

## Summer Semester 2024 - Lectures offered in English

#### 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 only 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/https://mycampus.rwu.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 – English taught study program (SEMESTER 1 AND 3 TAKE PLACE IN ENGLISH IN THE SUMMER SEMESTER, SEMESTER 2 AND 4 IN WINTER SEMESTER)

First semester				
Course number	Title	Lecturer	ECTS	Hrs/week
4233	ELECTRICAL ENGINEERING 1: ANALYSIS OF ELECTRIC NETWORKS	?	5	4
288	MATHEMATICS 1: ANALYSIS 1 WITH EXERCISES	Elser	5	4
3000	MATHEMATICS 2: LINEAR ALGEBRA WITH EXERCISES	Elser	5	4
XXX	MATHEMATICS TUTORIAL?			
4341	Programming	Косн	5	4
DIGITAL TECHNOLOGY (	MODULE)			
1850	DIGITAL TECHNOLOGY	Siggelkow	4	4
1438	DIGITAL TECHNOLOGY, PRACTICAL	Siggelkow	?	4
1402	PHYSICS MECHANICS/ PHYSICS 1	Doderer/Sieber		

Third semester	Third semester			
4240	ELECTRICAL ENGINEERING 3: CIRCUIT ANALYSIS IN THE TIME AND FREQUENCY DOMAINS	Berens	5	4
5139	METROLOGY 2	Pfeil	5	4
1809	COMPUTER TECHNOLOGY PRACTICAL	?	5	4
LINEAR METROLOGY (M	IODULE)		5	
1815	ELECTRONICS	LUDESCHER		4



FOURTH OR HIGHER S	SEMESTER			
Course number	Title	Lecturer	ECTS	hrs/week
1816	ELECTRONICS, PRACTICAL TRAINING: LINEAR METROLOGY	Reusch		2
ROBOTICS (MODULE)			5	
5761	ROBOTICS	Wöllhaf, Glönkler, Stehle		4
5768	ROBOTICS PRACTICAL			2
ELECTRICAL ENGINEERING PRACTICAL (MODULE) — POSSIBLE TO TAKE AS INDIVIDUAL COURSES — ECTS TO CLARIFY DIRECTLY WITH THE PROFESSOR		5		
5891	BASIC PRACTICAL ELECTRICAL ENGINEERING1: BASIC CIRCUIT	Pfeil / Siggelkow/ Störzer	3	2
7079	Basis Practical Course Electrical Engineering 2: Implementation and Verification	Ruf	2	2
Computer-aided Circuit Design 1		5		
7077	BASIS PRACTICAL TRAINING ENGINEERING 3: PROGRAMMING OF UC	Ludescher		2
1911	CIRCUIT DESIGN PRACTICAL TRAINING	Ludescher		2
Fourth semester				
10159	EMBEDDED GUI	Berger	5	4
Six/ Seventh emes	ter			
1501	INTERNET APPLICATIONS – LECTURE AND PRACTICAL	FECHTER	5	4
5298	ELECTRIC DRIVES/ POWER TRAIN ENGINEERING	Farkas	5	4
REAL-TIME PROGRAMMING (MODULE)		5		
1494	REAL TIME PROGRAMMING	PFEIL		4
1495	REAL TIME PROGRAMMING LAB	Weissensbühler		4



