2 hrs/week 2 ECTS credits

6900 Management Accounting and Reporting (Philippi-Beck)*

4 hrs/week 4 ECTS credits

Part of Module 8: Management Systems, Management Accounting and Reporting

6466 Operations Research (T. Harth)*

2 hrs/week 2 ECTS credits

6920 TM01 System analysis and Technical Specification (Gerland)*

1 hrs/week 1 ECTS credits

INTERNATIONAL ACADEMY: INNOVATION MANAGEMENT AND NEW TECHNOLOGIES (1 YEAR PROGRAM ON BACHELOR LEVEL)

8034 International communication – analyzing and resolving conflicts in international contexts (xxx)

2 hrs/week 3 ECTS credits

xxxx Practical Sales Project Seminar (RAFI) (Fuss)

2 hrs/week ECTS credits (compulsory if you take the whole program)

xxxx Intercultural Challenges in Customer and Account Management (?)

2 hrs/week 3 ECTS credits

xxxx Innovation and Virtual Leadership (?)

2 hrs/week 3 ECTS credits (marked case study)

4355 Simulating and Optimizing the value network (Hagen, Giesa)

Attention: Block seminar first week/weekend of Jan before lectures officially start!

2 hrs/week 3 ECTS credits

4906 Business Analysis and Valuation (?)

^{*} in Engl. if there are students of Y Schools (ESC Troyes)

2 hrs/week 3 ECTS credits

3968 Change Management (Hohl)

Block Seminar 2 ECTS credits

4305 Strategic Management (Willax)

2 hrs/week 3 ECTS credits

3585 International Marketing (Niersbach)

Block Seminar 2 ECTS credits

6919 Seminar: Academic writing (Pufall?)

2 hrs/week 5 ECTS credits

8073 International Project Management (Collenberg)

2 hrs/week 3 ECTS credits

xxxx B2B Marketing and Sales Project Seminar (Coperion) (Niersbach)

2 hrs/week 5 ECTS credits

BACHELOR LEVEL - Lectures in English language in various study fields

6598 International Comparison of health care systems (Kern - Health Economics)

2 hrs/week 2 ECTS

1825 Operating Systems (Eggendorfer - Applied Computer Science)

4 hrs/week 4 ECTS

4305 Strategic Management (Willax - Business Management)

2 hrs/week 3 ECTS

MASTER LEVEL - Lectures in English language in various study fields

3008 Artificial Intelligence for Master (Ertel - Computer Science)

4 hrs/week 5 ECTS credits

3058 Artificial Intelligence Lab (Ertel - Computer Science) - in English if > 3 intl. participants

4 hrs/week 3 ECTS credits

3227 Advanced Computer Graphics (Scherzer- Computer Science)

8 hrs/week 10 ECTS credits

1895 Simulation of Mechatronic Systems (Wöllhaf)

4 hrs/week 5 ECTS credits

3219 Modern Database Technologies (Hulin - Computer Science)

Blended-Learning-Course with Presence Phases 5 ECTS credits

6896 Signal Processing 1 + Signal processing 1 Lab (Schulter - IN)

4 hrs/week 5 ECTS credits

7435 Software Security (Eggendorfer, Inan - Computer Science)

Blended-Learning-Course with Presence Phases 5 ECTS credits

7536 Advanced Controlling (Neff - BWU)

4 hrs/week 5 ECTS credits

LANGUAGE LECTURES AND INTERCULTURAL SEMINARS (CLIC)

<u>German as a foreign language = Deutsch als Fremdsprache (DaF)</u>

4382 DaF A1

Attention: The course starts with a two-week intensive course September 20, 2021* and will be continued on Wednesdays from 9:45 – 13:00 throughout the semester 4 hrs/week 4 ECTS credits

4634 DaF A2,

Attention: The course starts with a two-week intensive course September 20, 2021* and will be continued on Wednesdays from 9:45 – 13:00 throughout the semester 4 hrs/week 4 ECTS credits

4630 DaF B1,

Attention: The course starts with a two-week intensive course September 20, 2021* and will be continued on Wednesdays from 9:45 – 13:00 throughout the semester 4 hrs/week 4 ECTS credits

4631 DaF B2.

Attention: The course starts with a two-week intensive course September 20, 2021* and will be continued on Wednesdays from 9:45 – 13:00 throughout the semester 4 hrs/week 4 ECTS credits

4632 DaF C1

4 hrs/week 2 ECTS credits (starts in the first semester week: Oct.x)

+ Tutorial Courses - to be announced shortly before semester start

^{*}to be confirmed

English

10210 Improve your speaking skills C1 (Wandinger)

2 hrs/ week 2 ECTS credits (?)

10212 English for Specific Purposes: Focus on Mechanical and Automotive Engineering (Matter)

2 hrs/ week 2 ECTS credits (?)

10188 English for Specific Purposes: Lost for Words? Effective and Essential Communication in our Professional Environment (Wandinger)

2 hrs/week 2 ECTS credits (?)

10194 English for Specific Purposes: Student EQ Edge - Emotional Intelligence and Your Success (Hopkins)

2 hrs/week 2 ECTS credits (?)

10197 English for Health Economics (Riviere)

2 hrs/week 2 ECTS credits (?)

10857 English for Specific Purposes - The "Designing Your Life Bookclub" (Hopkins)

2 hrs/week 2 ECTS credits (?)

4408 Improve your speaking skills B2

2 hrs/ week 2 ECTS credits

10196 English Negotiating - Block Seminar (Rudolph)

Blockseminar, 3 ECTS credits, 31.10., 07.11., 21.11. 09:00 – 17:00 – C-building C004 (max. 40 students)

Some of the English course may vary but there is always quite a big choice available

Seminars on Intercultural Sensitization and other topics

4656 Intercultural Sensitization (Ronssin + students)

Block seminar: 1 ECTS credit

1479 Intercultural Management (Hohl)

2 hrs/week 2 ECTS credits

Others to be decided on shortly before semester start

Other language course offers at various levels

Spanish, Italian, French, Brazilian-Portuguese, Arabic, Russian, Japanese...to be decided shortly before semester start