

Course Requirements and Registration Priorities (Undergraduate), Spring 2019

#	Abbr	Title	Cr(US)	Cr(ECTS)	PreRequisite	CoRequisite	AntiRequisite	1st priority registration	2nd priority registration	3rd priority registration	4th priority registration
SST											
Mathematics											
1	MATH 417	Cryptography	3	6	MATH 273 Linear Algebra with Applications (84) (C and above) AND (MATH 251 Discrete Mathematics (85) (C and above) OR MATH 301 Introduction to Number Theory (613) (C and above) OR MATH 355 Introduction to Proofs (86) (C and above))			Mathematics	SST	SHSS	
Other											
Other											
2	T - 19020	History of America	3	6							
3	T - 19185	Human Rights: Contemporary issues	3	6							
4	T - 19186	Seminar in Geopolitics	3	6							
5	T - 19405	Language Teaching (English)	3	6							
6	T-EE 4220	Problstc Sig and Sys	3	6							
7	T-EE 4360	VLSI Design	3	6							
8	T-EE 4390	Microprocessors	3	6							
9	T-EE 4621	Auto Control Systems	3	6							
10	T-PO 323	Urban & Metropolitan Politics	3	6							
11	T-PO 407	Contemporary Political Thought	3	6							
12	T-SO 101	Introduction to Sociology	3	6							
13	T-SO 202	Social Problems	3	6							
SoM											
Nursing											
14	NUR 402	Principles of Healthcare Administration	4	8							

15	NUR 405	Issues and Trends in Nursing	4	8							
16	NUR 406.2	Medical-Surgical Nursing: Complex Management	4	8							
17	NUR 407	Capstone (Clinical +EBP Quality Improvement Research)	4	8							
SMG											
School of Mining and Geosciences											
18	GEOL 101	Fundamentals of Geology	3	6				1 year UG SMG	SEng, SST	SHSS	
19	GEOL 102	Fundamentals of Geology	3	6				1 year UG SMG	SEng, SST	SHSS	
20	SMG 100	Introduction to Natural Resources Extraction	3	6				1 year UG SMG	SEng, SST	SHSS	
SSH											
Biological Science											
21	BIOL 101	Biology for non-Science majors	3	6			BIOL 110 Modern Biology I (1070) (C- and above)		SHSS		
22	BIOL 120	Modern Biology II	3	6	BIOL 110 Modern Biology I (1070) (C and above)			Biological Sciences, Chemistry	SST	SHSS	
23	BIOL 231	Human Anatomy and Physiology II	4	8	BIOL 230 Human Anatomy and Physiology I (72) (C and above)			Biological Sciences	SST	SEng, SHSS, SMG	
24	BIOL 301	Molecular Biology of Cell with Lab	4	8	BIOL 120 Modern Biology II (177) (C and above) OR BIOL 120 Modern Biology II (177) (C and above) OR BIOL 120 Modern Biology II Lab (1445) (C and above) OR BIOL 120L Modern Biology II Laboratory (5443) (C and above)			Biological Sciences	SST	SEng, SHSS, SMG	
25	BIOL 341	Biochemistry I	3	6	CHEM 211 Organic Chemistry I (154) (C and above)			Biological Sciences	SST	SEng, SHSS, SMG	
26	BIOL 341L	Biochemistry I Lab	1	2		BIOL 341 Biochemistry I (2002) (C and above)		Biological Sciences	SST	SEng, SHSS, SMG	
27	BIOL 370	Genetics	3	6	BIOL 120 Modern Biology II (1195) (C and above)			Biological Sciences	SST	SEng, SHSS, SMG	
28	BIOL 420	Bioethics	3	6	BIOL 120 Modern Biology II (1195) (C and above)			3 year UG SST Biological Sciences, 3 year UG SST Chemistry, 4 year UG SST Biological Sciences, 4 year UG SST Chemistry			

29	BIOL 430	Histology with Laboratory	4	8	BIOL 230 Human Anatomy and Physiology I (72) (C and above)			Biological Sciences	SST	SEng, SHSS, SMG	
30	BIOL 440	Neuroscience	3	6	BIOL 230 Human Anatomy and Physiology I (72) (C and above)			Biological Sciences	SST	SEng, SHSS, SMG	
31	BIOL 450	Food Microbiology	3	6	BIOL 305 Introduction to Microbiology with Lab (1642) (C and above)			Biological Sciences	SST	SEng, SHSS, SMG	
32	BIOL 450L	Food Microbiology Lab	1	2	BIOL 305 Introduction to Microbiology with Lab (1642) (C and above)	BIOL 450 Food Microbiology (4609) (C and above)		Biological Sciences	SST	SEng, SHSS, SMG	
33	BIOL 456	Biology Research Design	3	6	BIOL 355 Critical Research Reasoning (1000) (C and above)			Biological Sciences	SST	SEng, SHSS, SMG	
34	BIOL 471	Light and Electron microscopy concepts and techniques	3	6	BIOL 110 Modern Biology I (1070) (C and above) AND BIOL 120 Modern Biology II (1195) (C and above) AND CHEM 101 General Chemistry I (113) (C and above) AND PHYS 161 Physics I for Scientists and Engineers with Laboratory (116) (C and above)			Biological Sciences	SST	SEng, SHSS, SMG	
35	BIOL 471L	Light and Electron Microscopy Concepts and Techniques-Lab	1	2		BIOL 471 Light and Electron microscopy concepts and techniques (4686) (C and above)		Biological Sciences	SST	SEng, SHSS, SMG	
36	BIOL 480	Molecular Immunology	3	6	BIOL 341 Biochemistry I (2002) (C and above) AND BIOL 410 Immunology (628) (C and above)			Biological Sciences	SST	SEng, SHSS, SMG	
37	BIOL 491	Graduation Project 2	4	8	BIOL 490 Graduation Project 1 (1581) (C- and above)			Through Add Course form only			
38	BIOL 492	Directed Study in Biology	3	6				Biological Sciences	SST	SEng, SHSS, SMG	
Chemistry											
39	CHEM 090	Chemistry for Non-Science majors	3	6				SHSS			
40	CHEM 092	Survey of Environmental Sciences for Non-Science Majors	3	6				SHSS			
41	CHEM 101	General Chemistry I	3	6				Biological Sciences, Chemistry	SST	SHSS	
42	CHEM 102	General Chemistry II	3	6	CHEM 101 General Chemistry I (113) (C and above)			Biological Sciences, Chemistry, SMG	SST	SHSS	