7552	ROBOCUP@HOME LEAGUE SEMINAR	STÄHLE	5	4
7090	SOFTWARE AUTOMONE MOBILE ROBOTER	STÄHLE	5	4

# 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)

### First Semester

Course number	Title	Lecturer	ECTS	hrs/week
4233	ELECTRICAL ENGINEERING 1: ANALYSIS OF ELECTRIC NETWORKS	?	5	4
288	MATHEMATICS 1: ANALYSIS 1 WITH EXERCISES	Elser	5	4
3000	MATHEMATICS 2: LINEAR ALGEBRA WITH EXERCISES	ELSER	5	4
XXX	MATHEMATICS TUTORIAL?			
4341	Programming	Косн	5	4
DIGITAL TECHNOLOGY (MODULE)				
1850	DIGITAL TECHNOLOGY	Siggelkow		4
1438	DIGITAL TECHNOLOGY, PRACTICAL	Siggelkow	?	4
1402	PHYSICS MECHANICS/ PHYSICS 1	Doderer/ Sieber	5	4
Third Semester			5	4
4240	ELECTRICAL ENGINEERING 3: CIRCUIT ANALYSIS IN THE TIME AND FREQUENCY DOMAINS	Berens	5	4
5761/5768	ROBOTICS+LAB	WÖLLHAF/ GLÖNKLER	5	4



	Fourth or Higher Semester			
Course number	Title	Lecturer	ECTS	hrs/week
ELECTRICAL ENGINEER	RING PRACTICAL (MODULE)— POSSIBLE TO TAKE AS INDIVIDUAL COURSES— ECTS TO CLARIFY DIRECTLY WITH THE PROFESSOR		5	
5891	BASIC PRACTICAL ELECTRICAL ENGINEERING 1: BASIC CIRCUIT	PFEIL/ WEBER/ FESSLER	3	2
7079	BASIC PRACTICAL COURSE ELECTRICAL ENGINEERING 2: IMPLEMENTATION AND VERIFICATION	Ruf	2	2
1904	AUTOMATION, REALTIME PROGRAMMING, PRACTICAL TRAINING (PART OF MODULE EMBEDDED SYSTEMS (TOTAL) 5 ECTS)	Weissensbühler/ Glönkler		
AUTOMOTIVE ENGINEE	RING: BASICS, PRACTICAL AND CAD (MODULE)		10	
7087	AUTOMOTIVE ENGINEERING	Reick	5	4
7034	Practical Automotive Engineering	Reick	3	2
7295	COMPUTER AIDED DESIGN (CAD)	REICK	2	2
1815	ELECTRONICS	Ludescher	5	4
2119	Machinery Design	PFEFFER	5	4
7351	PROJECT SEMINAR: SCIENTIFIC WORK (BILINGUAL)	Siggelkow/Pfeil	5	4
10277	ROBOT CAR RACING COMPETITION	Berens	5	4
Fourth Semester				
10159	EMBEDDED GUI	Berger	5	4
Sixth/ Seventh Semester				
XXXX	MATHMATICS 4: STATISTICS AND NUMERICS	?	5	4
5839	TRAFFIC TELEMATICS/ INTELLIGENT TRANSPORTATION SYSTEMS	Fechter	5	4
4913	Hybrids in Cars	Farkas	5	4



Physical Engineering (Bachelor Program) – English taught study program\*

\*Semesters 1, 2 and 3 are taught in English entirely, from semester 4 the study program is taught in German!

During summer semester Lectures from semesters 1 and 3 are offered in English, during winter semester from semester 2

### First Semester

Course number	Title	Lecturer	ECTS	hrs/week
10361	MATHEMATICS 1: ANALYSIS 1 WITH EXERCISES (SIMILAR TO EI/ EM 288	SMAGA	5	4
10362	MATHEMATICS 2: LINEAR ALGEBRA WITH EXERCISES (SIMILAR TO EI/ EM 3000)	SMAGA	5	4
10363	TUTORIAL – ANALYSIS 1, LINEAR ALGEBRA (SIMILAR TO EI/ EM 5432)	SMAGA/ SIEBER	5	4
7805	PHYSICS 1 – MECHANICS AND THERMODYNAMICS (SIMILAR TO EI/ EM 1402)	Schlemmer	5	4
7724	TUTORIAL/ PHYSICS 1 - MECHANICS AND THERMODYNAMICS	Baumgarten/Sieber	5	4
7786	CHEMISTRY	KOLACYAK	5	4
6886	ELECTRICAL ENGINEERING	Vogel	5	4
COMPUTER SCIENCE (N	COMPUTER SCIENCE (MODULE)			
198	BASIC PRINCIPLES OF COMPUTER SCIENCE	EBERHARDT		4
1420	Practical Computer Science	EBERHARDT		4
Third Semester			5	4
2111	ANALYSIS 3: NUMERICAL ANALYSIS/ MATHEMATICS	SMAGA	5	4
6050	PHYSICS III - OPTICS AND WAVES IV - QUANTUM PHYSICS	SCHLEMMER/ SIEBER	5	4
1271	PRACTICAL PHYSICS - PRACTICAL TRAINING IN EXPERIMENTAL PHYSICS 1	EBERHARDT/ BAUMGARTEN/ HERZER	5	4
7409	MATERIALS SCIENCE / MATERIALS	Kolacyak	5	4
2119	Machinery Design	PFEFFER	5	4
6051	ELECTRONICS 2	Vogel	5	4



