

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

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 (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)

- **exceptionally** offered this winter semester, normally only SS

4 hrs/week 5 ECTS credits

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 + 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)

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

7553 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*

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 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)

Blockseminar: 06.12. + 13.12.2019/ 07.12 + 14.12.2019, 2 ECTS credits

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