

Computer Engineering										
Sem ester	CODE	Title	Prerequisite	ECTS	Contact Hours	Independent Work	Status	Instructor	EQE Module	ABET Module
1	MATH150	Calculus I	No Prerequisite	6	62	88	mandatory	Shalva Beriashvili	Free Component	Math & Basic Sciences
1	PHYS195	Basics of Physics I (including Lab)	Co-requisite: MATH150	8	77	123	mandatory	Giorgi Dalakishvili, Iuri Baghaturia, Shota Garuchava	Free Component	Math & Basic Sciences
1		Practical Course of English Language I	No Prerequisite	6	90	60	mandatory	English Language Center	Free Component	General Education
1	P737	Academic Techniques	No Prerequisite	6	34	116	mandatory	Center of Academic Techniques	Free Component	General Education
1	CS50	Introduction to Programming	No Prerequisite	6	80	70	mandatory	Eter Ivanelashvili, Liana Khandolishvili	Major	Engineering
2	MATH151	Calculus II	MATH150	6	62	88	mandatory	Shalva Beriashvili	Free Component	Math & Basic Sciences
2	PHYS196	Basics of Physics II	PHYS195	6	47	103	mandatory	Giorgi Dalakishvili, Shota Garuchava	Free Component	Math & Basic Sciences
2		Practical Course of English Language II	Practical Course of English Language I	6	90	60	mandatory	English Language Center	Free Component	General Education
2	DE112	Mathematical Foundation of Computing	MATH150, CS50	6	48	102	mandatory	Maia Mrevlishvili	Major	Math & Basic Sciences
2	DE111	Computer Organization	CS50	6	68	82	mandatory	Amiran Malania	Major	Engineering
3	MATH252	Calculus III	MATH151	6	62	88	mandatory	Shalva Beriashvili	Free Component	Math & Basic Sciences
3		Practical Course of English Language III	Practical Course of English Language II	6	90	60	mandatory	English Language Center	Free Component	General Education
3	MATH254	Introduction to Linear Algebra	MATH151	6	48	102	mandatory	Shalva Beriashvili	Free Component	Math & Basic Sciences
3	EE210	Circuit Analysis I	PHYS196, MATH151	6	62	88	mandatory	Zurab Ratiani	Major	Engineering
3	CE111	Procedural Programming with C	CS50	6	48	102	mandatory	Giorgi Partskhaladze, Giorgi Modebadze	Major	Engineering
4	EE300	Computational and Statistical Methods	MATH252	6	62	88	mandatory	Khatia Vashakmadze	Major	Math & Basic Sciences
4	CS312	Computer and Data Networks	DE111	6	48	102	mandatory	Giorgi Modebadze	Major	Engineering
4	CS221	Algorithms and Data Structures	CS50	6	48	102	mandatory	Giorgi Partskhaladze	Major	Engineering
4		Practical Course of English Language IV	Practical Course of English Language III	6	90	60	mandatory	English Language Center	Free Component	General Education
4	EE310	Circuit Analysis II	EE210, MATH254	6	62	88	mandatory	Zurab Ratiani	Major	Engineering
5	CE375	Embedded Systems	DE111, CE111, DE112	6	63	87	mandatory	Tsotne Putkaradze	Major	Engineering
5	DE101	Introduction to Operating Systems	DE111	6	48	102	mandatory	Giorgi Modebadze	Major	Engineering
5	CE470	Digital Circuits	EE310, DE112	6	32	118	mandatory	Tsotne Putkaradze	Major	Engineering
5	EE410	Signals and Systems	EE300, EE310	6	47	103	mandatory	Ivane Darsavelidze	Major	Engineering
5	P432	Introduction to Modern Thought I	No Prerequisite	6	31	119	mandatory		Free Component	General Education
6		Elective: from free component		6			elective	Business School	Free Component	General Education
6	T077	Architecture and Programming of Microprocessors	DE111, CE470	6	62	88	mandatory	David Chkhaidze	Major	Engineering
6	MATH311	Principles of Numerical Methods	MATH151	6	47	103	mandatory	Shalva Beriashvili	Major	Math & Basic Sciences
6	CS326	System Programming	DE111	6	77	73	mandatory	Giorgi Modebadze	Major	Engineering
6		Elective		6			elective		Major	Engineering
7	T028	IT Project Management	CS50	6	32	118	mandatory	Nino Kodzakhidze	Major	Engineering
7	CS223	Introduction to Cybersecurity	CS312	6	48	102	mandatory	Giorgi Akhalaia	Major	Engineering
7	CE490A	Senior Design Project A	EE310, CE375, T077, CS326	6	34	116	mandatory	Paata Gogishvili, Archil Gvimradze, David Chkhaidze	Major	Engineering
7		elective		6			elective		Major	Engineering
7		elective		6			elective		Major	Engineering
8	CE490B	Senior Design Project B	CE490A	6	48	102	mandatory	Paata Gogishvili, Archil Gvimradze, David Chkhaidze	Major	Engineering
8		elective: Science		6			elective		Free Component	Math & Basic Sciences
8		elective		6			elective		Major	Engineering
8		elective		6			elective		Major	Engineering
8		elective		6			elective		Major	Engineering
Elective Courses										
6	U837	Drones	No Prerequisite	6	47	103	elective	Mariam Gogiasvili	Major	Engineering
6	CE470L	Digital Logic Laboratory	CE470	6	48	102	elective	Tsotne Putkaradze	Major	Engineering
6	S826	Introduction to Computer Modeling	CE111, MATH151	6	63	87	elective	Ivane Murusidze	Major	Engineering
6	T026	Software Architecture and Engineering	CE111, CS221	6	63	87	elective	David Nadaraia	Major	Engineering
6	CS212	Cyber Law and Ethics	No Prerequisite	6	47	103	elective	Mariam Gogiasvili	Major	Engineering
6	CS325	Computer Graphics	CE111, CS221	6	48	102	elective	Giorgi Partskhaladze	Major	Engineering
6	EE380	Electrical Energy Conversion	EE310	6	62	88	elective	Archil Gvimradze	Major	Engineering
7	CS214	Introduction to Computational Linguistics	CS50, DE112	6	47	103	elective	Irina Lobzhanidze	Major	Engineering
7	CS311	Programming Languages	CE111	6	48	102	elective	Guga Rukhadze	Major	Engineering
7	CS314	Distributed and Parallel Computing	CS312	6	48	102	elective	Erekle Magradze	Major	Engineering
7	CS322	Databases and Information Systems	CS312, CS221	6	47	103	elective	Mariam Vadachkoria, Giorgi Modebadze	Major	Engineering

