

## Course Requirements and Registration Priorities (Undergraduate), Spring 2017

#	Abbr	Title	Cr(US)	Cr(ECTS)	PreRequisite	CoRequisite	AntiRequisite	1st priority registration	2nd priority registration	3rd priority registration	4th priority registration
<b>SST</b>											
<b>Mathematics</b>											
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	
2	MATH 441	Design of Experiments	3	6	MATH 273 Linear Algebra with Applications (84) (C and above) AND (MATH 310 Applied Statistical Methods (82) (C and above) OR MATH 322 Mathematical Statistics (1165) (C and above))			Mathematics	SST	SHSS	
3	MATH 444	Nonparametric Methods	3	6	MATH 322 Mathematical Statistics (1165) (C and above)			Mathematics	SST	SHSS	
4	MATH 476	Numerical Methods for Partial Differential Equations	3	6	MATH 351 Numerical Methods with Applications (1166) (C and above) AND MATH 481 Partial Differential Equations (1168) (C and above)			Mathematics	SST	SHSS	
<b>SSH</b>											
<b>Biological Science</b>											
5	BIOL 101	Biology for non-Science majors	3	6			BIOL 110 Modern Biology I (1070) (C- and above)	SHSS			
6	BIOL 110	Modern Biology I	3	6				Biological Sciences, Chemistry	SST	SHSS	
7	BIOL 120	Modern Biology II	3	6	BIOL 110 Modern Biology I (1070) (C and above)			Biological Sciences, Chemistry	SST	SHSS	
8	BIOL 231	Human Anatomy and Physiology II	4	8	BIOL 230 Human Anatomy and Physiology I (72) (C and above)			Biological Sciences, Chemistry	SST	SHSS	

9	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, Chemistry	SST	SHSS	
10	BIOL 341	Biochemistry I	3	6	CHEM 211 Organic Chemistry I (154) (C and above)			Biological Sciences, Chemistry	SST	SHSS	
11	BIOL 370	Genetics	3	6	BIOL 120 Modern Biology II (1195) (C and above)			Biological Sciences			
12	BIOL 399	Biology Internship	3	6				Biological Sciences			
13	BIOL 420	Bioethics	3	6	BIOL 120 Modern Biology II (1195) (C and above)			4 year UG SST Biological Sciences	Biological Sciences		
14	BIOL 430	Histology with Laboratory	4	8	BIOL 230 Human Anatomy and Physiology I (72) (C and above)			Biological Sciences			
15	BIOL 440	Neuroscience	3	6	BIOL 230 Human Anatomy and Physiology I (72) (C and above)			Biological Sciences			
16	BIOL 456	Biology Research Design	3	6	BIOL 355 Critical Research Reasoning (1000) (C and above)			Biological Sciences			
17	BIOL 491	Graduation Project 2	4	8	BIOL 490 Graduation Project 1 (1581) (C- and above)			Biological Sciences			
<b>Chemistry</b>											
18	CHEM 090	Chemistry for Non-Science majors	3	6				SHSS			
19	CHEM 092	Survey of Environmental Sciences for Non-Science Majors	3	6				SHSS			
20	CHEM 101	General Chemistry I	3	6				Chemistry	Biological Sciences	SST	
21	CHEM 102	General Chemistry II	3	6	CHEM 101 General Chemistry I (113) (C and above)			Biological Sciences, Chemistry	SST		
22	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)					
23	CHEM 189c	Independent Study	3	6				Through Add form only			
24	CHEM 211	Organic Chemistry I	3	6	CHEM 102 General Chemistry II (232) (C and above)						
25	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)					

