Curriculum of BA 60610500 – Computer Engineering (Computer Engineering)

1st semester	2nd semester	3rd semester	4th semester	5th semester	6th semester	7th semester	8th semester
PRG101 Programming 1 lectures 2/1 practical sessions 6 ECTS	PRG102 Programming 1 lectures 2/1 practical sessions 6 ECTS	DBM201 Database 2/1 lectures 1 practical sessions 6 ECTS	NWK201 Computer networks 2/1 lectures 1 practical sessions 6 ECTS	SIP301 Signal and image processing 2/1 lectures 1 practical sessions 6 ECTS	MUS301 Multi-agent systems 1 lectures 0/1 practical sessions 4 ECTS	GIT401 Geoinformation technologies 2/1 lectures 1 practical sessions 6 ECTS	QPR402 Qualification Practice 2 6 ECTS
PHY101 Physics I 1 lectures 1 practical sessions and laboratory 6 ECTS	PHY102 Physics I 1 lectures 0/1 practical sessions and laboratory 4 ECTS	CSF201 Fundamentals of Cyber Security 2/1 lectures 1 practical sessions 6 ECTS	AIF201 Fundamentals of artificial intelligence 2/1 lectures 1 practical sessions 6 ECTS	PCA301 Parallel computer architecture and programming 2 lectures 1 practical sessions 8 ECTS	EBS301 Embedded systems 2/1 lectures 1 practical sessions 6 ECTS	*Elective Subject* ITS407/ITS408 2/1 lectures 1 practical sessions 6 ECTS	GQW403 Graduation Qualification Work 14 ECTS
MTH101 Calculus 2/1 lectures 1 practical sessions 6 ECTS	MTH102 Differential equations 1 lectures 0/1 practical sessions 4 ECTS	DSA201 Data structure and algorithms 2/1 lectures 1 practical sessions 6 ECTS	WAC201 Create web applications 2/1 lectures 1 practical sessions 6 ECTS	OPS301 Operating systems 2/1 lectures 1 practical sessions 6 ECTS	IDP301 Individual project 2/1 practical sessions 4 ECTS	*Elective Subject* ITS409/ITS410 2/1 lectures 1 practical sessions 6 ECTS	*Elective Subject* ITS415/ITS416 2/1 lectures 1 practical sessions 6 ECTS
AWR101 Academic writing 2/1 practical sessions 4 ECTS	MTH103 Discrete structures 1 lectures 0/1 practical sessions 4 ECTS	EAC201 Electronics and circuits 2/1 lectures 1 practical sessions 6 ECTS	MTH204 Probability and statistics 2/1 lectures 1 practical sessions 6 ECTS	*Elective Subject* ITS303/ITS304 2/1 lectures 1 practical sessions 6 ECTS	QPR301 Qualification Practice 1 6 ECTS	*Elective Subject* ITS411/ITS412 2/1 lectures 1 practical sessions 6 ECTS	*Elective Subject* ITS417/ITS418 1 lectures 0/1 practical sessions 4 ECTS
FRL101 Foreign language I 2/1 practical sessions 4 ECTS	FRL101 Foreign language II 2/1 practical sessions 4 ECTS	CAO201 Computer organization 2/1 lectures 1 practical sessions 6 ECTS	*Elective Subject* ITS201/ITS202 2/1 lectures 1 practical sessions 6 ECTS	*Elective Subject* GEN301/GEN302 1 lectures 0/1 practical sessions 4 ECTS	*Elective Subject* GEN303/GEN304 1 lectures 0/1 practical sessions 4 ECTS	*Elective Subject* ITS413/ITS414 2/1 lectures 1 practical sessions 6 ECTS	
HUM101 The newest History of Uzbekistan 1 lectures 1 seminars 4 ECTS	HUM102 Religious studies 1 lectures 1 seminars 4 ECTS				*Elective Subject* ITS305/ITS306 2/1 lectures 1 practical sessions 6 ECTS		
	HUM103 Philosophy 1 lectures 1 seminars 4 ECTS						
6 exams	7 exams	5 exams	5 exams	5 exams	4 exams, Course project Practice Report	5 exams	2 exams, Practice Report, State Attestation
30 ECTS	30 ECTS	30 ECTS	30 ECTS	30 ECTS	30 ECTS	30 ECTS	30 ECTS
TOTAL: 240 ECTS							

Subjects included in the curriculum of the educational program is divided into 6 main blocks, which are highlighted in the appropriate color:

Languages	General		Math and Science		
Humanities	Fundamental		Core		

**Elective subjects for the Educational program BA 60610500 – Computer Engineering
(Computer Engineering)**

№	Code	1th subject	2nd subject
1.	ITS201/ITS202	Application Software Package	Computer architecture
2.	GEN301/GEN302	Pedagogy. Psychology	Ecology
3.	GEN303/GEN304	Power supply of information communication systems	Life safety
4.	ITS303/ITS304	Computer Modeling	3D Technology
5.	ITS305/ITS306	Data communication	Virtual Reality
6.	ITS407/ITS408	Analyzing geodata based on Python	Multi-core processor architecture
7.	ITS409/ITS410	Multimedia Database	Bioinformatics and Biomechanics
8.	ITS411/ITS412	Cloud Computing	Distributed systems
9.	ITS413/ITS414	Data Mining	HPC System
10.	ITS415/ITS416	Big data management	Computer Vision
11.	ITS417/ITS418	Big data processing technologies and methods	Programming Computer Vision with Raspberry Pi