43	CHEM 102L	General Chemistry II lab	1	2	CHEM 101L General Chemistry I lab (179) (C and above)	CHEM 102 General Chemistry II (232) (C and above)		Biological Sciences, Chemistry, SMG	SST	SHSS	
44	CHEM 211	Organic Chemistry I	3	6	CHEM 102 General Chemistry II (232) (C and above)			Chemistry	Biological Sciences	SST	
45	CHEM 211L	Organic Chemistry I Lab	1	2	CHEM 101L General Chemistry I lab (179) (C and above)	CHEM 211 Organic Chemistry I (154) (C and above)		Chemistry	Biological Sciences	SST	
46	CHEM 212	Organic Chemistry II	3	6	CHEM 211 Organic Chemistry I (154) (C and above) OR CHEM 191 Chemistry I for Engineers (1908) (C and above)			Chemistry	Biological Sciences	SST	
47	CHEM 212L	Organic Chemistry II Lab	1	2	CHEM 211L Organic Chemistry I Lab (156) (C and above)	CHEM 212 Organic Chemistry II (443) (C and above) OR CHEM 292 Organic Chemistry for Biologists II (1901) (C and above)		Chemistry	Biological Sciences	SST	
48	CHEM 320	Instrumental Analysis	3	6	CHEM 220 Quantitative Chemical Analysis (555) (C and above)			Chemistry	Biological Sciences	SST	
49	CHEM 332	Physical Chemistry II	3	6	CHEM 331 Physical Chemistry I (634) (C and above) AND MATH 274 Introduction to Differential Equations (484) (C and above)			Chemistry	Biological Sciences	SST	
50	CHEM 332L	Physical Chemistry II Lab	1	2	CHEM 331L Physical Chemistry Lab (1060) (C and above)	CHEM 332 Physical Chemistry II (1056) (C and above)		Chemistry	Biological Sciences	SST	
51	CHEM 380	Research Methods	3	6				Chemistry	Biological Sciences	SST	
52	CHEM 411	Advanced Organic Chemistry I	3	6	CHEM 212 Organic Chemistry II (443) (C and above) AND MATH 161 Calculus I (118) (C and above)			Chemistry			
53	CHEM 442	Biochemistry II with Lab-Metabolic Biochemistry	3	6	CHEM 341 Biochemistry I (1058) (C and above) AND CHEM 212 Organic Chemistry II (443) (C and above)			Chemistry	Biological Sciences	SST	
54	CHEM 451	Applied Homogenous Catalysis	3	6	CHEM 350 Advanced Inorganic Chemistry (1905) (C and above)			Chemistry	Biological Sciences	SST	

55	CHEM 490	Nanochemistry	3	6	CHEM 331 Physical Chemistry I (634) (C and above) AND CHEM 250 Descriptive Inorganic Chemistry (445) (C and above)			Chemistry			
Communication and Composition											
56	SHSS 300	SHSS Internship	3	6				Through Add Course form only			
57	SHSS 301	SHSS Internship Second Experience	3	6				Through Add Course form only			
58	WCS 150	Rhetoric and Composition	3	6				1 year UG SENG, 1 year UG SHSS, 1 year UG SMG, 1 year UG SST			
59	WCS 202	Introduction to Public Speaking	3	6	WCS 150 Rhetoric and Composition (2183) (C- and above)			SEng, SHSS, SMG, SST			
60	WCS 240	Writing for Digital Media	3	6	WCS 150 Rhetoric and Composition (2183) (C- and above)			SHSS	SEng, SMG, SST		
61	WCS 390	Writing Fellows I - Composition and Collaboration in Theory and Practice	3	6	WCS 150 Rhetoric and Composition (2183) (B+ and above) AND (WCS 210 Technical and Professional Writing (4881) (B+ and above) OR () (and above) OR WCS 230 Say What you Mean: Clarity, Precision, and Style in Academic Writing (3026) (B+ and above) OR WCS 240 Writing for Digital Media (4421) (B+ and above) OR WCS 250 Advanced Rhetoric and Composition (3027) (B+ and above))			Through Add Course form only			
62	WCS 391	Writing Fellows II - Practicum in Composition & Collaboration	3	6	WCS 390 Writing Fellows I - Composition and Collaboration in Theory and Practice (1969) (B and above)			Through Add Course form only			
Communication and Composition, Languages, Literature and Linguistics											
63	WCS 260/WLL 235	Creative Writing: Introduction to Fiction Writing I	3	6	WCS 150 Rhetoric and Composition (2183) (C- and above)			SHSS	SEng, SMG, SST		
Economics											
64	ECON 101	Introduction to Microeconomics	3	6				1 year UG SHSS	2 year UG SHSS	SEng, SHSS, SMG, SST	
65	ECON 102	Introduction to Macroeconomics	3	6				1 year UG SHSS	2 year UG SHSS	SEng, SHSS, SMG, SST	

66	ECON 201	Intermediate Microeconomics	3	6	ECON 101 Introduction to Microeconomics (379) (B- and above) AND (MATH 161 Calculus I (118) (B- and above) OR MATH 162 Calculus II (170) (B- and above))		Economics	SHSS	SEng, SMG, SST	
67	ECON 202	Intermediate Macroeconomics	3	6	ECON 102 Introduction to Macroeconomics (503) (B- and above) AND (MATH 161 Calculus I (118) (B- and above) OR MATH 162 Calculus II (170) (B- and above))		Economics	SHSS	SEng, SMG, SST	
68	ECON 211	Economic Statistics	3	6	ECON 101 Introduction to Microeconomics (379) (C and above) OR ECON 102 Introduction to Macroeconomics (503) (C and above)		Economics	SHSS	SEng, SMG, SST	
69	ECON 300	Research Assistance in Economics	1	2	ECON 101 Introduction to Microeconomics (379) (C- and above) AND ECON 102 Introduction to Macroeconomics (503) (C- and above)		Through Add Form Only			
70	ECON 321	Economic Growth	3	6	ECON 202 Intermediate Macroeconomics (207) (C- and above)		Economics	SHSS	SEng, SMG, SST	
71	ECON 332	Urban Economics	3	6	ECON 201 Intermediate Microeconomics (133) (C- and above)		Economics	SHSS	SEng, SMG, SST	
72	ECON 345	The Economics of Family	3	6	ECON 201 Intermediate Microeconomics (133) (C- and above)		Economics	SHSS	SEng, SMG, SST	
73	ECON 413	Econometrics II	3	6	ECON 301 Econometrics I (664) (C- and above)		Economics	SHSS	SEng, SMG, SST	
74	ECON 415	Industrial Organization	3	6	ECON 301 Econometrics I (664) (C- and above)		Economics	SHSS	SEng, SMG, SST	
75	ECON 428	Wages and the Labor Market	3	6	ECON 201 Intermediate Microeconomics (133) (C- and above) AND ECON 301 Econometrics I (664) (C- and above)		Economics	SHSS	SEng, SMG, SST	
History, Philosophy and Religious Studies										
76	HST 100	History of Kazakhstan	3	6			4 year UG SENG, 4 year UG SHSS, 4 year UG SST	1 year UG SENG, 1 year UG SMG, 1 year UG SST	SEng, SHSS, SMG, SST	
77	HST 151	US History I (to 1877)	3	6			1 year UG SHSS, 2 year UG SHSS, History	SEng, SHSS, SMG, SST		