26	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	
27	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	
28	CHEM 320	Instrumental Analysis	3	6	CHEM 220 Quantitative Chemical Analysis (555) (C and above)			Chemistry	Biological Sciences	SST	
29	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	
30	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	
31	CHEM 341	Biochemistry I	3	6	CHEM 211 Organic Chemistry I (154) (C and above) AND BIOL 120 Modern Biology II (1195) (C and above)						
32	CHEM 341L	Biochemistry I Lab	1	2	CHEM 212L Organic Chemistry II Lab (444) (C and above)	CHEM 341 Biochemistry I (1058) (C and above)					
33	CHEM 380	Research Methods	3	6							
34	CHEM 400	Chemistry Seminar	3	6	CHEM 380 Research Methods (636) (C and above)			Chemistry	Biological Sciences	SST	
35	CHEM 413	Natural Product Chemistry	3	6	CHEM 212 Organic Chemistry II (443) (C and above) AND CHEM 220 Quantitative Chemical Analysis (555) (C and above)						
36	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)						
37	CHEM 451	Applied Homogenous Catalysis	3	6	CHEM 350 Advanced Inorganic Chemistry (1905) (C and above)						

38	CHEM 471	Environmental Chemistry	3	6	CHEM 320 Instrumental Analysis (1055) (C and above) AND CHEM 212 Organic Chemistry II (443) (C and above)			Chemistry	Biological Sciences	SST	
39	CHEM 490	Nanochemistry	3	6	CHEM 331 Physical Chemistry I (634) (C and above) AND CHEM 250 Descriptive Inorganic Chemistry (445) (C and above)						
<b>Communication and Composition</b>											
40	COMM 240	Health Communication	3	6				3 year UG SEng Civil Engineering, SHSS, SST			
41	COMM 350	Science, Health, and Social Influence	3	6				3 year UG SEng Civil Engineering, SHSS, SST			
42	SHSS 300	SHSS Internship	3	6				Through Add form only			
43	SHSS 301	SHSS Internship Second Experience	3	6				Through Add form only			
44	SHSS 398	Independent Study	1	2				Through Add form only			
45	WCS 150	Rhetoric and Composition	3	6				1 year UG SHSS, 2 year UG SHSS	SST	3 year UG SEng Civil Engineering, SHSS	
46	WCS 202	Introduction to Public Speaking	3	6	WCS 150 Rhetoric and Composition (2183) (C- and above)			3 year UG SEng Civil Engineering, SHSS, SST			
47	WCS 250	Advanced Rhetoric and Composition	3	6	WCS 150 Rhetoric and Composition (2183) (C- and above)			SHSS	SST	3 year UG SEng Civil Engineering	
48	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 form only			
<b>Economics</b>											
49	ECON 101	Introduction to Microeconomics	3	6				1 year UG SHSS, 2 year UG SHSS	SHSS	3 year UG SEng Civil Engineering, SST	
50	ECON 102	Introduction to Macroeconomics	3	6				1 year UG SHSS, 2 year UG SHSS	SHSS	3 year UG SEng Civil Engineering, SST	

51	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	3 year UG SEng Civil Engineering, SST
52	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	3 year UG SEng Civil Engineering, SST
53	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	3 year UG SEng Civil Engineering, SST
54	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		
55	ECON 302	Game Theory and Economic Analysis	3	6	ECON 201 Intermediate Microeconomics (133) (C- and above)		Economics	SHSS	3 year UG SEng Civil Engineering, SST
56	ECON 322	Natural Resources and Environmental Economics	3	6	ECON 201 Intermediate Microeconomics (133) (C- and above)	ECON 331 Environmental Economics (1687) (C- and above)	Economics	SHSS	3 year UG SEng Civil Engineering, SST
57	ECON 326	The Economics of Financial Markets	3	6	ECON 201 Intermediate Microeconomics (133) (C- and above)		Economics	SHSS	3 year UG SEng Civil Engineering, SST
58	ECON 328	Labor Economics	3	6	ECON 201 Intermediate Microeconomics (133) (C- and above)		Economics	SHSS	3 year UG SEng Civil Engineering, SST
59	ECON 329	International Finance	3	6	ECON 202 Intermediate Macroeconomics (207) (C- and above)		Economics	SHSS	3 year UG SEng Civil Engineering, SST
60	ECON 399	Independent Study in Economics	3	6			Through Add form only		
61	ECON 405	Behavioral and Experimental Economics	3	6	ECON 201 Intermediate Microeconomics (133) (C- and above) AND ECON 301 Econometrics I (664) (C- and above)		Economics	SHSS	3 year UG SEng Civil Engineering, SST

