

Winter Semester 2022/ 2023 - Lectures in English Language

PLEASE NOTE:

- The lectures are listed according to the faculty/study program offered. If you fulfill the pre-requisites you can take any course from any faculty/study program. There may not be enough room in some labs though.
- If you take courses from different programs and semesters, there might be conflicts in the timetable. The timetable 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/ SWS" = hours per week per semester, SWS= Semesterwochenstunde(n) in German (1 SWS 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)

(SEMESTER 2 AND 4 TAKE PLACE IN ENGLISH IN THE WINTER SEMESTER, SEMESTER 1 AND 3 IN THE SUMMER SEMESTER)

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

Computer-Aided Circuit Design 1 - Module: 5 ECTS

7077 Basis Practical Training Engineering 3: Programming of uC (Ludescher)

2 hrs/week

1911 Circuit Design Practical Training (Ludescher, Weber)

2 hrs/week

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

3947 Computer Technology (Siggelkow)
4 hrs/week 5 ECTS credits

6048 Object-Oriented Programming (Zeller)
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

5298 Automation Module 1: Power Train Engineering (Farkas)
4 hrs/week 5 ECTS credits

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

10277 Robot Car Racing Competition (Berens)
4 hrs/week 5 ECTS credits

NEW Numerical Methods for Computational Engineering (Berger) - elective
4 hrs/week 5 ECTS credits

Sixth Semester

5839 Traffic Telematics (Fechter)
4 hrs/week 5 ECTS credits

7351 Project Seminar: Scientific Work (Pfeil, Siggelkow)
4 hrs/week 5 ECTS credits

E-MOBILITY AND GREEN ENERGY (BACHELOR PROGRAM) – ENGLISH TAUGHT STUDY PROGRAM

(SEMESTER 2 AND 4 TAKE PLACE IN ENGLISH IN THE WINTER SEMESTER, SEMESTER 1 AND 3 IN THE SUMMER SEMESTER)

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

Computer-Aided Circuit Design 1 - Module: 5 ECTS

7077 Basis Practical Training Engineering 3: Programming of uC (Ludescher)

2 hrs/week

1911 Circuit Design Practical Training (Ludescher, Weber)

2 hrs/week

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

3947 Computer Technology (Siggelkow)

4 hrs/week 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)

7087 Automotive Engineering (Reick) - new module moved to em 2nd semester from em 3rd

4 hrs/week 5 ECTS credits

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

2119 Machinery Design (Pfeffer)

4 hrs/week 5 ECTS credits

1421 Materials Science (Fuchs)

4 hrs/week 5 ECTS credits

Fourth Semester

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

4 hrs/week 5 ECTS credits

2152 Digital Signal Processing (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

4913 Hybrids in Cars (Farkas)

4 hrs/week 5 ECTS credits

5298 Automation Module 1: Power Train Engineering (Farkas)

4 hrs/week 5 ECTS credits

10277 Robot Car Racing Competition (Berens)

4 hrs/week 5 ECTS credits

Sixth Semester

5839 Traffic Telematics (Fechter)

4 hrs/week 5 ECTS credits

7351 Project Seminar: Scientific Work (Pfeil, Siggelkow)

4 hrs/week 5 ECTS credits

NEW Numerical Methods for Computational Engineering (Berger) - elective

4 hrs/week 5 ECTS credits

PHYSICAL ENGINEERING (BACHELOR PROGRAM) - ENGLISH TAUGHT STUDY PROGRAM *

Second Semester

1396/ 10243 (Analysis 2) Differential Equations and Vector Analysis (Donges)

4 hrs/week 5 ECTS credits

10238 Tutorial Analysis (Sieber/ Baumgarten)

2 hrs/week no credits

1418 (Physics 2) Electrodynamics (Klemt/ Sieber)

4 hrs/week 5 ECTS credits

4912 Module Physics 2: Electrodynamics (Doderer)

4 hrs/week 5 ECTS credits

10239 Tutorial Physics 2 Electrodynamics (Sieber/ Baumgarten)

2 hrs/week no credits

1408 Materials (Kolacyak)

4 hrs/week 5 ECTS credits

Design 1 - Module: 5 ECTS credits

7957 CAD Practical Training (Barho)

2 hrs/week

2166 Technical Mechanics (Pfeffer)

2 hrs/week

Electronics TE 1 - Module: 5 ECTS credits

6052 Electronics TE 1 (Vogel)

2 hrs/week

2218 Practical Electrical Engineering/ Electronics (Vogel/ 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

7351 Project Seminar: Scientific Work (Siggelkow, Pfeil)

4 hrs/week 5 ECTS credits

*semester 1, 2 and 3 are taught in English entirely, from semester 4 the study program is taught in German! During summer semester lectures from semester 1 and 3 are offered in English, during winter semester from semester 2