IPE – Industrial Project Engineering (Bachelor Program) – English taught study program \*

\*Semesters 1 – 4 are taught in English entirely, from semester 4 the study program is taught in German!

During summer semester Lectures from semesters 1 and 3 are offered in English, during winter semester from semester 2

### First Semester

Course number	Title	Lecturer	ECTS	hrs/week
288	MATHEMATICS 1: ANALYSIS 1 WITH EXERCISES	Elser	5	4
3000	MATHEMATICS 2: LINEAR ALGEBRA WITH EXERCISES	Elser	5	4
4233	ELECTRICAL ENGINEERING 1: ANALYSIS OF ELECTRIC NETWORKS	?	5	4
10637	INTRODUCTION PRODUCTION TECHNOLOGY	STRAUB	5	5
10516	PROGRAMMING WITH PYTHON	Harth, Zerrin	5	4



	Electrical Engineering and Embedded Systems - EMM (English taught Master Program)  ENTIRELEY TAUGHT IN ENGLISH ENTIRELY, DURING SUMMER SEMESTER LECTURES FROM SEMESTERS 2 ARE OFFERED IN ENGLISH, DURING WINTER SEMESTER FROM SEMESTER 1 AND 3					
Course number	Title	Lecturer	ECTS	hrs/week		
3008	ARTIFICIAL INTELLIGENCE FOR MASTER	ERTEL	5	4		
3059	LAB FOR ARTIFICIAL INTELLIGENCE	ERTEL	5	4		
7110	Communication 1 – Wireless communication	Fechter	5	4		
7790	Communication 2 – Nearfield Communication	PFEIL	5	4		
ADVANCED CONTROL S	YSTEMS (MODULE)		5			
1706	DIGITAL CONTROL	Berger		3		
4876	DIGITAL CONTROL LAB	Berger		2		
EMBEDDED COMPUTINI	G (MODULE)		5			
4874	EMBEDDED COMPUTING LAB (SS ONLY)	PFEIL		2		
7193	EMBEDDED PROJECT (SS ONLY)	Brümmer		3		
7781	Computer Vision	ELSER/ BERENS	5	4		
7781	Computer Architecture	Siggelkow	5	4		
3311	ROBOTICS	Wöllhaf/ Stähle	5	4		
2172	LAB ON ROBOTICS	WÖLLHAF	3	2		
7183	SIGNAL PROCESSING 2 AND LAB	SCHULTER	5	4		
4443	AUTOMATION	Ruf	5	4		
Process Interface (	Module)		8			
2171	LAB ON PROCESS INTERFACE EQUIPMENT	Ruf	3	2		
1905	PROCESS INTERFACE EQUIPMENT – WS ONLY!	Ruf	5	4		