78	HST 214	An Introduction to Comparative History: The Eurasian Steppes and Great Plains of North America	3	6				SHSS	SEng, SMG, SST		
79	HST 233	The Russian Empire from Catherine the Great to the Bolshevik Revolution	3	6	Subject "HST" BETWEEN 100 and 199			SHSS	SEng, SMG, SST		
80	HST 235	Peter the Great (1682-1725): First Emperor of Russia and "Father of the Fatherland"	3	6				SHSS	SEng, SMG, SST		
81	HST 236	Eurasian revolutions, 1905-1949	3	6				SHSS	SEng, SMG, SST		
82	HST 239	Modernizing the Periphery: Nationalism, Communism, and Empire in Central Europe, 1890-Present	3	6	Subject "HST" BETWEEN 100 and 199			SHSS	SEng, SMG, SST		
83	HST 331	The Eurasian Enlightenment	3	6	HST 100 History of Kazakhstan (172) (B and above) OR Subject "HST" BETWEEN 100 and 199			SHSS	SEng, SMG, SST		
84	HST 411	Exploring Eurasian Environmental History	3	6	HST 100 History of Kazakhstan (172) (D and above)			SHSS	SEng, SMG, SST		
85	HST 499	History Capstone: Undergraduate Dissertation	4	8	HST 498 Directed Reading (1365) (C- and above)			4 year UG SHSS			
86	PHIL 124	Knowledge and Reality	3	6				SEng, SHSS, SMG, SST			
87	PHIL 141	Critical Thinking	3	6				SEng, SHSS, SMG, SST			
88	PHIL 215	Bioethics	3	6				SEng, SHSS, SMG, SST			
89	PHIL 223	Philosophy of Science	3	6				SEng, SHSS, SMG, SST			
90	PHIL 320	Truth, Knowledge and Belief	3	6				SEng, SHSS, SMG, SST			
91	PHIL 361	Philosophy of Language	3	6				SEng, SHSS, SMG, SST			
92	REL 212	Buddhist Religious Traditions	3	6				SEng, SHSS, SMG, SST			
History, Philosophy and Religious Studies, History, Philosophy and Religious Studies											
93	HST 329/REL 329	Women in Islamic History	3	6				SHSS	SEng, SMG, SST		
94	PHIL 266/HST 266	Sunzi's Art of War and Unorthodox Military Strategy in Ancient China	3	6				SEng, SHSS, SMG, SST			
95	PHIL 267/REL 267	Chinese Roots of Martial Arts	3	6				SEng, SHSS, SMG, SST			

96	REL 273/HST 273	History of Sufism in the Middle East and Central Asia	3	6	Subject "HST" BETWEEN 100 and 199			SHSS	SEng, SMG, SST		
History, Philosophy and Religious Studies, Sociology and Anthropology											
97	HST 223/ANT 287	Cannibalism and Civilization	3	6				SHSS	SEng, SMG, SST		
98	HST 381/SOC 319	AIDS and Society	3	6	Subject "HST" BETWEEN 100 and 199 OR HST 100 History of Kazakhstan (172) (B- and above)			3 year UG SST, 4 year UG SST, SHSS	SEng, SMG, SST		
Kazakh Language and Turkic Studies											
99	KAZ 201	Academic Kazakh I	3	6	KLL "Basic" OR KLL "Intermediate"				1 year UG SENG, 1 year UG SHSS, 1 year UG SMG, 1 year UG SST, 4 year UG SENG, 4 year UG SHSS, 4 year UG SST	SEng, SHSS, SMG, SST	
100	KAZ 202	Academic Kazakh II	3	6	KAZ 201 Academic Kazakh I (4561) (C- and above) OR KLL "Upper-Intermediate"				1 year UG SENG, 1 year UG SHSS, 1 year UG SMG, 1 year UG SST, 4 year UG SENG, 4 year UG SHSS, 4 year UG SST	SEng, SHSS, SMG, SST	
101	KAZ 211	Academic Speaking in Kazakh	3	6	KAZ 201 Academic Kazakh I (4561) (C- and above) OR KLL "Upper-Intermediate" OR KLL "Advanced"				1 year UG SENG, 1 year UG SHSS, 1 year UG SMG, 1 year UG SST, 4 year UG SENG, 4 year UG SHSS, 4 year UG SST	SEng, SHSS, SMG, SST	
102	KAZ 212	Academic Writing in Kazakh	3	6	KLL "Advanced" OR KLL "Upper-Intermediate"				1 year UG SENG, 1 year UG SHSS, 1 year UG SMG, 1 year UG SST, 4 year UG SENG, 4 year UG SHSS, 4 year UG SST	SEng, SHSS, SMG, SST	

103	KAZ 226	Kazakh for Medical School	3	6	KLL "Upper-Intermediate" OR KLL "Advanced"				1 year UG SENG, 1 year UG SHSS, 1 year UG SMG, 1 year UG SST, 4 year UG SENG, 4 year UG SHSS, 4 year UG SST	SEng, SHSS, SMG, SST	
104	KAZ 313	Kazakh for Business	3	6	KLL "Advanced" OR KLL "Upper- Intermediate"				1 year UG SENG, 1 year UG SHSS, 1 year UG SMG, 1 year UG SST, 4 year UG SENG, 4 year UG SHSS, 4 year UG SST	SEng, SHSS, SMG, SST	
105	KAZ 349	Kazakh Mythology	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "Advanced"				1 year UG SENG, 1 year UG SHSS, 1 year UG SMG, 1 year UG SST, 4 year UG SENG, 4 year UG SHSS, 4 year UG SST	SEng, SHSS, SMG, SST	
106	KAZ 351	Kazakh Short Stories	3	6	KLL "Advanced" OR KLL "Upper- Intermediate"				1 year UG SENG, 1 year UG SHSS, 1 year UG SMG, 1 year UG SST, 4 year UG SENG, 4 year UG SHSS, 4 year UG SST	SEng, SHSS, SMG, SST	
107	KAZ 354	Kazakh Drama	3	6	KLL "Advanced" OR KLL "Upper- Intermediate"				1 year UG SENG, 1 year UG SHSS, 1 year UG SMG, 1 year UG SST, 4 year UG SENG, 4 year UG SHSS, 4 year UG SST	SEng, SHSS, SMG, SST	

108	KAZ 356	Kazakh Music History	3	6	KLL "Advanced"				1 year UG SENG, 1 year UG SHSS, 1 year UG SMG, 1 year UG SST, 4 year UG SENG, 4 year UG SHSS, 4 year UG SST	SEng, SHSS, SMG, SST	
109	KAZ 357	Literature of Alash	3	6	KLL "Advanced" OR KLL "Upper-Intermediate"				1 year UG SENG, 1 year UG SHSS, 1 year UG SMG, 1 year UG SST, 4 year UG SENG, 4 year UG SHSS, 4 year UG SST	SEng, SHSS, SMG, SST	
110	KAZ 358	Technique of Translation	3	6	KLL "Upper-Intermediate" OR KLL "Advanced"						
111	KAZ 362	Creative Writing in Kazakh Language	3	6	KLL "Upper-Intermediate" OR KLL "Advanced"				1 year UG SENG, 1 year UG SHSS, 1 year UG SMG, 1 year UG SST, 4 year UG SENG, 4 year UG SHSS, 4 year UG SST	SEng, SHSS, SMG, SST	
112	KAZ 363	Language and Globalization	3	6	KLL "Upper-Intermediate" OR KLL "Advanced"				1 year UG SENG, 1 year UG SHSS, 1 year UG SMG, 1 year UG SST, 4 year UG SENG, 4 year UG SHSS, 4 year UG SST	SEng, SHSS, SMG, SST	
113	KAZ 364	Kazakh for Civil Service	3	6	KLL "Advanced" OR KLL "Upper-Intermediate" OR KAZ 314 Speech Culture in Business (1836) (C- and above)				1 year UG SENG, 1 year UG SHSS, 1 year UG SMG, 1 year UG SST, 4 year UG SENG, 4 year UG SHSS, 4 year UG SST	SEng, SHSS, SMG, SST	