62	ECON 413	Econometrics II	3	6	ECON 301 Econometrics I (664) (C- and above)			Economics	SHSS	3 year UG SEng Civil Engineering, SST
63	ECON 415	Industrial Organization	3	6	ECON 301 Econometrics I (664) (C- and above)			Economics	SHSS	3 year UG SEng Civil Engineering, SST
<b>History, Philosophy and Religious Studies</b>										
64	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 SHSS, 1 year UG SST	SEng, SHSS, SST
65	HST 122	World History II (from 1500)	3	6				1 year UG SHSS, 1 year UG SST, History	SEng, SHSS, SST	
66	HST 132	European History II (from 1700)	3	6				1 year UG SENG, 1 year UG SHSS, 1 year UG SST, History	3 year UG SEng Civil Engineering, SHSS, SST	
67	HST 151	US History I (to 1877)	3	6				1 year UG SENG, 1 year UG SHSS, 1 year UG SST, History	3 year UG SEng Civil Engineering, SHSS, SST	
68	HST 220	India 1757-1947: Empire, Nationalism and Independence	3	6	Subject "HST" BETWEEN 100 and 199			History	SHSS	3 year UG SEng Civil Engineering, SST
69	HST 222	History of Medical Ethics	3	6	Subject "HST" BETWEEN 100 and 199			History	Biological Sciences, SHSS	3 year UG SEng Civil Engineering, SST
70	HST 399	Independent Study	3	6				Through Add form only		
71	HST 499	History Capstone: Undergraduate Dissertation	4	8	HST 498 Directed Reading (1365) (C- and above)			Through Add form only		
72	PHIL 101	Introduction to Philosophy	3	6				1 year UG SHSS	3 year UG SEng Civil Engineering, SHSS, SST	
73	PHIL 210	Ethics	3	6				Chemistry	3 year UG SEng Civil Engineering, SHSS, SST	
74	PHIL 215	Bioethics	3	6				4 year UG SST Biological Sciences	3 year UG SEng Civil Engineering, SHSS, SST	

75	PHIL 223	Philosophy of Science	3	6				1 year UG SHSS	3 year UG SEng Civil Engineering, SHSS, SST		
76	PHIL 240	Formal Logic	3	6				SHSS	3 year UG SEng Civil Engineering, SST		
77	PHIL 325	Truth, Lies, Media, and Propaganda	3	6				SHSS	3 year UG SEng Civil Engineering, SST		
78	REL 212	Buddhist Religious Traditions	3	6				SHSS	3 year UG SEng Civil Engineering, SST		
<b>History, Philosophy and Religious Studies, History, Philosophy and Religious Studies</b>											
79	REL 273/HST 273	History of Sufism in the Middle East and Central Asia	3	6	Subject "HST" BETWEEN 100 and 199			History	SHSS	3 year UG SEng Civil Engineering, SST	
<b>History, Philosophy and Religious Studies, Languages, Literature and Linguistics</b>											
80	WLL 102 /PHIL 102	Language, Experience, Culture	3	6				1 year UG SHSS	3 year UG SEng Civil Engineering, SHSS, SST		
<b>History, Philosophy and Religious Studies, Political Science and International Relations</b>											
81	PHIL 431/PLS 420	Human Rights and Cultural Differences	3	6	Subject "PHIL" BETWEEN 100 and 199 OR Subject "PHIL" BETWEEN 200 and 299 OR Subject "PHIL" BETWEEN 300 and 399 OR Subject "PHIL" BETWEEN 400 and 499 OR Subject "" BETWEEN 100 and 199 OR Subject "" BETWEEN 200 and 299 OR Subject "" BETWEEN 300 and 399 OR Subject "" BETWEEN 400 and 499 OR PLS 120 Introduction to Political Theory (512) (C- and above) OR PLS 328/REL 328 Confucianism and the Development of Chinese Politics (2396) (C- and above) OR PLS 331 Nationalism and Multi-Ethnic Governance (99) (C- and above)			SHSS	3 year UG SEng Civil Engineering, SST		
82	PLS 430/HST 424	Science, Politics and the State in Comparative Context, c.1850-1980	3	6	Subject "HST" BETWEEN 200 and 299 OR Subject "HST" BETWEEN 300 and 399			History	SHSS	3 year UG SEng Civil Engineering, SST	
<b>History, Philosophy and Religious Studies, Sociology and Anthropology</b>											