1856	SYSTEM ANALYSIS AND SIMULATION WITH LABVIEW FOR MASTER	GEORIGI/HOHL?	5	4
7421	IMPLEMENTATION OF CLOSED LOOP DIGITAL CONTROL SYSTEMS (DDC)	Altmann	5	4
7455	ADVANCED SOFTWARE DEVELOPMENT FOR AUTONOMOUS MOBILE ROBOTS	STÄHLE/ PRASAD	5	4
7553	ROBOCUP@Home Seminar for Masters	STÄHLE / PRASAD	5	4
10280	AUTONOMOUS DRIVING	Grösch	5	4
6807	PROCESSES AND AUTOMATION IN PHOTOVOLTAICS	Niedermeier/ Fath	5	4
5812	MACHINE LEARNING FOR INTELLIGENT SYSTEMS	?	5	4
5149	Working in International Scientific Project teams	RUDOLPH	RUDOLPH 5	



	Mechatronics - MM (Entlish taught Master Program)  ENTIRELEY TAUGHT IN ENGLISH ENTIRELY, DURING SUMMER SEMESTER LECTURES FROM SEMESTERS 2 ARE OFFERED IN ENGLISH, DURING WINTER SEMESTER FROM SEMESTER 1 AND 3				
Course number	Title	Lecturer	ECTS	hrs/week	
3008	ARTIFICIAL INTELLIGENCE FOR MASTER	ERTEL	5	4	
3059	LAB FOR ARTIFICIAL INTELLIGENCE	ERTEL	5	4	
2233	ELECTRICAL DRIVES	Farkas	5	4	
4443	AUTOMATION	Ruf	5	4	
1856	SYSTEM ANALYSIS AND SIMULATION WITH LABVIEW FOR MASTER	Нонг	5	4	
2354	ADVANCED ENGINEERING MECHANICS	STETTER / WINKLER	5	6	
PROCESS INTERFACE (	Module)		8		
2171	LAB ON PROCESS INTERFACE EQUIPMENT	Ruf	3	2	
1905	PROCESS INTERFACE EQUIPMENT – WS ONLY!	Ruf	5	4	
7455	ADVANCED SOFTWARE DEVELOPMENT FOR AUTONOMOUS MOBILE ROBOTS	STÄHLE/ PRASAD	5	4	
ADVANCED CONTROL S	SYSTEMS <b>(M</b> ODULE)		5		
1706	DIGITAL CONTROL	Berger		3	
4876	DIGITAL CONTROL LAB	Berger		2	
3311	ROBOTICS	Wöllhaf/Stähle	5	4	
2172	LAB ON ROBOTICS	WÖLLHAF	3	2	
Embedded Computini	G (MODULE)		5		
4874	EMBEDDED COMPUTING LAB (SS ONLY)	PFEIL		2	
7193	EMBEDDED PROJECT (SS ONLY)	Brümmer		3	
7421	IMPLEMENTATION OF CLOSED LOOP DIGITAL CONTROL SYSTEMS (DDC)	Altmann	5	4	



6807	PROCESSES AND AUTOMATION IN PHOTOVOLTAICS	NIEDERMEIER/ FATH	5	4
7553	ROBOCUP@HOME SEMINAR/TOURNMENT FOR MASTERS	STÄHLE / PRASAD	5	4
10280	AUTONOMOUS DRIVING	Grösch	5	4
5812	MACHINE LEARNING FOR INTELLIGENT SYSTEMS	?	5	4
5149	Working in International Scientific Project teams	RUDOLPH	5	4



Bachelor level - Lectures In English Language In various study fields				
Course number	Title	Lecturer	ECTS	hrs/week
1825	OPERATING SYSTEMS	ZELLER – APPLIED COMPUTER SCIENCE	4	4
6763	USER EXPERIENCE DESIGN - OPTIONAL IN ENGLISH	Ehret, Gräf – Media Design	10	6
7149	INTERACTION DESIGN – OPTIONAL IN ENGLISH	EHRET – MEDIA DESIGN	5	4
7217	GAME DESIGN - OPTIONAL IN ENGLISH	Scherzer- Media Design	5	4
7667	DESIGING AR/ VR EXPERIENCE- OPTIONAL IN ENGLISH	Lauterbach – Media Design	4	5
7214	MOTION DESIGN- OPTIONAL IN ENGLISH	Lauterbach – Media Design	10	8
7090	AUTONOMOUS MOBILE ROBOTS	Schneider/ Stähle	5	4
8965	COMPUTER AIDED DESIGN - CAD	BAUMGART – TECHNOLOGY MANAGEMENT	2	2
10813	mThe Economics of the Welfare State	HAUPT	2	2