114	KAZ 366	Kazakh Language for Engineers	3	6	KLL "Advanced" OR KLL "Upper-Intermediate"				1 year UG SENG, 1 year UG SHSS, 1 year UG SMG, 1 year UG SST, 4 year UG SENG, 4 year UG SHSS, 4 year UG SST	SEng, SHSS, SMG, SST	
115	KAZ 368	Onomastics: History and Function of Names	3	6	KLL "Advanced" OR KLL "Upper-Intermediate"				1 year UG SENG, 1 year UG SHSS, 1 year UG SMG, 1 year UG SST, 4 year UG SENG, 4 year UG SHSS, 4 year UG SST	SEng, SHSS, SMG, SST	
116	KAZ 371	Contemporary Kazakh Literature	3	6	KLL "Advanced"				1 year UG SENG, 1 year UG SHSS, 1 year UG SMG, 1 year UG SST, 4 year UG SENG, 4 year UG SHSS, 4 year UG SST	SEng, SHSS, SMG, SST	
117	KAZ 372	Language and ethnicity	3	6	KLL "Advanced" OR KAZ 211 Academic Speaking in Kazakh (702) (C- and above) OR KAZ 212 Academic Writing in Kazakh (703) (C- and above)				1 year UG SENG, 1 year UG SHSS, 1 year UG SMG, 1 year UG SST, 4 year UG SENG, 4 year UG SHSS, 4 year UG SST	SEng, SHSS, SMG, SST	
118	KAZ 373	Kazakh Terminology	3	6	KLL "Advanced" OR KAZ 202A Kazakh Literature 2/K(C) (228) (C- and above) OR KAZ 211 Academic Speaking in Kazakh (702) (C- and above) OR KAZ 212 Academic Writing in Kazakh (703) (C- and above)				1 year UG SENG, 1 year UG SHSS, 1 year UG SMG, 1 year UG SST, 4 year UG SENG, 4 year UG SHSS, 4 year UG SST	SEng, SHSS, SMG, SST	

119	KAZ 374	Kazakh Diplomacy	3	6	KAZ 202A Kazakh Literature 2/K(C) (228) (C- and above) OR KAZ 211 Academic Speaking in Kazakh (702) (C- and above) OR KAZ 212 Academic Writing in Kazakh (703) (C- and above) OR KLL "Advanced"				1 year UG SENG, 1 year UG SHSS, 1 year UG SMG, 1 year UG SST, 4 year UG SENG, 4 year UG SHSS, 4 year UG SST	SEng, SHSS, SMG, SST	
120	KAZ 375	Cultural Studies and Kazakh Culture	3	6	KLL "Advanced" OR KAZ 202A Kazakh Literature 2/K(C) (228) (C- and above) OR KAZ 211 Academic Speaking in Kazakh (702) (C- and above) OR KAZ 212 Academic Writing in Kazakh (703) (C- and above)				1 year UG SENG, 1 year UG SHSS, 1 year UG SMG, 1 year UG SST, 4 year UG SENG, 4 year UG SHSS, 4 year UG SST	SEng, SHSS, SMG, SST	
121	TUR 230	Literatures of Central Asia	3	6				SHSS	SEng, SMG, SST		
Kazakh Language and Turkic Studies, Languages, Literature and Linguistics											
122	LING 280/TUR 280	Introduction to Turkic Historical and Comparative Linguistics	3	6				SHSS	SEng, SMG, SST		
Languages, Literature and Linguistics											
123	CHN 101	Beginning Mandarin I	4	8				World Languages, Literature and Culture	1 year UG SHSS, 2 year UG SHSS	SEng, SHSS, SMG, SST	
124	CHN 201	Intermediate Mandarin I	4	8	CHN 102 Beginning Mandarin II (1844) (B- and above)			SEng, SHSS, SMG, SST			
125	FRE 102	Beginning French II	4	8	FRE 101 Beginning French I (246) (C- and above)			SEng, SHSS, SMG, SST			
126	FRE 314	Advanced French Grammar and Composition	3	6	FRE 202 Intermediate French II (1122) (C- and above)			SEng, SHSS, SMG, SST			
127	GER 101	Beginning German	4	8				World Languages, Literature and Culture	1 year UG SHSS, 2 year UG SHSS	SEng, SHSS, SMG, SST	
128	GER 102	Beginning German II	4	8	GER 101 Beginning German (3173) (C- and above)			SEng, SHSS, SMG, SST			
129	KOR 102	Beginning Korean II	4	8	KOR 101 Beginning Korean I (4672) (C- and above)			SEng, SHSS, SMG, SST			
130	LING 130	Introduction to Language and Communication	3	6				World Languages, Literature and Culture	SHSS	SEng, SMG, SST	
131	LING 131	Introduction to Linguistics	3	6				World Languages, Literature and Culture	SHSS	SEng, SMG, SST	
132	LING 270	Languages of Eurasia	3	6				SHSS	SEng, SMG, SST		

133	LING 277	Language Diversity and Language Universals	3	6				SHSS	SEng, SMG, SST		
134	LING 278	Sounds of the World's Languages	3	6				SHSS	SEng, SMG, SST		
135	LING 370	Methods of Teaching Foreign Languages	3	6				SHSS	SEng, SMG, SST		
136	LING 372	Discourse Analysis	3	6	Subject "LLL" BETWEEN 100 and 199 OR Subject "WLL" BETWEEN 100 and 199 OR WLL 171/ANT 175 Introduction to Linguistic Anthropology (4417) (C- and above) OR Subject "LING" BETWEEN 100 and 199			SHSS	SEng, SMG, SST		
137	PER 102	Beginning Persian II	4	8	PER 101 Beginning Persian I (4474) (C- and above)			SEng, SHSS, SMG, SST			
138	SPA 102	Beginning Spanish II	4	8	SPA 101 Beginning Spanish I (685) (C- and above)			SEng, SHSS, SMG, SST			
139	SPA 202	Intermediate Spanish II	4	8	SPA 201 Intermediate Spanish I (1475) (C- and above)			SEng, SHSS, SMG, SST			
140	SPA 320	The Hispanic Short Story	3	6	Subject "WLL" BETWEEN 100 and 199 AND SPA 202 Intermediate Spanish II (1842) (C- and above)			SEng, SHSS, SMG, SST			
141	WLL 110	Introduction to Literary Studies	3	6				World Languages, Literature and Culture	SHSS	SEng, SMG, SST	
142	WLL 121	Introduction to Cultural Studies	3	6				World Languages, Literature and Culture	SHSS	SEng, SMG, SST	
143	WLL 211	World Literature II: from the 18th to the 20th century	3	6				World Languages, Literature and Culture	SHSS	SEng, SMG, SST	
144	WLL 212	Introduction to Poetry	3	6				World Languages, Literature and Culture	SHSS	SEng, SMG, SST	
145	WLL 241	Survey of Folk Tales	3	6				World Languages, Literature and Culture	SHSS	SEng, SMG, SST	
146	WLL 245	Terrible Perfection: Heroines of Classical Russian Literature	3	6				World Languages, Literature and Culture	SHSS	SEng, SMG, SST	
147	WLL 246	Survey of Contemporary Russian Literature and Culture	3	6	Subject "WLL" BETWEEN 100 and 199 OR WCS 150 Rhetoric and Composition (2183) (C- and above)			2 year UG SHSS	SHSS	SEng, SMG, SST	
148	WLL 442	Contemporary Russian and Russophone Literature	3	6	Subject "WLL" BETWEEN 100 and 199			World Languages, Literature and Culture	4 year UG SHSS	SEng, SMG, SST	