ELECTRICAL ENGINEERING AND EMBEDDED SYSTEMS - EMM (MASTER PROGRAM)

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

4 hrs/week 5 ECTS credits

Module Advanced Mathematics for Engineers (10 ECTS)

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

2236 Engineering Design and Materials (Niedermeier) - elective

6 hrs/week 6 ECTS credits

2354 Engineering Mechanics (Stetter, Winkler) - elective

6 hrs/week 6 ECTS credits

3124 Embedded Computing (Pfeil)

4 hrs/week 5 ECTS credits

3244 SW - HW Design (Siggelkow) - elective

4 hrs/week 5 ECTS credits

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

4 hrs/week 5 ECTS credits

6896 Signal Processing 1 + Lab (Schulter)

4 hrs/week 5 ECTS credits

7421 Implementation of Closed Loop Digital Control Systems IDCS (Altmann) - elective

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 (Schneider) - elective

4 hrs/week 5 ECTS credits

7553 Robocup@Home Seminar for Masters (former Robocup Software architecture project) (Ertel, Stähle)

4 hrs/week 5 ECTS credits

10277 Robot Racing Competition (Berens)

4 hrs/week 5 ECTS credits

7945 Lidar and Radar Systems (Elser) - elective

4 hrs/week 5 ECTS credits

10280 Autonomous Driving (Grösch) - elective

Block Seminar 2 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 10 ECTS

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

2354 Advanced Engineering Mechanics (Stetter, Winkler)

6 hrs/week 5 ECTS credits

3124 Embedded Computing (Pfeil)

4 hrs/week 5 ECTS credits

4441 Power Electronics (Farkas)

4hrs/week 5 ECTS credits

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

4 hrs/week 5 ECTS credits

7455 Advanced Software Development for Autonomous Mobile Robots (Schneider)

4 hrs/week 5 ECTS credits

7553 Robocup@Home Seminar for Masters (former Robocup Software architecture Project) (Ertel, Stähle)

4 hrs/week 5 ECTS credits

10280 Autonomous Driving (Grösch)

2 hrs/week 2 ECTS credits

2236 Engineering Design and Materials (Niedermeier) - will not take place this semester, but again in WS 23/24 - 6 hrs/week 6 ECTS credits

!! TECHNOLOGY MANAGEMENT AND OPTIMIZATION (MASTER PROGRAM)

Lectures offered in the frame of the TMO Master program are **open for Master students only** and **mostly offered in German** (if you have any questions, please check with Barbara Wildenhain)

Module 1: Product Engineering 1

Neu - Data design methods - 3 ECTS (Vogel)

10260 - Moderne Entwicklungsmethoden/ Modern development methods - 2 ECTS (Ermark)

4 hrs/week 5 ECTS credits

Module 2: Product Engineering 2

10263 - Funktionsmaterialien / Functional materials - 3 ECTS (Kolacyak)

10264 - Neue Materialien und Materialtrends/ New materials and material trends - 2 ECTS (Freundendahl)

4 hrs/week 5 ECTS credits

10257 Module 4: Cyberphysische Systeme/ Cyberphysical systems (Schlemmer)

4 hrs/week 5 ECTS credits

Module 8: Production Optimization 2

10271 Analyse und Optimierung von Produktionssystemen/ Analysis and optimization of production systems (Pufall)

2 hrs/week 3 ECTS credits

10265 Fabrikplanung/ Factory planning (Reinerth)

2 hrs/week 2 ECTS credits

Module 12: Business Management 1

10266 Business Development (Jäckle)

2 hrs/week 3 ECTS credits

10267 Unternehmerisches Handeln im technologischen Umfeld/ Entrepreneurial activity in a technological environment (Philippi-Beck)

2 hrs/ week 2 ECTS credits

Module 15: Optimization Methods 1

10270 Optimization with MatLab (T. Harth)

4 hrs/week 5 ECTS credits

Module 17: Optimization Methods 3

neu Entwicklung digitaler Geschäftsmodelle/ Development of digital business models (Jäckle)