83	ANT 302/REL 301	Anthropology of Religion and Secularism	3	6	Subject "HST" BETWEEN 100 and 499 OR Subject "ANT" BETWEEN 100 and 499 OR Subject "SOC" BETWEEN 100 and 499 OR Subject "PLS" BETWEEN 100 and 499			Anthropology, Sociology	3 year UG SEng Civil Engineering, SHSS, SST		
84	ANT 313/REL 332	Islam and Politics in Eurasia	3	6				1 year UG SHSS Political Sciences and International Relations, 2 year UG SHSS Political Sciences and International Relations, 3 year UG SHSS Political Sciences and International Relations, 4 year UG SHSS Political Sciences and International Relations	SHSS	3 year UG SEng Civil Engineering, SST	
<b>Kazakh Language and Turkic Studies</b>											
85	KAZ 101	Basic Kazakh I	3	6	KLL "Basic"						
86	KAZ 111	Intermediate Kazakh I	3	6	KLL "Intermediate"						
87	KAZ 114	Intermediate Kazakh II	3	6	KLL ""						
88	KAZ 121	Upper-Intermediate Kazakh	3	6	KLL "Upper-Intermediate"						
89	KAZ 150	Basic Kazakh	3	6	KLL "Basic"						
90	KAZ 211	Academic Speaking in Kazakh	3	6	KAZ 201 Academic Kazakh I (4561) (C- and above) OR KLL "Upper-Intermediate" OR KLL "Advanced"						
91	KAZ 212	Academic Writing in Kazakh	3	6	KLL "Advanced" OR KLL "Upper- Intermediate"						
92	KAZ 226	Kazakh for Medical School	3	6	KLL "Upper-Intermediate" OR KLL "Advanced"						
93	KAZ 263	Business Etiquette	3	6	KLL "Upper-Intermediate" OR KLL "Advanced"						
94	KAZ 313	Kazakh for Business	3	6	KLL "Advanced" OR KLL "Upper- Intermediate"						
95	KAZ 314	Speech Culture in Business	3	6	KLL "Upper-Intermediate" OR KLL "Advanced"						
96	KAZ 351	Kazakh Short Stories	3	6	KLL "Advanced" OR KLL "Upper- Intermediate"						
97	KAZ 357	Literature of Alash	3	6	KLL "Advanced" OR KLL "Upper- Intermediate"						
98	KAZ 358	Technique of Translation	3	6	KLL "Upper-Intermediate" OR KLL "Advanced"						