149	WLL 499	Languages, Linguistics, and Literatures Capstone II	3	6	WLL 498 Languages, Linguistics, and Literatures Capstone I (3048) (C- and above)			4 year UG SHSS World Language and Literature		
Languages, Literature and Linguistics, Languages, Literature and Linguistics										
150	WLL 254/SPA 254	Superstition, Magical Realism, and Horror in Hispanic Culture	3	6	Subject "WLL" BETWEEN 100 and 499 OR Subject "HST" BETWEEN 100 and 499			World Languages, Literature and Culture	SHSS	SEng, SMG, SST
Mathematics										
151	MATH 161	Calculus I	4	8				Biological Sciences, Chemistry	1 year UG SENG, 1 year UG SHSS, 1 year UG SMG, 1 year UG SST	SEng, SHSS, SMG, SST
152	MATH 162	Calculus II	4	8	MATH 161 Calculus I (118) (C and above)			1 year UG SENG, 1 year UG SMG, 1 year UG SST	SST	SHSS
153	MATH 251	Discrete Mathematics	3	6	MATH 162 Calculus II (170) (C and above)			Computer Science, Mathematics	SST	SHSS
154	MATH 263	Calculus III	4	8	MATH 162 Calculus II (170) (C and above)			Mathematics	SST	SHSS
155	MATH 273	Linear Algebra with Applications	4	8	MATH 161 Calculus I (118) (C and above)	MATH 162 Calculus II (170) (C and above)		Mathematics	SST	SHSS
156	MATH 274	Introduction to Differential Equations	3	6	MATH 162 Calculus II (170) (C and above)			Mathematics	SST	SHSS
157	MATH 302	Abstract Algebra I	3	6	MATH 273 Linear Algebra with Applications (84) (C and above) AND MATH 251 Discrete Mathematics (85) (C and above)			3 year UG SST Mathematics	SST	SHSS
158	MATH 310	Applied Statistical Methods	3	6	MATH 161 Calculus I (118) (C and above)		MATH 322 Mathematical Statistics (1165) (D and above)	Biological Sciences	SST	SHSS
159	MATH 321	Probability	3	6	MATH 162 Calculus II (170) (C and above)		ECON 211 Economic Statistics (2280) (C- and above) OR PLS 211 Quantitative Methods (221) (C- and above)	Computer Science, Mathematics	SST	SHSS
160	MATH 322	Mathematical Statistics	3	6	MATH 321 Probability (482) (C and above) OR ECON 211 Economic Statistics (2280) (C and above)			3 year UG SST Mathematics	SST	SHSS

161	MATH 351	Numerical Methods with Applications	3	6	MATH 274 Introduction to Differential Equations (484) (C and above) AND MATH 263 Calculus III (81) (C and above)	ENG 202 Numerical Methods in Engineering (5506) (C and above)	Mathematics	SST	SHSS	
162	MATH 361	Real Analysis I	3	6	MATH 263 Calculus III (81) (C and above) AND MATH 251 Discrete Mathematics (85) (C and above)		Mathematics	SST	SHSS	
163	MATH 371	Introduction to Mathematical Biology	3	6	MATH 273 Linear Algebra with Applications (84) (C and above) AND MATH 274 Introduction to Differential Equations (484) (C and above)		3 year UG SST Mathematics	Mathematics	SST	
164	MATH 407	Graph Theory	3	6	MATH 301 Introduction to Number Theory (613) (C and above) OR (MATH 251 Discrete Mathematics (85) (C and above) AND MATH 273 Linear Algebra with Applications (84) (C and above))		Mathematics	SST	SHSS	
165	MATH 412	Nonlinear Optimization	3	6	MATH 273 Linear Algebra with Applications (84) (C and above) AND MATH 263 Calculus III (81) (C and above)		Mathematics	SST	SHSS	
166	MATH 423	Actuarial Mathematics II	3	6	MATH 321 Probability (482) (C and above) OR ECON 211 Economic Statistics (2280) (C and above)		Mathematics	SST	SHSS	
167	MATH 449	Statistical Programming	3	6	MATH 322 Mathematical Statistics (1165) (C and above)		4 year UG SST Mathematics	Mathematics		
168	MATH 477	Applied Finite Element Methods	3	6	MATH 351 Numerical Methods with Applications (1166) (C and above)		Mathematics	SST	SHSS	
169	MATH 480	Complex Analysis	3	6	MATH 263 Calculus III (81) (C and above)		Mathematics	SST	SHSS	
170	MATH 482	Fourier Analysis	3	6	MATH 263 Calculus III (81) (C and above) AND MATH 274 Introduction to Differential Equations (484) (C and above)		Mathematics	SST	SHSS	
171	MATH 490	Special Topics in Mathematics I	3	6			Mathematics	SST	SHSS	
172	MATH 499	Capstone Project	3	6			Through Add Course form only			

Physics

173	PHYS 161	Physics I for Scientists and Engineers with Laboratory	4	8		MATH 161 Calculus I (118) (C and above)	PHYS 171 Physics I for Physics Majors with Laboratory (1401) (C- and above)	1 year UG SENG, 1 year UG SMG, 1 year UG SST	SST	SHSS	
174	PHYS 162	Physics II for Scientists and Engineers with Laboratory	4	8	PHYS 161 Physics I for Scientists and Engineers with Laboratory (116) (C- and above) OR PHYS 151 Introductory Physics I with Lab (649) (C- and above)		PHYS 172 Physics II for Physics Majors with Laboratory (1402) (C- and above)	1 year UG SENG, 1 year UG SMG, 1 year UG SST	SST	SHSS	
175	PHYS 202	Introductory Astrophysics	3	6	PHYS 162 Physics II for Scientists and Engineers with Laboratory (173) (C- and above)			SST	SHSS		
176	PHYS 222	Classical Mechanics II	3	6	PHYS 221 Classical Mechanics I (652) (C- and above)	MATH 274 Introduction to Differential Equations (484) (D and above)		Physics	SST		
177	PHYS 270	Computational Physics with Laboratory	3	6	(CSCI 150 Fundamentals of Programming (1501) (C- and above) OR CSCI 151 Programming for Scientists and Engineers (192) (C- and above)) AND MATH 263 Calculus III (81) (C- and above) AND (PHYS 162 Physics II for Scientists and Engineers with Laboratory (173) (C- and above) OR PHYS 172 Physics II for Physics Majors with Laboratory (1402) (C- and above))	MATH 273 Linear Algebra with Applications (84) (D and above)		Physics	SST		
178	PHYS 280	Thermodynamics and Statistical Physics	3	6	MATH 263 Calculus III (81) (C- and above) AND (PHYS 162 Physics II for Scientists and Engineers with Laboratory (173) (C- and above) OR PHYS 172 Physics II for Physics Majors with Laboratory (1402) (C- and above))			Physics	SST		
179	PHYS 362	Classical Electrodynamics II	3	6	PHYS 361 Classical Electrodynamics I (651) (C- and above)			Physics	SST		
180	PHYS 370	Optics with Laboratory	4	8	PHYS 361 Classical Electrodynamics I (651) (C- and above)			Physics	SST		
181	PHYS 451	Quantum Mechanics I	3	6	PHYS 221 Classical Mechanics I (652) (C- and above) AND PHYS 361 Classical Electrodynamics I (651) (C- and above)			Physics	SST		

