Curriculum EL (FT)		HPW	Type						Examination form		CP	HPW						
			V	SL	S	Ü	Pra	Pro	Attestation	graded		WS1	SS2	WS3	SS4	WS5	SS6	WS7
1st Semester																		
EL 1 2000	Introductory Mathematics	8	5			3				x	8	8						
EL 1 2008	Statics and Strength of Materials	4	2			2				x	5	4						
EL 1 2011	Programming	4	2				2		x	x	5	4						
EL 1 2013	Business Economics and Project Management	4	3				1		x		5	4						
EL 1 2300	Introduction to Electrical Engineering	3	2		1				x		3	3						
EL 1 2301	Electrical Engineering I	4	2			1	1		x	x	5	4						
2nd Semester																		
EL 2 2001	Applied Mathematics	8	5			3				x	7		8					
EL 2 2003	Physics	4	2			1	1		x	x	5		4					
EL 2 2012	Advanced Programming	4	2				2		x	x	5		4					
EL 2 2302	Electrical Engineering II	4	2			1	1		x	x	5		4					
EL 2 2303	Digital Electronics	4	2			1	1			x	5		4					
EL 2 2304	Analog Electronics	4	2			1	1		x	x	5		4					
3rd Semester																		
EL 3 2014	Cross-Cultural Management and Creativity	4	2			2			x		5			4				
EL 3 2306	Microcontrollers	4	2				2		x	x	5			4				
EL 3 2307	Fields and Waves	4	2			2				x	5			4				
EL 3 2308	Signal Transmission	4	2			1	1			x	5			4				
EL 3 2309	Object-oriented Programming	4	2				2			x	5			4				
EL 3 2901	Drives and Power Electronics	4	2			2				x	5			4				
4th Semester																		
EL 4 2323	Materials and Manufacturing of Electronics	4	3			1				x	5				4			
EL 4 2311	Embedded Systems	4	2				2			x	5				4			
EL 4 2310	Signal Processing & Measurement Technology	4	1			1	2			x	5				4			
EL 4 2902	System Theory and Controls	4	2			1	1			x	5				4			
	Focus Field (see: Catalogue Individual Subjects: Focus Field Subjects)																	
	Focus Field Subject 1	4									5				4			
	Focus Field Subject 2	4									5				4			
5th Semester																		
EL 5 2015	Group Project	1						1	x		5					1		
EL 5 2312	Microelectronic Control Systems	4	2				2		x		5					4		
EL 5 2313	Model-based Hardware Design	4	2			1	1			x	5					4		
EL 5 2314	Practical Electronics	4	2				2			x	5					4		
	Focus Field (see: Catalogue Individual Subjects: Focus Field Subjects)																	
	Focus Field Subject 3	4									5					4		
	Focus Field Subject 4	4									5					4		
6th Semester																		
EL 6 2016	Internship / Semester abroad								x		30							
7th Semester																		
EL 7 2017	Thesis									x	12							
EL 7 2018	Colloquium									x	3							
EL 7 2510	Technology and Innovation Management	4	2				2			x	5							4
EL 7 2512	Entrepreneurship	2						2	x		2							2
	Elective (see: Catalogue of Individual Subjects: Electives)	3									5							3
Overview		**133**	**V**	**SL**	**S**	**Ü**	**Pra**	**Pro**	**Attestation**	**graded**	**210**	**27**	**28**	**20**	**24**	**21**		**9**
		HPW	**Type**						**Examination form**		**CP**	**WS1**	**SS2**	**WS3**	**SS4**	**WS5**	**SS6**	**WS7**
															HPW			

Catalogue Individual Subjects EL		HPW	Type						Examination form		CP	HPW						
			V	SL	S	Ü	Pra	Pro	Attestation	graded		WS1	SS2	WS3	SS4	WS5	SS6	WS7
Focus Field Subjects *//***/******																		
	Focus Field Electronics	**12**	**8**			**4**	**0**				**20**				**6**	**6**		
EL 4 2315	Low Power Design	3	2			1				x	5				3			
EL 4 2316	Design of Env. Friendly Circuits and Recycling of Electr.	3	2			1				x	5				3			
EL 5 2317	Optoelectronics	3	2			1				x	5					3		
EL 5 2318	Nanoelectronics	3	2			1				x	5					3		
	Focus Field Communication	**14**	**7**			**3**	**4**				**20**				**6**	**8**		
EL 4 2319	Mobile Information Devices	3	2				1			x	5				3			
EL 4 2320	Audio & Speech Processing	3	2				1			x	5				3			
EL 5 2321	Biomedical Electronics	4	2			2				x	5					4		
EL 5 2322	Networks in Industrial Automation	4	1			1	2			x	5					4		
	Focus Field Controls	**16**	**8**			**6**	**2**				**20**				**8**	**8**		
EL 4 2002	Numerical Mathematics	4	2			2				x	5				4			
	Foreign Language / Free Elective (Modelling and Simulation)	4	2			2				x	5				4			
EL 5 2903	Controls	4	2			1	1			x	5					4		
	Foreign Language / Free Elective (Sensors & Actuator Networks)	4	2			1	1			x	5					4		
Electives																		
EL 7 2019	Scientific Methods (Block or Online)	4	2			2			x		5							4
EL 7 2020	Foreign Language								x		5							
EL 7 2021	Module from any other Bachelor study course HSRW								x	x	5							

Explanations / Conditions

* The faculty reserves the right to determine a minimum number of participants for offering a subject in the focus fields / electives, as well as a maximum number of participants. The possibility of obtaining the required number of credit points remains unaffected.

** A maximum of 5 credits may be earned via an elective from the catalogue of any bachelor's degree programme at Rhine-Waal University of Applied Sciences with the approval of the Examination Board of the Faculty of Technology and Bionics.

*** The Faculty of Technology and Bionics reserves the right to amend its catalogue of electives.

**** Due to time tabling constraints, subjects from different focus fields and electives may be offered concurrently.

Abbreviations

HPW Hours per week (also: Semesterwochenstunden / SWS)

CP Credit points