

PTE-TTK CS BSc curriculum 2017

ENGLISH COURSE TITLE	COURSE TYPE / EXAM	SEMESTER (H-WEEK)/(H-SEMESTER)						CREDIT	PREREQUISITE	INSTRUCTOR-IN-CHARGE
		1	2	3	4	5	6			
1. Obligatory courses								132		
Elementary linear algebra	Pres+Prac/Coll.	2+2						4		Dr. Koniorczyk Mátyás
Calculus I	Pres+Prac/Coll.	2+2						5		Dr. Pap Margit
Calculus II	Pres+Prac/Coll.		2+2					5	Calculus I	Dr. Pap Margit
Probability and statistics	Pres+Prac/Coll.			2+1				3		Dr. Figyik B. András
Mathematical logics	Pres/Coll.			2+0				2		Dr. Jenei Sándor
Numerical methods I	Pres+Prac/Pract				2+2			5	Elementary linear algebra	Király Balázs
Numerical methods II	Prac/Pract					0+2		2	Numerical methods I	Király Balázs
Operations research	Prac/Pract					1+2		3	Elementary linear algebra	Király Balázs
Discrete mathematics I	Pres+Prac/Coll.	2+2						5		Dr. Szabó Sándor
Discrete mathematics II	Pres+Prac/Coll.				2+2			5		Dr. Szabó Sándor
Basics of computer science	Pres+Prac/Pract			2+2				5	Discrete mathematics I	Dr. Jenei Sándor
Elementary programming	Prac/Pract	0+4						4		Dr. Koniorczyk Mátyás
Programming I	Prac/Pract	0+4						5		Dr. Gimesi László
Programming II	Prac/Pract		0+4					5	Programming I	Dr. Gimesi László
Compilers and assemblers	Prac/Pract					0+2		2		Dr. Gimesi László
Algorithms, data structures	Pres+Prac/Coll.		2+2					5		Dr. Kilián Imre
Formal languages and automata	Pres+Prac/Coll.	2+2						5		Dr. Jenei Sándor
Distributed systems, parallel programming	Pres+Prac/Coll.					1+2		3		Zaválnij Bogdán, PhD
Relational databases	Pres+Prac/Coll.			2+2				5		Dr. Koniorczyk Mátyás
Methodology of programming I	Pres+Prac/Pract		2+2					5	Programming I	Dr. Kilián Imre
System engineering	Pres+Prac/Coll.			2+2				5		Dr. Kilián Imre
Professional communication	Pres+Prac/Pract		1+2					3		Zaválnij Bogdán, PhD
Operating systems	Pres+Prac/Coll.						2+2	5		Zaválnij Bogdán, PhD

Computer architectures	Pres/Coll.	2+0						2		Dr. Almási Gábor
Computer networks	Pres/Coll.		4+0					5		Dr. Mechler Mátyás Illés
Information and data security	Pres/Coll.						3+0	3		Dr. Koniorczyk Mátyás
Operation of IT systems	Prac/Pract				0+3			3		Horváth Zoltán
Control technology	Pres+Prac/Coll.						2+2	5		Dr. Laczkó József
Web programming I	Pres+Prac/Pract			2+2				5	Methodology of programming I	Rébay Viktor
State-of-art database systems	Pres+Prac/Coll.				1+2			3		Dr. Pauler Gábor
Methodology of programming II	Pres+Prac/Pract			2+2				5	Methodology of programming I	Dr. Kilián Imre
Software development technologies	Pres+Prac/Pract				1+3			5	Methodology of programming I	Kiss-Vincze Tamás
1.1 Completing TWO of the courses is compulsory								6		
PHP programming	Pres+Prac/Pract				1+2			3	Methodology of programming I	Rébay Viktor
Basics of Python	Pres+Prac/Pract				1+2			3	Methodology of programming I	Bodor András
Basics of Java	Pres+Prac/Pract				1+2			3	Methodology of programming I	Dr. Makkai Géza
Basics of C#	Pres+Prac/Pract				1+2			3	Methodology of programming I	Dr. Makkai Géza
2. Elective courses selected								12		
Applied linear algebra	Pres/Coll.		2+2					4		Dr. Koniorczyk Mátyás
Analysis II.	Pres/Coll.		2+2					5	Calculus I	Dr. Pap Margit
Analysis 3.	Pres+Prac/Coll.			2+2				4	Analysis II OR Calculus II.	Dr. Pap Margit
Analysis 4.	Pres+Prac/Coll.				2+1			5	Analysis 3 OR Calculus II.	Dr. Pap Margit
Analysis 5.	Pres+Prac/Coll.					1+2		3	Analysis 4 OR Calculus II.	Dr. Eisner Tímea
Complex functions	Pres+Prac/Coll.				2+2			4	Analysis 5 OR Calculus II.	Dr. Pap Margit
Chapters of Linear Algebra	Pres+Prac/Coll.				2+1			5	Elementary linear algebra	Dr. Simon Ilona
IT Life (Openminds)	Prac/Pract					0+3		4		Dr. Pauler Gábor

Programming languages	Pres/Coll.				2+0			4		Dr. Almási Gábor
SAP ABAP Programming	Prac/Pract						0+2	4	Methodology of programming I	Dr. Pauler Gábor
Vaadin backend-frontend framework	Prac/Pract						0+3	4	Methodology of programming I	Dr. Pauler Gábor
Basics of Android	Prac/Pract						0+3	4		Dr. Pauler Gábor
Non-imperative languages	Pres+Prac/Coll.						2+1	3		Dr. Kilián Imre
Basics of mobile application development	Pres+Prac/Pract				2+2			5	Methodology of programming I	Rébay Viktor
Server-side JAVA programming	Prac/Pract						0+2	3		Fischer Norbert
Business software development in JAVA	Prac/Pract						0+2	3	Methodology of programming I	János Zsolt
Working with SAP ERP 6.0 MM-PP-SD modules	Pres+Prac/Pract				2+2			5		Dr. Pauler Gábor
Basics of SAP ABAP programming	Pres+Prac/Pract					2+2		5		Dr. Pauler Gábor
Web programming II.	Pres+Prac/Pract				2+2			5	Web programming I.	Rébay Viktor
Microcontroller programming	Prac/Pract					2+2		4		Dr. Almási Gábor
Biorobotics	Pres+Prac/Coll.						2+2	5		Dr. Laczkó József
Handling of structured data in Python	Prac/Pract						0+2	2	Basics of Python	Dr. Almási Gábor
MATLAB I	Prac/Pract				0+3			3		Dr. Mechler Mátyás Illés
MATLAB II	Prac/Pract					0+2		2		Dr. Mechler Mátyás Illés
Computer game development	Prac/Pract						0+2	2		Kiss-Vincze Tamás
Basics of desktop publishing	Prac/Pract					0+3		3		Rébay Viktor
3. Facultative courses								10		
4. Thesis								20		
Thesis consultation I.						X		10		
Thesis consultation II.							X	10		
5. Professional practice (8 week)								0		