182	PHYS 463	Astrophysics and General Relativity	3	6	MATH 162 Calculus II (170) (C- and above) AND PHYS 221 Classical Mechanics I (652) (C- and above) AND MATH 274 Introduction to Differential Equations (484) (C- and above)		Physics	SST		
183	PHYS 473	Introduction to Solid State Physics	3	6	PHYS 280 Thermodynamics and Statistical Physics (1179) (C- and above) AND PHYS 451 Quantum Mechanics I (1415) (C- and above)		Physics	SST		
184	PHYS 483	Statistical Mechanics	3	6	PHYS 280 Thermodynamics and Statistical Physics (1179) (C- and above)		Physics	SST		
185	PHYS 491	Directed Study of Advanced Physics Topics	3	6			Physics			
186	PHYS 495	Physics Colloquium	0	0			Physics			
187	PHYS 499	Honors Thesis	3	6			Physics			
Political Science and International Relations										
188	PLS 101	Introduction to Political Science	3	6			SEng, SMG, SST	SHSS		
189	PLS 140	Introduction to Comparative Politics	3	6			1 year UG SHSS, Political Science and International Relations	SHSS	SEng, SMG, SST	
190	PLS 150	Introduction to International Relations	3	6			1 year UG SHSS, Political Science and International Relations	SHSS	SEng, SMG, SST	
191	PLS 210	Political Science Research Methods	3	6			Political Science and International Relations	SHSS	SEng, SMG, SST	
192	PLS 211	Quantitative Methods	3	6		ECON 211 Economic Statistics (2280) (C- and above)	Political Science and International Relations	SHSS	SEng, SMG, SST	
193	PLS 341	Politics of Development	3	6	PLS 210 Political Science Research Methods (129) (C- and above)		Political Science and International Relations	SHSS	SEng, SMG, SST	
194	PLS 351	International Political Economy	3	6	PLS 150 Introduction to International Relations (511) (C- and above) AND PLS 210 Political Science Research Methods (129) (C- and above) AND PLS 211 Quantitative Methods (221) (C- and above)		Political Science and International Relations	SHSS	SEng, SMG, SST	

195	PLS 354	Introduction to International Law	3	6	PLS 150 Introduction to International Relations (511) (C- and above) AND PLS 210 Political Science Research Methods (129) (C- and above)		Political Science and International Relations	SHSS	SEng, SMG, SST	
196	PLS 355	European Union: Institutions and Policies	3	6	PLS 210 Political Science Research Methods (129) (C- and above)		Political Science and International Relations	SHSS	SEng, SMG, SST	
197	PLS 356	International Politics of the Korean Peninsula	3	6	PLS 210 Political Science Research Methods (129) (C- and above) AND PLS 150 Introduction to International Relations (511) (C- and above)		Political Science and International Relations	SHSS	SEng, SMG, SST	
198	PLS 360	Foreign Policy Analysis	3	6	PLS 150 Introduction to International Relations (511) (C- and above) AND PLS 211 Quantitative Methods (221) (C- and above)		Political Science and International Relations	SHSS	SEng, SMG, SST	
199	PLS 365	Civil-Military Relations	3	6	PLS 211 Quantitative Methods (221) (C- and above) AND PLS 210 Political Science Research Methods (129) (C- and above)		Political Science and International Relations	SHSS	SEng, SMG, SST	
200	PLS 391	Intermediate Special Topics in Comparative Politics	3	6	PLS 210 Political Science Research Methods (129) (C- and above)		Political Science and International Relations	SHSS	SEng, SMG, SST	
201	PLS 392	Politics of China	3	6	PLS 210 Political Science Research Methods (129) (C- and above)		Political Science and International Relations	SHSS	SEng, SMG, SST	
202	PLS 395	Independent Study	3	6	PLS 210 Political Science Research Methods (129) (C- and above) AND PLS 211 Quantitative Methods (221) (C- and above)		Through Add Course form only			
203	PLS 441	Advanced Topics in Comparative Politics	3	6	PLS 140 Introduction to Comparative Politics (223) (C- and above) AND PLS 210 Political Science Research Methods (129) (C- and above)		Political Science and International Relations	SHSS	SEng, SMG, SST	
204	PLS 445	Political Violence	3	6	(PLS 140 Introduction to Comparative Politics (223) (and above) OR PLS 150 Introduction to International Relations (511) (C- and above)) AND PLS 210 Political Science Research Methods (129) (C- and above)		Political Science and International Relations	SHSS	SEng, SMG, SST	
205	PLS 447	Comparative Political Parties	3	6	PLS 140 Introduction to Comparative Politics (223) (C- and above) AND PLS 210 Political Science Research Methods (129) (C- and above)		Political Science and International Relations	SHSS	SEng, SMG, SST	

206	PLS 457	International Security and Conflict	3	6	PLS 150 Introduction to International Relations (511) (C- and above) AND PLS 210 Political Science Research Methods (129) (C- and above) AND PLS 211 Quantitative Methods (221) (C- and above)						
207	PLS 495	Research Practicum in PSIR	1	2	PLS 210 Political Science Research Methods (129) (C- and above) AND PLS 211 Quantitative Methods (221) (C- and above)			Through Add Course form only			
Sociology and Anthropology											
208	ANT 101	Introduction to Sociocultural Anthropology	3	6				1 year UG SHSS, 2 year UG SHSS, Anthropology, Sociology	SHSS	SEng, SMG, SST	
209	ANT 140	World Prehistory	3	6				1 year UG SHSS, 2 year UG SHSS, Anthropology, Sociology	SHSS	SEng, SMG, SST	
210	ANT 160	Introduction to Biological Anthropology	3	6			ANT 361 Human Evolution: Bones, Stones and Genomes (160) (C- and above)	1 year UG SHSS, 2 year UG SHSS, Anthropology, Sociology	Biological Sciences, SHSS	SEng, SMG, SST	
211	ANT 232	Life, Death and Economy: Archaeology of Central Asia	3	6				1 year UG SHSS, 2 year UG SHSS, Anthropology	SHSS	SEng, SMG, SST	
212	ANT 280	Introduction to Medical Anthropology	3	6			() (and above)	1 year UG SHSS, 2 year UG SHSS, Anthropology, Sociology	Biological Sciences, SHSS	SEng, SMG, SST	
213	ANT 286	Nomads: Around the world and through time	3	6				1 year UG SHSS, 2 year UG SHSS, Anthropology	SHSS	SEng, SMG, SST	
214	ANT 306	Anthropology of Performance	3	6				Anthropology, Sociology	SHSS	SEng, SMG, SST	
215	ANT 314	Politics of Identity in Eurasia	3	6	Subject "HST" BETWEEN 100 and 499 OR Subject "SOC" BETWEEN 100 and 499 OR Subject "ANT" BETWEEN 100 and 499 OR Subject "PLS" BETWEEN 100 and 499			Anthropology, Political Science and International Relations, Sociology	SHSS	SEng, SMG, SST	
216	ANT 333	Anthropology of Space	3	6				3 year UG SHSS, 4 year UG SHSS, Anthropology, Sociology	SHSS	SEng, SMG, SST	

217	ANT 400	Research Assistance in Anthropology	1	2				Through Add Course form only			
218	ANT 475	Digital Ethnographies	3	6	ANT 101 Introduction to Sociocultural Anthropology (501) (C- and above) OR PLS 210 Political Science Research Methods (129) (C- and above) OR SOC 201 Social Science Research Methods (1341) (C- and above) OR ANT 214/SOC 214 Qualitative Methods (1033) (C- and above)			Anthropology, Sociology	SHSS	SEng, SMG, SST	
219	SOC 101	Introduction to Sociology	3	6				Anthropology, Sociology	1 year UG SHSS, 2 year UG SHSS, 3 year UG SST Biological Sciences	SEng, SHSS, SMG, SST	
220	SOC 201	Social Science Research Methods	3	6				Anthropology, Sociology	SHSS	SEng, SMG, SST	
221	SOC 203	Quantitative Methods in Sociology	3	6				Anthropology, Sociology	SHSS	SEng, SMG, SST	
222	SOC 215	Sociology of Race and Ethnicity	3	6				Anthropology, Sociology	SHSS	SEng, SMG, SST	
223	SOC 221	International Migration	3	6				Anthropology, Sociology	SHSS	SEng, SMG, SST	
224	SOC 301	Classical Sociological Theory	3	6	SOC 101 Introduction to Sociology (508) (C- and above) OR SOC 115 Global Social Problems (1032) (C- and above)			Anthropology, Sociology	SHSS	SEng, SMG, SST	
225	SOC 320	Organized Crime and Corruption	3	6	SOC 101 Introduction to Sociology (508) (C- and above)						
226	SOC 400	Research Assistance in Sociology	1	2				Through add form only			
227	SOC 499	Capstone Seminar II	3	6	SOC 498 Capstone Seminar Part I (3043) (C- and above)			4 year UG SHSS Sociology			
Sociology and Anthropology, Sociology and Anthropology											
228	ANT 214/SOC 214	Qualitative Methods	3	6				Anthropology, Sociology	SHSS	SEng, SMG, SST	
229	ANT 222/SOC 222	Approaches to Global Development	3	6			ANT 222/SOC 222 Approaches to Global Development (158) (C- and above)	Anthropology, Sociology	SHSS	SEng, SMG, SST	

