

Curriculum

ECTS Subject code T IE SN

- **T** - type of course: **B** for BEng, **M** for MEng
- **WIFg** – “Business Informatics” in German
- **FBEE** – F fundamental, B - bachelor program, EE – electrical engineering group of specialities
- **SN** - subsequent number of the subject

Lectures (L), tutorials (Tut.), labs (Lab.) weekly;

exam (E), continuous assessment (CA); semester projects (SP)/ semester assignment (course work) (SA)

No	SUBJECT	Week Load					Assessment				ECTS subject code	ECTS credits
		L	Tut.	Lab.	Self study	Total	E	CA	SP	SA		

SEMESTER I

1	Mathematics – Preliminary.	4	2	0	10	16	1				BWIFg01	8
2	Introduction to Business Sciences	2	2	0	10	14	1				BWIFg02	7
3	Programming And Computer Use	2	0	3	9	14	1		1		BWIFg03	7
4	Fundamentals Of Informatics	3	1	2	10	16	1			1	BWIFg04	8
5	German Language	0	(8)	0	(2)	(10)		1			BWIFg05	-
6	Sports	0	(3)	0	0	(3)					BWIFg06	-
	Total	11	5	5	39	60	4	1	1	1		30

SEMESTER II

7	Mathematics 1– Linear Algebra	3	3	0	10	16	1				BWIFg07	8
8	Computer Systems (Technical Informatics I)	2	0	2	6	10	1				BWIFg08	5
9	Introduction to Economics	2	2	0	6	10	1				BWIFg09	5
10	Logic	2	0	2	6	10		1		1	BWIFg10	5
11	Modeling	2	0	1	5	8	1				BWIFg11	4
12	Key Competences And Methods 1	2	0	0	4	6				1	BWIFg12	3
13	German Language	0	(8)	0	(2)	(10)		1			BWIFg13	-
14	Sports	0	(3)	0	0	(3)					BWIFg14	-
	Total	13	5	5	37	60	4	2	0	2		30

SEMESTER III

15	Mathematics 2– Analysis	4	2	0	10	16	1				BWIFg15	8
16	Algorithms And Data Structures	3	0	2	7	12	1				BWIFg16	6
17	Basics Of Theoretical Informatics	3	0	2	7	12	1				BWIFg17	6
18	Corporate accounting	2	1	0	5	8	1				BWIFg18	4
19	Key Competences And Methods 2	2	0	0	4	6		1			BSCTg19	3
20	About Germany 1	1	1	0	4	6		1		1	BWIFg20	3
21	English Language	0	(3)	0	(3)	(6)					BWIFg21	-
22	Sports	0	(3)	0	0	(3)					BWIFg22	-
	Total	15	4	4	37	60	4	2	0	1		30

No	SUBJECT	Week Load					Assessment				ECTS subject code	ECTS credits
		L	Tut.	Lab.	Self study	Total	E	CA	SP	SA		

SEMESTER IV

23	Mathematics 3	3	2	0	7	12	1				BWIFg23	6
24	Theoretical Informatics 2	2	0	2	6	10	1				BWIFg24	5
25	Practical Module – Key Competences	0	2	0	8	10			1		BWIFg25	5
26	Computer networks	2	0	2	6	10	1				BWIFg26	5
27	IT Project Management	1	1	0	6	8		1			BWIFg27	3
28	Databases	2	0	2	6	10	1				BWIFg28	5
29	English Language	0	(3)	0	(3)	(6)		1			BWIFg29	1
30	Sports	0	(3)	0	0	(3)					BWIFg30	-
Total		10	5	6	39	60	4	2	0	1		30

SEMESTER V

31	Fundamentals of Business Informatics 1 – Fundamentals of Business Informatics	2	2	0	6	10	1				BWIFg31	5
32	Optional Subject In Module – (List 1)	2	2	0	6	10		1			BWIFg32	5
33	Fundamentals of Business Informatics 2 – Fundamentals of Quality Management	2	2	0	6	10	1				BWIFg33	5
34	Technical Informatics II	2	0	2	6	10	1			1	BWIFg34	5
35	Optional Subject In Module – (List 2)	2	0	2	6	10		1		1	BWIFg35	5
36	Optional Subject In Module – (List 3)	2	2	0	6	10		1			BWIFg36	5
Total		12	8	4	36	60	4	2	0	2		30

SEMESTER VI

37	Scientific Seminar	0	3	0	3	6		1	1		BWIFg37	3
38	Intelligent Systems	2	0	2	6	10	1				BWIFg38	5
39	IT Project	0	0	0	12	12			1		BWIFg39	6
40	Modern methods of business informatics 1 - Business models for e-business	2	2	0	6	10	1				BWIFg40	5
41	Optional Subject In Module – (List 4)	2	2	0	6	10	1				BWIFg41	5
42	About Germany 2	1	1	0	0	2		1			BWIFg42	1
43	Optional Subject In Module – (List 5)	2	2	0	6	10	1				BWIFg43	5
Total		9	10	2	39	60	4	2	2	0		30

Lists of optional modules

List 1		ECTS credits - 5
1	Fundamentals of Marketing	BWIFg32.1
2	Decision-making theory	BWIFg32.2
List 2		ECTS credits - 5
1	Bioinformatics	BWIFg35.1
2	Evolutionary algorithms	BWIFg35.2
3	Interactive systems	BWIFg35.3
4	Fundamentals Of Image Processing	BWIFg35.4
List 3		ECTS Credits - 5
1	Information Technologies in Organizations	BWIFg36.1
2	Fundamentals of Business Informatics 3 – Innovation and Project Management	BWIFg36.2
List 4		ECTS credits - 5
1	Usability and Aesthetics	BWIFg41.1
2	Modern methods of business informatics 2 - Entrepreneurship	BWIFg41.2
List 5		ECTS credits – 5
1	Application Systems	BWIFg43.1
2	Modern methods of business informatics 3 – International Economy	BWIFg43.2
List 6		ECTS credits - 5
1	Investments and Financing	BWIFg45.1
2	Ethics in the digital age	BWIFg45.2
3	Gpu programming	BWIFg45.3
List 7		ECTS credits - 5
1	Organization and Personal	BWIFg46.1
2	Sustainability of ecological systems	BWIFg46.2
3	Intelligent Data Analysis	BWIFg46.3
List 8		ECTS credits - 5
1	Operations Research	BWIFg47.1
2	Information Retrieval	BWIFg47.2
3	Introduction in Deep Learning	BWIFg47.3
List 9		ECTS credits – 5
1	Fundamentals of Computer Vision	BWIFg48.1
2	Neuro – Fuzzy Systems	BWIFg48.2
3	IT – Operations management	BWIFg48.3
4	Machine Learning	BWIFg48.4