99	KAZ 362	Creative Writing in Kazakh Language	3	6	KLL "Upper-Intermediate" OR KLL "Advanced"						
100	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)						
101	KAZ 366	Kazakh Language for Engineers	3	6	KLL "Advanced" OR KLL "Upper-Intermediate"						
102	KAZ 368	Onomastics: History and Function of Names	3	6	KLL "Advanced" OR KLL "Upper-Intermediate"						
103	KAZ 370	Kazakh for Career Development	3	6	KLL "Upper-Intermediate" OR KLL "Advanced"						
104	KAZ 371	Contemporary Kazakh Literature	3	6	KLL "Advanced"						
105	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)						
106	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)						
107	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"						
108	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)						
<b>Languages, Literature and Linguistics</b>											
109	CHN 102	Beginning Mandarin II	4	8	CHN 101 Beginning Mandarin I (1384) (B- and above)			World Languages, Literature and Culture	SHSS	3 year UG SEng Civil Engineering, SST	
110	CHN 201	Intermediate Mandarin I	4	8	CHN 102 Beginning Mandarin II (1844) (B- and above)			World Languages, Literature and Culture	SHSS	3 year UG SEng Civil Engineering, SST	

111	FRE 102	Beginning French II	4	8	FRE 101 Beginning French I (246) (C- and above)			World Languages, Literature and Culture	SHSS	3 year UG SEng Civil Engineering, SST	
112	FRE 202	Intermediate French II	4	8	FRE 201 Intermediate French I (667) (C- and above)			World Languages, Literature and Culture	SHSS	3 year UG SEng Civil Engineering, SST	
113	GER 101	Beginning German	4	8				1 year UG SHSS	World Languages, Literature and Culture	3 year UG SEng Civil Engineering, SHSS, SST	
114	GER 102	Beginning German II	4	8	GER 101 Beginning German (3173) (C- and above)			World Languages, Literature and Culture	SHSS	3 year UG SEng Civil Engineering, SST	
115	LING 131	Introduction to Linguistics	3	6				1 year UG SHSS	3 year UG SEng Civil Engineering, SHSS, SST		
116	LING 270	Languages of Eurasia	3	6				World Languages, Literature and Culture	3 year UG SEng Civil Engineering, SHSS, SST		
117	LING 470	Multilingualism and Language Contact	3	6	LING 131 Introduction to Linguistics (1394) (C- and above) OR LING 270 Languages of Eurasia (2485) (C- and above) OR ANT 277/WLL 271 Language and Society (1027) (C- and above) OR LING 272 Language and the Mind (1847) (C- and above) OR LING 273 Survey of Research Methods in Linguistics (2158) (C- and above) OR LING 274 Introduction to Applied Linguistics (2486) (C- and above) OR () ( and above)			World Languages, Literature and Culture	3 year UG SEng Civil Engineering, SHSS, SST		
118	SPA 102	Beginning Spanish II	4	8	SPA 101 Beginning Spanish I (685) (C- and above)			1 year UG SHSS	3 year UG SEng Civil Engineering, SHSS, SST		
119	SPA 202	Intermediate Spanish II	4	8	SPA 201 Intermediate Spanish I (1475) (C- and above)			1 year UG SHSS	3 year UG SEng Civil Engineering, SHSS, SST		
120	WLL 101	Introduction to Critical Issues in the Humanities and Social Sciences	3	6				1 year UG SHSS	3 year UG SEng Civil Engineering, SHSS, SST		