4 hrs/week 5 ECTS credits

Module 18: Optimization Methods 4

10268 Maschinelles Lernen/ Machine Learning (T. Harth)

4 hrs/week 5 ECTS credits

INTERNATIONAL ACADEMY – ONE OR TWO SEMESTERS OF INTERDISCIPLINARY STUDY PROGRAM IN ENGLISH ON BACHELOR LEVEL (TAKING SINGLE/ INDIVIDUAL COURSES IS ALSO POSSIBLE)

8034 International communication - analysing and resolving conflicts in international contexts (Rudolph)

2 hrs/week 3 ECTS credits

6919 Seminar: Academic writing (Pufall)

2 hrs/week 5 ECTS credits

10105 Practical Sales Project Seminar (RAFI) (Fuss)

2 hrs/week 5 ECTS credits

10244 Intercultural Challenges in Customer and Account Management (Kadam)

2 hrs/week 5 ECTS credits

10245 Innovation and Virtual Leadership (Piansoongnern) (Online)

2 hrs/week 5 ECTS credits (marked case study)

~~**10246 B2B Project Group "Sales Challenge"** (Niersbach) – former title "B2B Marketing and Sales" Block Seminar 5 ECTS credits (Online) – cancelled for the winter semester 2022/ 2023~~

10127 International Project Management (Kopf)

2 hrs/week 3 ECTS credits

3585 International Marketing (Ahmadi, Niersbach)

Block Seminar 5 ECTS credits (Online)

10247 Successful Seminar Presentations, Dialogues and Meetings (Hohl)

Block Seminar 2 ECTS credits

3968 Change Management and New Work (Walter)

2 hrs/week 5 ECTS credits

BACHELOR LEVEL - Lectures in English language in various study fields

Xxxx The Economics of the Welfare State (Haupt)

2 hrs/week 3 ECTS

6807 Processes and Automation in Photovoltaics (Niedermeier, Fath - Mech. Eng.)

2 hrs/week 2 ECTS

1825 Operating Systems (Eggendorfer/ Inan - Applied Computer Science)

4 hrs/week 4 ECTS

Some lectures in the study program **"Media Design"** can be offered in English as they are offered as a project - if you are interested, kindly let me know in advance, so that I can check the possibilities -

<https://www.rwu.de/studieren/studiengaenge/mediendesign?destination=%2Fhochschule%2Ffakultaeten%2Felektrotechnik-und-informatik%23studiengaenge#studieninhalte>

Lectures from the **Faculty S (Social Work etc.)** are offered mostly in German. If you have a German level of B1 and are interested to take some, kindly let me know in advance, so that I can get in touch with the faculty to check which courses are project-based and more practically oriented so that they might fit for you -

<https://www.rwu.de/hochschule/fakultaeten/soziale-arbeit-gesundheit-und-pflege#studiengaenge>

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 - Applied Computer Science)
4 hrs/week 5 ECTS
(!! WS22/23 7536 IT Forensics, SS23 7592 Hardware Security, WS23/24 7435 Software Security, SS24 IT Forensics - rotating!!)
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 from Sept 19 - 30, 2022 and will be continued on Wed 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 from Sept 19 - 30, 2022 and will be continued on Wed 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 from Sept 19 - 30, 2022 and will be continued on Wed 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 from Sept 19 - 30, 2022 and will be continued on Wed 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 in October)

+ Support Courses throughout the semester

10103 Business German (Török) (probably online)
(in order to take Business Germany you should have a level of at least B1 in German)
4 hrs/week 4 ECTS credits

