Computer Science Engineering BSc

	Subject name and Neptun Code	pre requirement	1st sem. Fall	2nd sem. Spring	3rd sem. Fall	4th sem. Spring	5th sem. Fall	6th sem. Spring	7th sem. Fall	cr.	
Natural Sciences	Mathematical Analysis I. (GEMAN151-B2a)	none	3 + 2							5	exam
	Linear Algebra and Discrete Mathematics (GEMAN102-B2a)	none	3 + 2							6	exam
	Mathematical Analysis II. (GEMAN161-B2a)	GEMAN151-B2a		3 + 2						5	term mark
	Discrete Mathematics II. (GEMAN122-B2a)	GEMAN102-B2a		2 + 2						5	term mark
	Data Structures and Algorithms (GEMAK121-B2a)	GEMAN102-B2a		2 + 2						5	exam
	Introduction into Physics (GEFIT010-B2a)	none		2 + 2						5	exam
	Probability Theory and Mathematical Statistics (GEMAK131-B2a)	none			2 + 2					5	exam
	Introduction to CAD Systems (GEAGT123-B2a)	none				2 + 2				5	exam
	Modern Physics (GEFIT014-B2a)	GEFIT010-B2a				2 + 0				2	exam
Economics and Social Sciences	Operations Management (GTVIM6001B-B2a)	none	2 + 0							3	exam
	Integrated ERP Systems (GEIAK120-B2a)	none			2 + 2					5	exam
	Management and Organization (GTVVE6002B-B2a)	none						2 + 2		5	exam
	Resource Planning (GEIAK155-B2a)	none						2 + 2		5	exam
Professional Subjects	Fundamentals of Programming (GEIAL311-B2a)	none	3 + 2							6	exam
	Computer Architectures (GEIAL301-B2a)	none	2 + 2							5	exam
	Object Oriented Programming (GEIAL313-B2a)	GEIAL311-B2a		2 + 2						5	exam
	Operating Systems (GEIAL302-B2a)	GEIAL301-B2a and GEIAL311-B2a		2 + 2						5	exam
	Database Systems I. (GEIAL322-B2a)	none			2 + 2					5	exam
	Computer Networks (GEIAL304-B2a)	GEIAL301-B2a			2 + 2					5	exam
	Software Technology (GEIAL314-B2a)	GEIAL313-B2a			2 + 2					5	exam
	Digital Systems (GEVAU195I-B2a)	none			2 + 2					5	exam
	Security in Computer Systems (GEIAL30B-B2a)	GEIAL302-B2a				2 + 2				5	exam
	Database Systems II. (GEIAL323-B2a)	GEIAL322-B2a				2 + 2				5	exam
	Software Technology Lab (GEIAL316-B2a)	GEIAL314-B2a				1 + 3				5	term mark
	Web Technologies Foundation (GEIAL33H-B2a)	GEIAL313-B2a				1 + 2				3	term mark
	Java Programming (GEIAL31A-B2a)	GEIAL313-B2a				2 + 2				5	exam
	Introduction into Artificial Intelligence (GEIAK130-B2a)	GEIAL311-B2a					2 + 2			5	exam
	Electrotechnics-Electronics (GEVEE050-B2a)	GEFIT010-B2a					2 + 2			5	exam
	Computer Graphics Programming (GEIAL31L-B2a)	GEIAL313-B2a					2 + 2			5	term mark
	Technical Communication (GEIAK100-B2a)	none	2 + 2							5	exam
	Design of Industrial IT Systems (GEIAK185-B2a)	GEIAL311-B2a						2 + 2		5	exam
	Advanced IT Technologies / SW Testing (GEIAL31H-B2a)	GEIAL316-B2a)						2 + 2		5	exam
	Windows Operating Systems (GEIAL30A-B2a)	none							2 + 2	5	exam
Specialisation in Web Technologies	Mobile Phone Programming (GEIAK335-B2a)	GEIAL313-B2a					2 + 2			5	exam
	Web Technologies - Client side (GEIAL331-B2a)	GEIAL33H-B2a					2 + 2			5	exam
	Data Management in Web Applications (GEIAL32K-B2a)	GEIAL322-B2a					2 + 2			5	term mark
	Web Technologies - Server Components (GEIAL334-B2a)	GEIAL331-B2a						2 + 2		5	exam
	Development of Distributed Web Applications (GEIAL519-B2a)	GEIAL313-B2a							2 + 2	5	term mark
	Degree Thesis (GEIALSzD2-BI-a_WT-B2a)	GEIAL334-B2a and min. 160 credits							0 + 8	15	term mark
Specialisation in Big Data and Computational Science (kódja: GE-BI-a_BD)	Computer and Database Servers (GEIAL54B-B2a, Kovács László József)	GEIAL302-B2a, GEIAL322-B2a					(2 + 2)			5	exam
	Big Data Architectures (GEIAK186-B2a, Nehéz Károly)	GEIAL322-B2a					2 + 2			5	exam
	Data Analysis and Machine Learning (GEIAL52B-B2a, Kovács László József)	GEIAL322-B2a					2 + 2			5	exam
	Development of Cloud Applications (GEIAK187-B2a, Nehéz Károly)	GEIAL313-B2a						2 + 2		5	term mark
	Development of Distributed Web Applications (GEIAL519-B2a, Kriszán Zoltán)	GEIAL313-B2a							2 + 2	5	term mark
	Degree Thesis (GEIALSzD2-BI-a_BD-B2a, Kovács László József)	GEIAK187-B2a and min. 160 credits							0 + 8	15	term mark
	Physical Education 1. (ETTESME1A)		0 + 2							0	signature
	Physical Education 2. (ETTESME2A)			0 + 2						0	signature
	Summer Internship (GEIALSzGyBI-a-B2a)*	enrollment for specialization							0	0	signature
	optional 1: Optional by the program; e.g.										
	Advanced Java (GEIAL31M-B2a)	GEIAL31A-B2a						2 + 2		5	exam
	Embedded Systems (GEVAU519-B2a)	GEVAU195I-B2a									
	optional 2: Common knowledge optional from the institutional curriculum								2 + 2	5	exam
cr/sem.			**30**	**30**	**30**	**30**	**30**	**30**	**30**	**210**	

***Obligatory: minimum of 8 weeks, preferably after the 6th semester**