121	WLL 110	Introduction to Literary Studies	3	6				1 year UG SHSS	3 year UG SEng Civil Engineering, SHSS, SST		
122	WLL 111	Introduction to Theatre	3	6				1 year UG SHSS	3 year UG SEng Civil Engineering, SHSS, SST		
123	WLL 121	Introduction to Cultural Studies	3	6				1 year UG SHSS	3 year UG SEng Civil Engineering, SHSS, SST		
124	WLL 155	Introduction to the Comic Book	3	6				1 year UG SHSS	3 year UG SEng Civil Engineering, SHSS, SST		
125	WLL 211	World Literature II: from the 18th to the 20th century	3	6				World Languages, Literature and Culture	3 year UG SEng Civil Engineering, SHSS, SST		
126	WLL 212	Introduction to Poetry	3	6				1 year UG SHSS	3 year UG SEng Civil Engineering, SHSS, SST		
127	WLL 222	Acting: Praxis, Theory and History	3	6				World Languages, Literature and Culture	3 year UG SEng Civil Engineering, SHSS, SST		
128	WLL 241	Survey of Folk Tales	3	6				World Languages, Literature and Culture	3 year UG SEng Civil Engineering, SHSS, SST		
129	WLL 245	Terrible Perfection: Heroines of Classical Russian Literature	3	6				World Languages, Literature and Culture	3 year UG SEng Civil Engineering, SHSS, SST		
130	WLL 251	Hong Kong Cinema	3	6				World Languages, Literature and Culture	3 year UG SEng Civil Engineering, SHSS, SST		
131	WLL 257	Fan Culture in the Age of Convergence	3	6				World Languages, Literature and Culture	3 year UG SEng Civil Engineering, SHSS, SST		
132	WLL 399	Independent Study	3	6				Through Add form only			
133	WLL 442	Contemporary Russian and Russophone Literature	3	6	Subject "WLL" BETWEEN 100 and 199			World Languages, Literature and Culture	3 year UG SEng Civil Engineering, SHSS, SST		

134	WLL 499	Languages, Linguistics, and Literatures Capstone II	3	6	WLL 498 Languages, Linguistics, and Literatures Capstone I (3048) (C- and above)			Through Add form only			
<b>Languages, Literature and Linguistics, Languages, Literature and Linguistics</b>											
135	WLL 352/SPA 352	Contemporary Spanish Literature and Cinema: from the transition to the recent economic crisis	3	6				World Languages, Literature and Culture	3 year UG SEng Civil Engineering, SHSS, SST		
<b>Mathematics</b>											
136	MATH 161	Calculus I	4	8				Biological Sciences, Chemistry	SST	SHSS	
137	MATH 162	Calculus II	4	8	MATH 161 Calculus I (118) (C and above)			1 year UG SST	SST	SHSS	
138	MATH 251	Discrete Mathematics	3	6	MATH 162 Calculus II (170) (C and above)			Mathematics	SST	SHSS	
139	MATH 263	Calculus III	4	8	MATH 162 Calculus II (170) (C and above)			Mathematics	SST	SHSS	
140	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	
141	MATH 274	Introduction to Differential Equations	3	6	MATH 162 Calculus II (170) (C and above)			Mathematics	SST	SHSS	
142	MATH 310	Applied Statistical Methods	3	6	MATH 161 Calculus I (118) (C and above)		MATH 322 Mathematical Statistics (1165) (D and above)	Mathematics	SST	SHSS	
143	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)	Mathematics	SST	SHSS	
144	MATH 322	Mathematical Statistics	3	6	MATH 321 Probability (482) (C and above) OR ECON 211 Economic Statistics (2280) (C and above)			Mathematics	SST	SHSS	
145	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	

146	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	
147	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	
148	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	
149	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	
150	MATH 460	Topology	3	6	MATH 361 Real Analysis I (483) (C and above)			Mathematics	SST	SHSS	
151	MATH 461	Real Analysis II	3	6	MATH 361 Real Analysis I (483) (C and above)			Mathematics	SST	SHSS	
152	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	
153	MATH 499	Capstone Project	3	6				Through Add form only			
<b>Physics</b>											
154	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 SST	SST	SHSS	
155	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 SST	SST	SHSS	
156	PHYS 202	Introductory Astrophysics	3	6	PHYS 162 Physics II for Scientists and Engineers with Laboratory (173) (C- and above)			SST		SHSS	

