Winter Semester - Lectures in English Language

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 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)

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, Practical Training: Module Digital Practical (offered in WS in German and in SS in English)

3947  Computer Technology (Jobke)
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  Introduction to PSPICE/MATLAB with emphasis on communications circuits (Klotzbücher)
4 hrs/week  5 ECTS credits

Sixth semester

2152  Digital Signal Processing (Siggelkow)
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)
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 (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

**3244**  **Circuit & Systems 2 - Software (SW) and Hardware (HW) Design** (Siggelkow)
- exceptionnally offered this winter semester, normally only SS
4 hrs/week  5 ECTS credits

**4441**  **Power Electronics** (Farkas)
4 hrs/week  5 ECTS credits

**6895**  **Circuit & Systems 1 - System-on-Chip** (Pfeil)
4 hrs/week  5 ECTS credits

**6896**  **Signal Processing 1 + Signalprocessing 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 Development for autonomous mobile robots for master** (Ertel, Stähle)
4 hrs/week  5 ECTS credits

**7553**  **Robocup Softwarearchitecture Project** (Ertel, Stähle)
4 hrs/week  5 ECTS credits

**NEW**  **Lidar and Radar Systems** (Elser)
4 hrs/week  5 ECTS credits
**Mechatronics – MM (Master Program)**

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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)  
4 hrs/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 Development for autonomous mobile robots for master (Ertel, Stähle)  
4 hrs/week 5 ECTS credits
Robocup Softwarearchitecture Project (Ertel, Stähle)
4 hrs/week 5 ECTS credits

Technology Management and Optimization (Master Program) Lectures offered in the frame of the TM&O Master program are open for Master students only.

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 says "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

* in Engl. if there are students of ESC Troyes
INTERNATIONAL ACADEMY: INNOVATION MANAGEMENT AND NEW TECHNOLOGIES
(1 YEAR PROGRAM ON BACHELOR LEVEL)

1479 Intercultural Management (Hohl)
2 hrs/week  2 ECTS credits

3586 International Companies (Kuttler)
2 hrs/week  4 ECTS credits (CAN but does not have to be taken in combination with 3910)

3910 International Management (Kuttler)
2 hrs/week  2 ECTS credits (If taken in combination with 3586 only one exam of 90 min necessary)

3585 International Marketing (Niersbach)
2 hrs/week  3 ECTS credits (marked case study)

4355 Simulating and Optimizing the value network (Hagen, Giesa)
2 hrs/week  3 ECTS credits

4356 Business Start-Up and Entrepreneurship (Rundel)
2 hrs/week  3 ECTS credits (business plan)

4462/1472 Business Game (Philippi-Beck, Klett)
Block Seminar 2 ECTS credits

4473 Practical Project: Investment Case (Duehnfort)
2 hrs/week  3 ECTS credits

4910 International Conduct of Negotiation and Moderation (Hohl, Hock)
Block Seminar 2 ECTS credits

6919 Seminar: Research project - Guiding students through a research paper (Pufall)
2 hrs/week  3 ECTS credits

7184 Seminar: B2B Sales Management (Niersbach)
2 hrs/week  3 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

3058 Artificial Intelligence Lab (Ertel – Computer Science) – in English if > 3 intl. participants
4 hrs/week 3 ECTS credits

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 + Signalprocessing 1 Lab (Schulter - IN)
4 hrs/week 5 ECTS credits

7536 IT Forensics (Eggendorfer - 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)

German as a foreign language = Deutsch als Fremdsprache (DaF)

4382 DaF A1
Attention: The course starts with a two-week intensive course September 23
4 hrs/week 4 ECTS credits

4634 DaF A2,
Attention: The course starts with a two-week intensive course September 23
4 hrs/week  4 ECTS credits

4630  DaF B1,
Attention: The course starts with a two-week intensive course September 23
4 hrs/week  4 ECTS credits

4631  DaF B2,
Attention: The course starts with a two-week intensive course September 23
4 hrs/week  4 ECTS credits

4632  DaF C1
4 hrs/week  2 ECTS credits

+ Tutorial Courses – to be announced

English

7753  Professional English
2x2 hrs/ week  2 credits

6873, 6848, 3318,  Professional English 1, B2
2 hrs/week  2 ECTS credits

7367, 7142, 7137  Professional English 2, B2
2 hrs/week  2 ECTS credits

4408  Improve your speaking skills B2
2 hrs/ week  2 credits

55  English for Specific Purposes: Project Management (Conner)

6857  English for Health Economics
2 hrs/week  2 ECTS credits

898  English Negotiating (Rudolph)
Blockseminar: 08.11/ 9.11., 22.11./ 23.11., 30.11., 3 ECTS credits

7396  English for Psychology (Marquard)
2 hrs/week  ? ECTS credits

Seminars on Intercultural Sensitization and other topics

4656  Intercultural Sensitization (Ronssin + students)
Blockseminar: 08.11.2019  1 ECTS credit

1479  Intercultural Management (Hohl)
2 hrs/week  2 ECTS credits
**7143  **Intercultural Competence  (Rudolph)
2 hrs/week   2 ECTS credits

**7806  **Intercultural Competence for Professional English  (da Silva)
Blockseminar: 09.11. Group 1; 07.12. Group 2   2 ECTS credits

**7634  **International Politics and business  (Mulder)
Blockseminar: 12.10. + 16.11.201+9 Blended learning/ Online
2 ECTS credits

**7397  **Business and Communication with China  (Mulder)
Blockseminar: 26.10. + 09.11. + 22.11.2019 Blended learning/ Online
2 ECTS credits

**Other language course offers at various levels**

Spanish (A1, A2, B1, B2), Italian (A1, A2 French (A1, A2, B1), Brasilianisch-Portugiesisch (A1), Arabic, Russian (A1)...  

**5521  **Russian reading and writing  (Manal)
2 hrs/week   2 ECTS credits