English

6848 TW1 Professional English 1 (Sheehy)

- 7137 TW2 Professional English 2 (Ironsides)**
- 3318 BM2 Professional English 1 (Brady-Kühnapfel)**
- 7367 BM3 Professional English 2 (Conner, Walz)**
 TW1 and TW2 and BM2 and BM3 modules = 5 ECTS - if you take TW1 or BM2 only you will get 2 ECTS
 2 hrs/ week 2 ECTS credits
- 7753 +8168 Professional English (AI4, PE3) (xxx)**
 2x2hrs/ week 5 ECTS credits
- 10214 English A2 - B1 - EU1/FT1/M1 (Le Roy)**
 2 hrs/ week 2 ECTS credits
- 10215 English B2 (EU1/FT1/M1) (Le Roy)**
 2 hrs/ week 2 ECTS credits
- 10120 Improve your speaking skills C1 (Hopkins)**
 2 hrs/ week 2 ECTS credits
- 3993 English for Specific Purposes (ESP): Presenting Internationally (Monja de Silva)**
 2 hrs/ week 2 ECTS credits
- 10857 ESP - Intercultural Communications - Talking effectively to an increasingly globalized English-speaking world (Ironsides)**
 2 hrs/week 2 ECTS credits
- 10194 ESP: Student EQ Edge - Emotional Intelligence and Your Success (Hopkins)**
 2 hrs/week 2 ECTS credits
- 8170 ESP - Get on the right track (Hopkins)**
 2 hrs/ week 2 ECTS credits
- 7398 ESP - English for Marketing (Brady-Kühnapfel)**
 2 hrs/ week 2 ECTS credits
- 10342 ESP - Vital Skills for the future Manager / Leader (Hopkins)**
 2 hrs/week 2 ECTS credits
- 10474 ESP - English for Social Work (Gütler)**
 2 hrs/week 2 ECTS credit
- 10476 Learning to develop strong English debating and rhetorical skills C1 (Ironsides)**
 2 hrs/week 2 ECTS credits
- 7683 English for Health Economics (Riviere)**
 2 hrs/week 2 ECTS credits
- 898 English Negotiating - Block Seminar (Rudolph)**

Blockseminar, 13.10., 20.10., 27.10., 3.11., 10.11., 17.11., 24.11.2022, 09:45 – 13:00, 3 ECTS (max. 40 students)

6392 Creating a job-winning CV and learning effective interview techniques in an English speaking environment (Ironsides)

Blockseminar, (max. 40 students)

2 hrs/ week 2 ECTS credits

10342 ESP – International Human Resource Management (IHRM) (Wang, Yuanyuan)

2 hrs/week 2 ECTS credits

10340 Developing the skills of cultural awareness, fluency and intercultural competencies in an English-speaking context (Ironsides)

2 hrs/week 2 ECTS credits

8034 International Communication – analyzing and resolving conflicts in international contexts (Rudolph)

Blockseminar, 10.10., 17.10., 24.10., 31.10., 7.11., 14.11., 21.11., 28.11.2022 – 09:00 – 12:15 (max. 40 students) 3 ECTS

Xxxx Intercultural Communication (de Silva, Monja)

2 SWS, 3 ECTS

10190 Intercultural Communication – focus on China and East Asia (Wang, Yuanyuan)

Block seminar 05.11., 12.11., 19.11., 09:00 – 16:00– 2 ECTS credits

4656 Intercultural Sensitization (de Pascale Speck & Team)

Block Seminar 1 ECTS – 18. + 19.11.2022

10473 Moderating meetings and work sessions (Rudolph, Frank)

Block seminar 15.10., 22.10., 29.10., 09:00 – 16:00– 2 ECTS credits

Additional language course offers at various levels

4220 Brazilian - Portuguese for beginners A1.1 (Chitolina-Hack)

2 hrs/week 2 ECTS credits

4922 Chinese for beginners A1.1 (Wang, Yuanyuan)

2 hrs/week 2 ECTS credits

10205 French A1.1 (Ristau)

2 hrs/week 2 ECTS credits

3324 French A1.2 (Ristau)

2 hrs/week 2 ECTS credits

3985 French A2.1 (Ristau)

2 hrs/week 2 ECTS credits

6078 Wirtschaftsfranzösisch – Business French (Ronssin)

2 hrs/week 2 ECTS credits

156 Italian A1.1 (Exposito-Depprich)

2 hrs/week 2 ECTS credits

4370 Italian A1.2 (Exposito-Depprich)

2 hrs/week 2 ECTS credits

6415 Italian A2.1 (DePascale Speck)

2 hrs/week 2 ECTS credits

10180 Italian B1.1 (DePascale Speck)

2 hrs/week 2 ECTS credits

6313 Japanese A1.2 (Herget)

2 hrs/week 2 ECTS credits

4369 Japanese A1.3 (Herget)

2 hrs/week 2 ECTS credits

16 Russian for beginners A1.1 (Manal)

2 hrs/week 2 ECTS credits

5578 Russian A1.2 (Manal)

2 hrs/week 2 ECTS credits

10002 Spanish A1.1 (Kösler)

3 hrs/week 2 ECTS credits

10003 Spanish A1.2 (Kösler)

2 hrs/week 2 ECTS credits

2039 Spanish A1.2 (Buhrmann)

2 hrs/week 2 ECTS credits

4612 Turkish for beginner A1 (Duman)

2 hrs/week 2 ECTS credits

10475 Turkish B1 (Duman)

2 hrs/week 2 ECTS credits