230	ANT 281/SOC 281	Health, Illness and Society	3	6			ANT 280 Introduction to Medical Anthropology (2961) (C- and above)	Anthropology, Sociology	SHSS	SEng, SMG, SST	
SEDS											
Chemical and Materials Engineering											
231	ECHE 210	Foundations of Unit Operations	3	6				Registration by School Office			
232	ECHE 221	Engineering Fluid Mechanics	3	6				Registration by School Office			
233	ECHE 270	Transport Phenomena-I	3	6				Registration by School Office			
234	ECHE 323	Computational methods in Chemical Engineering-I	3	6	ECHE 333 Separation Processes-I (1271) (D and above)		ECHE 481 Chemical Reaction Engineering (1985) (D and above)	Registration by School Office			
235	ECHE 383	Separation Processes II	3	6	ECHE 126 Introduction to Chemical Engineering (33) (D and above) AND ECHE 225 Heat and Mass Transfer Operations (541) (D and above)			Registration by School Office			
236	ECHE 386	Chemical Plant Design and Optimization	3	6				Registration by School Office			
237	ECHE 387	Chemical Reaction Engineering 2	3	6				Registration by School Office			
238	ECHE 388	Process Dynamics and Control	3	6				Registration by School Office			
239	ECHE 420	Polymer Processing and Rheology	3	6				4 year UG SEng Chemical Engineering	4 year UG SENG	SEng, SHSS, SMG, SST	
240	ECHE 421	Tissue Engineering	3	6				4 year UG SEng Chemical Engineering	4 year UG SENG	SEng, SHSS, SMG, SST	
241	ECHE 479	Capstone Project II	9	18	ECHE 418 Capstone project 1 (1278) (D and above)			Registration by School Office			
242	ECHE 483	Chemistry II	3	6	ECHE 222 Chemistry I (731) (D and above)			Registration by School Office			
243	ECHE 485	Introduction to Biochemical Engineering	3	6				4 year UG SEng Chemical Engineering	4 year UG SENG	SEng, SHSS, SMG, SST	
Civil Engineering											
244	ECE 210	Soil Mechanics	3	6				Registration by School Office			

245	ECE 218	Environmental Chemistry	3	6				Registration by School Office			
246	ECE 219	Hydraulics	3	6				Registration by School Office			
247	ECE 306	Geotechnical Design	3	6	ECE 210 Soil Mechanics (862) (D and above)			Registration by School Office			
248	ECE 319	Structural Design - Steel	3	6				Registration by School Office			
249	ECE 320	Engineering Hydrology	3	6				Registration by School Office			
250	ECE 420	Modern Information Technology in Construction	3	6				4 year UG SEng Civil Engineering	4 year UG SENG	SEng, SHSS, SMG, SST	
251	ECE 422	Prestressed Concrete Design	3	6				3 year UG SEng Civil Engineering	3 year UG SENG, 4 year UG SENG	SEng, SHSS, SMG, SST	
252	ECE 423	Structure and Properties of Concrete Materials	3	6				3 year UG SEng Civil Engineering	3 year UG SENG, 4 year UG SENG	SEng, SHSS, SMG, SST	
253	ECE 427	Individual Research Projects in Civil Engineering (II)	3	6	ECE 481 Individual Research Projects in Civil Engineering (4484) (D and above)			4 year UG SEng Civil Engineering	4 year UG SENG	SEng, SHSS, SMG, SST	
254	ECE 472	Water and Wastewater Treatment Processes	3	6	ECE 218 Environmental Chemistry (3296) (D and above)			Registration by School Office			
255	ECE 473	Environmental Systems	3	6				4 year UG SEng Civil Engineering	4 year UG SENG	SEng, SHSS, SMG, SST	
256	ECE 478	Capstone Project II	9	18	ECE 401 Capstone Project 1 (1270) (D and above)			Registration by School Office			
257	ECE 479	Structural Analysis II	3	6	ECE 217 Structural Analysis I (3156) (D and above)			Registration by School Office			
Computer Science											
258	CSCI 101	Introduction to Computational Sciences	3	6				1 year UG SHSS	SHSS		
259	CSCI 111	Web Programming & Problem Solving	3	6			CSCI 100 Computation and Problem Solving (1078) (C- and above)	1 year UG SHSS	SHSS		
260	CSCI 151	Programming for Scientists and Engineers	4	8			ROBT 102 Programming for robotics and physics (188) (C- and above) OR CSCI 150 Fundamentals of Programming (1501) (C- and above)	1 year UG SST, SMG	SST	SHSS	

261	CSCI 152	Performance and Data Structures	4	8	CSCI 151 Programming for Scientists and Engineers (192) (C- and above) OR CSCI 150 Fundamentals of Programming (1501) (C- and above) OR CSCI 261 Object Oriented Programming with Java I (171) (C- and above) OR ROBT 102 Programming for robotics and physics (188) (C- and above)			1 year UG SST	SST	SHSS	
262	CSCI 245	System Analysis and Design	3	6	CSCI 341 Database Systems (195) (C- and above)			Computer Science	SST	SEng, SHSS, SMG	
263	CSCI 270	Algorithms	3	6	CSCI 152 Performance and Data Structures (489) (C- and above) AND MATH 251 Discrete Mathematics (85) (C- and above)			2 year UG SST Computer Science	Computer Science	SEng, SHSS, SMG, SST	
264	CSCI 272	Formal Languages	3	6	CSCI 152 Performance and Data Structures (489) (C and above) AND MATH 251 Discrete Mathematics (85) (C- and above)			2 year UG SST Computer Science	Computer Science	SEng, SHSS, SMG, SST	
265	CSCI 307	Research Methods	3	6				Computer Science			
266	CSCI 325	Introduction to Parallel Systems and GPU Programming	3	6	CSCI 332 Operating Systems (490) (C- and above)			Computer Science	SST	SEng, SHSS, SMG	
267	CSCI 330	Mobile Computing	3	6	CSCI 332 Operating Systems (490) (C- and above)			Computer Science	SST	SEng, SHSS, SMG	
268	CSCI 332	Operating Systems	3	6	CSCI 231 Computer Systems and Organization (194) (C- and above)			2 year UG SST Computer Science	Computer Science	SEng, SHSS, SMG, SST	
269	CSCI 399A	Internship II - A	1	2							
270	CSCI 409	Senior Project II	3	6	CSCI 408 Senior Project I (1481) (C- and above)			4 year UG SST Computer Science			
271	CSCI 447	Machine Learning: Theory and Practice	3	6	MATH 273 Linear Algebra with Applications (84) (C and above) AND MATH 321 Probability (482) (C and above)			Computer Science	SST	SEng, SHSS, SMG	
272	CSCI 462	Open Source Software	3	6	CSCI 361 Software Engineering (640) (C- and above)			Computer Science	SST	SEng, SHSS, SMG	
Electrical and Electronic Engineering											
273	EEE 210	Software Engineering	3	6	BENG 146 Programming for Engineers (2234) (D and above)			Registration by School Office			
274	EEE 211	Computer Systems Architecture	3	6	ECHE 126 Introduction to Chemical Engineering (33) (D and above)			Registration by School Office			
275	EEE 239	Communication systems	3	6				Registration by School Office			
276	EEE 340	Data Communications	3	6				Registration by School Office			