Master level - lectures in English language in various study fields				
Course number	Title	Lecturer	ECTS	Hrs/week
3008	ARTIFICIAL INTELLIGENCE FOR MASTER	ERTEL	5	4
3059	LAB ON ARTIFICIAL INTELLIGENCE FOR MASTER	HARTH - PEM	3	2
5812	Machine Learning for Intelligent Systems – optional in English	Schneider - IN	5	4
6279	COMPUTER GRAPHICS FOR MASTER- OPTIONAL IN ENGLISH	SCHERZER - IN	5	4
6768	GAME DEVELOPMENT FOR MASTER – OPTIONAL IN ENGLISH	SCHERZER - IN	5	4
7532	Shader Programming - optional in English	Scherzer - IN	5	4
7183	SIGNAL PROCESSING 2 AND LAB	SCHULTER-IN	5	4
7954	DEEP LEARNING	SCHERZER - IN	5	4
3939	COMPUTATIONAL METHODS IN ENGINEERING	HARTH - PEM	3	2

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 – <a href="https://www.rwu.de/hochschule/fakultaeten/soziale-arbeit-gesundheit-und-pflege#studiengaenge">https://www.rwu.de/hochschule/fakultaeten/soziale-arbeit-gesundheit-und-pflege#studiengaenge</a>



Ir	International Academy - one or two semesters of interdisciplinary study program in English (taking single/ individual courses is possible)				
10102	CROSS CULTURAL COMMUNICATION AND TEAM WORK	Нонг	3	2	
10105	Practical Sales Project Seminar	Fuss	5	2	
10106	RESEARCH METHODS IN BUSINESS MARKETING	KADAM	5	2	
7184	B2B MARKETING & SALES	Ahmadi, Niersbach	5	2	
10107	Entrepreneurial Leadership	Opas Piansoongnern	3	2	
10357	Consumer Psychology	Walter	3	2	
4906	BUSINESS ANALYSIS	Neff	3	2	
10613	THE ECONOMICS OF THE WELFARE STATE	HAUPT	2	3	



### Language Lectures and Intercultural Seminars (CLIC)

## German as a foreign language = Deutsch als Fremdsprache (DaF) + Support Courses throughout the semester

Course number	Title	Lecturer	ECTS	Hrs/week
4382	DaF A1		4	4
	Attention: The course starts with a two-week intensive course in March 2024 and will be continued on Wed from			
	08:30–13:00 throughout the semester			
4634	DaF A2		4	4
	Attention: The course starts with a two-week intensive course in March 2024 and will be continued on Wed from			
	08:30–13:00 throughout the semester			
XXXX	DaF A2 – Additional Support Course, starting Oct ?			
4630	DaF B1		4	4
	Attention: The course starts with a two-week intensive course in March 2024 and will be continued on Wed from			
	08:30–13:00 throughout the semester			
10687	DaF B1 – Additional Support Course, starting Oct 12 – <mark>ONLINE</mark>			
4631	DaF B2		4	4
	Attention: The course starts with a two-week intensive course in March 2024 and will be continued on Wed from			
	08:30–13:00 throughout the semester			
10688	DaF B2 – Additional Support Course – WRITING – <mark>ONLINE</mark>			
10079	DaF C1.2, starts Oct 11 - ONLINE		2	4