7	CS413	Web Programming	CS50	6	48	102	elective	Davit Datunashvili	Major	Engineering
7	CS417	Introduction to Natural Language Processing	EE300	6	47	103	elective	Irina Lobzhanidze	Major	Engineering
7	EE458	Analog and Pulse Communication Systems	EE410	6	62	88	elective	Giorgi Veshapidze	Major	Engineering
7	EE480	Power System Analysis	EE380	6	62	88	elective	Giorgi Eriqashvili	Major	Engineering
7	EE534	Solid State Devices	PHYS196	6	62	88	elective	Zurab Ratiani	Major	Engineering
8	EE420	Feedback Control Systems	EE410	6	47	103	elective	Giorgi Veshapidze	Major	Engineering
8	CS321	Introduction to Machine Learning	CS50, MATH254	6	48	102	elective	Erekle Magradze	Major	Engineering
8	CS324	Artificial Neural Networks	EE300	6	63	87	elective	Paata Gogishvili	Major	Engineering
8	CS424	DevOps Technologies	DE101, CS312	6	48	102	elective	Erekle Mikiashvili	Major	Engineering
8	CS421	Mobile Applications Development	DE111	6	48	102	elective	Amiran Malania	Major	Engineering
8	CS425	Message Queueing and Data Streaming	Co-requisite: CS322	6	48	102	elective	Erekle Magradze	Major	Engineering
8	CS426	Big Data Systems	Co-requisite: CS322	6	48	102	elective	Erekle Magradze	Major	Engineering
8	EE450	Digital Signal Processing	EE410	6	47	103	elective	Shota Tsiskaridze	Major	Engineering
8	EE483	Power Distribution Systems	EE380	6	62	88	elective	Archil Gvimradze	Major	Engineering
8	DE114	Exploratory Data Analysis with Python	CS50	6	63	87	Elective	Gvantsa Mchedlidze	Major	Engineering
8	DE116	Hardware Design and Prototyping	CS50	6	47	103	Elective	Avtandil Mghebrishvili	Major	Engineering
8	DE117	Systems, sustainability and climate change - introduction	No Prerequisite	6	45	105	Elective	Murman Margvelashvili	Major	Engineering
8	UNI007	Introduction to Artificial Intelligence	No Prerequisite	6	48	102	Elective	Eter Ivanelashvili, Liana Khandolishvili	Major	Engineering
8	DE115	Computer and Society	No Prerequisite	6	35	115	Elective	Tamar Kalkhitashvili	Major	Engineering

Elective: General Education										
6	I562	Entrepreneurship	No Prerequisite	6	47	103	elective		Free Component	General Education
6	N085	Career Development Management	No Prerequisite	6	32	118	elective		Free Component	General Education
6	A155	Essentials of Management	No Prerequisite	6	32	118	elective		Free Component	General Education
6	A226	Introduction to Marketing	No Prerequisite	6	32	118	elective		Free Component	General Education
6	A159	Foundations of Business	No Prerequisite	6	32	118	elective		Free Component	General Education

Elective: Science										
8	CHEM100	Introduction to General Chemistry	No Prerequisite	6	34	116	Elective: Science	Ketevan Kupatadze	Free Component	Math & Basic Sciences
8	BIOL100	Biology for Engineers	No Prerequisite	6	32	118	Elective: Science	Natalia Kiknadze	Free Component	Math & Basic Sciences