277	EEE 341	Digital Electronic System Design	3	6				Registration by School Office			
278	EEE 343	Embedded Microcontrollers	3	6				Registration by School Office			
279	EEE 379	Power Systems Analysis	3	6				Registration by School Office			
280	EEE 381	Electrical Machines and Drives	3	6				Registration by School Office			
281	EEE 411	Special Topics in Signal Processing	3	6				4 year UG SEng Electrical and Electronic Engineering	4 year UG SENG	SEng, SHSS, SMG, SST	
282	EEE 480	Capstone Project II	9	18				Registration by School Office			
283	EEE 484	Electric Power Generation	3	6				4 year UG SEng Electrical and Electronic Engineering	4 year UG SENG	SEng, SHSS, SMG, SST	
284	EEE 485	Power System Operation and Control	3	6	EEE 379 Power Systems Analysis (1956) (D and above) OR EEE 452 Power Systems Protection (2652) (D and above)			4 year UG SEng Electrical and Electronic Engineering	4 year UG SENG	SEng, SHSS, SMG, SST	
285	EEE 486	Photonics for Engineering	3	6	EEE 342 Electromagnetics (533) (D and above)			4 year UG SEng Electrical and Electronic Engineering	4 year UG SENG	SEng, SHSS, SMG, SST	
286	EEE 489	Analog Circuit Design	3	6				Registration by School Office			
287	EEE 494	Modern Characterizations for Semiconductor Industry	3	6				4 year UG SEng Electrical and Electronic Engineering	4 year UG SENG	SEng, SHSS, SMG, SST	
288	EEE 495	Fundamentals of Biomedical Engineering and Biophysics	3	6				4 year UG SEng Electrical and Electronic Engineering	4 year UG SENG	SEng, SHSS, SMG, SST	
Mechanical Engineering											
289	EME 275	Fluid Mechanics I	3	6				Registration by School Office			
290	EME 300	Research Project	3	6				Registration by School Office			
291	EME 352	Computational Fluid Dynamics	3	6				Registration by School Office			
292	EME 357	Fluid Mechanics 2	3	6				Registration by School Office			
293	EME 377	Mechanical Systems Design	3	6	EME 361 Machine Design (1051) (D and above)			Registration by School Office			

294	EME 414	Fire Engineering	3	6	BENG 226 Engineering Thermodynamics (1553) (D and above)			4 year UG SEng Mechanical Engineering	4 year UG SENG	SEng, SHSS, SMG, SST	
295	EME 415	Flight Mechanics	3	6				4 year UG SEng Mechanical Engineering	4 year UG SENG	SEng, SHSS, SMG, SST	
296	EME 464	Materials and Manufacturing 1	3	6				Registration by School Office			
297	EME 476	Materials and Manufacturing II	3	6				Registration by School Office			
298	EME 477	Capstone Project II	9	18				Registration by School Office			
299	EME 480	Industrial Automation	3	6				Registration by School Office			
300	EME 489	Advanced Engineering Mathematics	3	6	BENG 228 Engineering Mathematics III (3154) (D and above)			4 year UG SEng Mechanical Engineering	4 year UG SENG	SEng, SHSS, SMG, SST	
Mechanical and Aerospace Engineering											
301	ENG 102	Engineering Materials I	3	6				1 year UG SEng Civil and Environmental Engineering, 1 year UG SEng Mechanical and Aerospace Engineering, 1 year UG SMG	1 year UG SHSS, 1 year UG SST, 2 year UG SENG, 3 year UG SENG, 4 year UG SENG	SEng, SHSS, SMG, SST	
302	ENG 103	Engineering Materials 2	3	6				1 year UG SEng Chemical and Materials Engineering, 1 year UG SEng Electrical and Computer Engineering, 1 year UG SMG	1 year UG SHSS, 1 year UG SST, 2 year UG SENG, 3 year UG SENG, 4 year UG SENG	SEng, SHSS, SMG, SST	
Robotics and Mechatronics											
303	ROBT 202	System Dynamics and Modeling	3	6	MATH 162 Calculus II (170) (C- and above) AND (PHYS 162 Physics II for Scientists and Engineers with Laboratory (173) (C- and above) OR PHYS 172 Physics II for Physics Majors with Laboratory (1402) (C- and above))			Robotics and Mechatronics	SST		
304	ROBT 204	Electrical and Electronic Circuits II with Lab	4	8	ROBT 203 Electrical and Electronic Circuits I with Lab (62) (C- and above)			Physics, Robotics and Mechatronics	SST		

305	ROBT 206	Microcontrollers with Lab	4	8	CSCI 151 Programming for Scientists and Engineers (192) (C- and above) OR ROBT 102 Programming for robotics and physics (188) (C- and above) OR CSCI 150 Fundamentals of Programming (1501) (C- and above)			Computer Science, Robotics and Mechatronics	SST		
306	ROBT 302	Mechanical Design II with Machining Laboratory	4	8	ROBT 301 Mechanical Design with CAD and Machining Laboratory (622) (C- and above)			Robotics and Mechatronics	SST		
307	ROBT 304	Electromechanical Systems with lab	4	8	ROBT 204 Electrical and Electronic Circuits II with Lab (491) (C- and above)			Robotics and Mechatronics	SST		
308	ROBT 310	Image Processing	3	6	MATH 162 Calculus II (170) (C- and above) AND MATH 273 Linear Algebra with Applications (84) (C- and above)			Computer Science, Robotics and Mechatronics	SST		
309	ROBT 402	Robotic/Mechatronic System Design	3	6	ROBT 204 Electrical and Electronic Circuits II with Lab (491) (C- and above) AND ROBT 206 Microcontrollers with Lab (476) (C- and above) AND ROBT 302 Mechanical Design II with Machining Laboratory (1170) (C- and above)			Robotics and Mechatronics			
310	ROBT 407	Machine Learning with Applications	3	6	MATH 273 Linear Algebra with Applications (84) (C and above) AND MATH 321 Probability (482) (C and above) AND CSCI 152 Performance and Data Structures (489) (C and above)			Computer Science, Robotics and Mechatronics	SST		
311	ROBT 414	Human-Robot Interaction	3	6	CSCI 152 Performance and Data Structures (489) (C- and above)			Computer Science, Robotics and Mechatronics	SST		
312	ROBT 491	Graduation Project	3	6				4 year UG SST Robotics and Mechatronics			
School of Engineering											
313	BENG 114	Introduction to Electrical Systems	3	6				Registration by School Office			
314	BENG 219	Control Systems	3	6				Registration by School Office			
315	BENG 226	Engineering Thermodynamics	3	6				Registration by School Office			
316	BENG 343	Interdisciplinary Design Project	3	6							