	English and other languages – examples from summer semester 2023 (same or similar courses will be offered in the summer semester 2024 but the offer will be finalized a few weeks before semester begin only!)			
Course number	Title	Lecturer	ECTS	Hrs/week
10214	English B1 (originally for EU1+2/ FT1+2/ M1+2 students) – Module with B2, pls discuss with CLIC if you can participate for less credits	Le Roy	-	2
10215	English B2 (originally for EU1+2/ FT1+2/ M1+2 students) – Module with B1, pls discuss with CLIC if you can participate for less credits	Le Roy	5 (if you do both B1 + B2)	2
7753, 8168	Professional English, B2 (two groups)	Walz	5	4
3318	Professional English 1, B2 (originally for BM2 students – two groups) – Module in connection with Prof. Engl 2. If you want to participate, please discuss with CLIC, if you can do that for less credits!	Sheehy	2 (Module 5)	2
6848	Professional English 1, B2 (originally for TW1 students - Module in connection with Prof. Engl 2. If you want to participate, please discuss with CLIC, if you can do that for less credits!	Connor	2 (Module 5)	2
7367	Professional English 2, B2 (four groups) originally forBM3 students- Module in connection with Prof. Engl 1. If you want to participate, please discuss with CLIC, if you can do that for less credits!	Ironside, Walz, Boerger	2 (Module 5)	2
7137	Professional English 2, B2 (originally for TW2 students) – Module in connection with Prof. Engl 1. If you want to participate, please discuss with CLIC, if you can do that for less credits!	Connor	2 (Module 5)	2
10708	English Conversation with a bit of Grammar – Intermediate B1-B2	Rivière	2	2
10210	Improve your speaking skills C1	Hopkins	2	2
10194	ESP – Student EQ Edge – Emotional Intelligence and your Success	Hopkins	2	2
8179	ESP – Get on the right track	Hopkins	2	2
7398	ESP – English for Marketing	Brady – Kühnapfel	2	2
10342	ESP -Vital Skills for the future Manager / Leader	Hopkins	2	2
10598	Intercultural Team- and project management	De Silva	5	4
156	Italian, A1.1 for beginners	Esposito-Depprich	2	2
4370	Italian, A1.1	Esposito-Depprich	2	2
6415	Italian, A1.2	De Pascale Speck	2	2
10712	Italian, B1, Conversazione in lingua Italiana livello B1	De Pascale Speck	2	2
10205	French, A1.1. for beginners	Ristau	2	2



3324	French, A1.2	Ristau	2	2
3985	French, A2.1	Ristau	2	2
4220	Brazilian – Portuguese, A1.1 – for beginners	Neudert Ramos	2	2
6312	Brazilian - Portuguese, A1.2	Neudert Ramos	2	2
3322	Japanese, A1.1 (for beginners)	Akiya, Michiko	2	2
6313	Japanese, A1.2 (from Lecture 5 or basic knowledge required)	Akiya, Michiko	2	2
10695	Japanese, A2.2	Akiya, Michiko	2	2
10002	A1.1 Spanish for Beginners	Buhrmann, Kösler	2?	3
2039	Spanish, A2.1	Buhrmann	2	2
3979	Spanish, B1.1	Buhrmann	2	2
16	Russian, A1.1 for beginners	Manal	2	2
5578	Russian, A1.2	Manal	2	2
4612	Turkish, A1 for beginners	Dumann	2	2
10642	Turkish A2	Dumann	2	2
10690	Turkish, B1, Structures of communication	Duman	2	2
6392	Creating a professional CV and conducting a job-winning interview	Ironside	2	Block Seminar,
10709	Bridging cultures for Global Cooperation	Boerger	2	Block Seminar,
10473	Moderating Meetings and Work Sessions	Rudolph	2	Block Seminar,.
4656	Intercultural Sensitization	De Pascale Speck & Team	1	Block Seminar,
7395	Fit für wissenschaftliches Schreiben, High-level of German knowledge required (at least B2, possibly C1, pls check with CLIC) – ONLINE	Kong, Vees, Zinke	2	2