

Curriculum

ECTS Subject code T IE SN

- **T** - type of course: **B** for BEng, **M** for MEng
- **CSTg** – “Computer Systems and Technologies” in German
- **FBEE** – F fundamental, B - bachelor program, EE – electrical engineering group of specialties
- **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	Computer Games	2	0	2	8	12	1				MCSTg01	6
2	Cloud computing	2	0	2	8	12	1				MCSTg02	6
3	Optional Subject – (List 1)*	2	0	2	8	12	1				MCSTg03	6
4	Optional Subject in Module – (List 2)	2	0	2	8	12	1			1	MCSTg04	6
5	Key Competences III	2	0	2	8	12		1			MCSTg05	6
Total		10	0	10	40	60	4	1	0	1		30

SEMESTER II

6	Selected Topics in Computer Graphics	2	0	2	8	12	1				MCSTg06	6
7	Optional Subject – (List 3)*	2	0	2	8	12	1				MCSTg07	6
8	Optional Subject in Module – (List 4)	2	0	2	8	12	1			1	MCSTg08	6
9	Optional Subject in Module – (List 5)	2	0	2	8	12	1				MCSTg09	6
10	Team Project	0	2	0	10	12			1		MCSTg10	6
Total		8	2	8	42	60	4	0	1	1		30

SEMESTER III

11	Master Work										MCSTg11	15
Total												15

* The Students choose from lists 1 and modules with equal sequence numbers.

Lists of optional modules

List 1		ECTS credits - 6	
1	Logistics I		MCSTg03.1
2	Modern Telecommunications		MCSTg03.2
3	Design And Programming Process		MCSTg03.3
4	Product Lifecycle Management		MCSTg03.4
List 2		ECTS credits - 6	
1	Advanced Database Models		MCSTg04.1
2	Natural Language Processing		MCSTg04.2
3	Computational Geometry		MCSTg04.3
4	Business Mining for CRM Systems		MCSTg04.4
5	Intelligent Methods and Tools for Data Analysis		MCSTg04.5
6	Methods for analysis and protection of information security		MCSTg04.6
List 3		ECTS credits - 6	
1	Logistics II		MCSTg07.1
2	Network Management		MCSTg07.2
3	Methods For Final Processing		MCSTg07.3
4	Product Development		MCSTg07.4
List 4		ECTS credits - 6	
1	Reliable distributed systems		MCSTg08.1
2	Bioinformatics		MCSTg08.2
3	Process Management		MCSTg08.3
4	Technical Systems in Informatics		MCSTg08.4
5	Mobile Computer Communications		MCSTg08.5
6	UML-Modelling		MCSTg08.6
7	Computer aided surgery		MCSTg08.7
8	Startup Engineering III		MCSTg08.8
List 5		ECTS credits - 6	
1	Embedded Communication Networks		MCSTg09.1
2	Distributed Real Time Systems		MCSTg09.2
3	Transaction Management		MCSTg09.3
4	Rigorous Development of Applied Services		MCSTg09.4
5	Advanced Machine Learning		MCSTg09.5
5	Management of global IT-Systems		MCSTg09.6
5	Real Time Operating Systems		MCSTg09.7

List of additional modules**

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

12	Selected Topics of Data Bases	2	0	2	8	12	1				MCSTg12	6
13	Algorithm Engineering	2	0	2	8	12	1				MCSTg13	6
14	Information systems for environmental protection	2	0	2	8	12	1				MCSTg14	6
15	Selected Topics of IT – security (Seminar + Project)	2	0	0	10	12				1	MCSTg15	6
16	User Behavior Modeling (Seminar	2	0	0	10	12				1	MCSTg16	6

+ Project)																
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** Additional modules are offered only in the partner university in Germany