157	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		
158	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	Mathematics	SST	
159	PHYS 271	Applied Methods of Computational Physics with Laboratory	3	6	MATH 162 Calculus II (170) (C- and above) AND MATH 273 Linear Algebra with Applications (84) (C- and above)		PHYS 270 Computational Physics with Laboratory (488) (C- and above)	Economics	Mathematics	SST	
160	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		
161	PHYS 362	Classical Electrodynamics II	3	6	PHYS 361 Classical Electrodynamics I (651) (C- and above)			Physics	SST		
162	PHYS 370	Optics with Laboratory	4	8	PHYS 361 Classical Electrodynamics I (651) (C- and above)			Physics	SST		
163	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)						
164	PHYS 474	Lasers and Photonics	3	6	PHYS 370 Optics with Laboratory (1405) (C- and above)			Physics	SST		
165	PHYS 491	Directed Study of Advanced Physics Topics	3	6				Through Add form only			
166	PHYS 495	Physics Colloquium	0	0				Physics	SST		
167	PHYS 499	Honors Thesis	3	6				Through Add form only			

**Political Science and International Relations**

168	PLS 101	Introduction to Political Science	3	6				1 year UG SHSS	SST	3 year UG SEng Civil Engineering, SHSS	
169	PLS 120	Introduction to Political Theory	3	6				1 year UG SHSS, 1 year UG SHSS Political Sciences and International Relations, 2 year UG SHSS, 2 year UG SHSS Political Sciences and International Relations, 3 year UG SHSS Political Sciences and International Relations, 4 year UG SHSS Political Sciences and International Relations	1 year UG SST	3 year UG SEng Civil Engineering, SHSS, SST	
170	PLS 140	Introduction to Comparative Politics	3	6				1 year UG SHSS, 1 year UG SHSS Political Sciences and International Relations, 2 year UG SHSS, 2 year UG SHSS Political Sciences and International Relations, 3 year UG SHSS Political Sciences and International Relations, 4 year UG SHSS Political Sciences and International Relations	1 year UG SST	3 year UG SEng Civil Engineering, SHSS, SST	

171	PLS 150	Introduction to International Relations	3	6				1 year UG SHSS, 1 year UG SHSS Political Sciences and International Relations, 2 year UG SHSS, 2 year UG SHSS Political Sciences and International Relations, 3 year UG SHSS Political Sciences and International Relations, 4 year UG SHSS Political Sciences and International Relations	1 year UG SST	3 year UG SEng Civil Engineering, SHSS, SST	
172	PLS 180	European Union	1	2				Through Add form only			
173	PLS 210	Political Science Research Methods	3	6				1 year UG SHSS Political Sciences and International Relations, 2 year UG SHSS Political Sciences and International Relations, 3 year UG SHSS Political Sciences and International Relations, 4 year UG SHSS Political Sciences and International Relations	SHSS	3 year UG SEng Civil Engineering, SST	
174	PLS 211	Quantitative Methods	3	6			ECON 211 Economic Statistics (2280) (C- and above)	1 year UG SHSS Political Sciences and International Relations, 2 year UG SHSS Political Sciences and International Relations, 3 year UG SHSS Political Sciences and International Relations, 4 year UG SHSS Political Sciences and International Relations	SHSS	3 year UG SEng Civil Engineering, SST	



175	PLS 326	Modern Political Theory	3	6	PLS 120 Introduction to Political Theory (512) (C- and above)			1 year UG SHSS Political Sciences and International Relations, 2 year UG SHSS Political Sciences and International Relations, 3 year UG SHSS Political Sciences and International Relations, 4 year UG SHSS Political Sciences and International Relations	SHSS	3 year UG SEng Civil Engineering, SST	
176	PLS 330	Politics and Governance of Eurasia	3	6	PLS 210 Political Science Research Methods (129) (C- and above)			1 year UG SHSS Political Sciences and International Relations, 2 year UG SHSS Political Sciences and International Relations, 3 year UG SHSS Political Sciences and International Relations, 4 year UG SHSS Political Sciences and International Relations	SHSS	3 year UG SEng Civil Engineering, SST	
177	PLS 338	U.S. Government and Politics	3	6	(PLS 140 Introduction to Comparative Politics (223) (C- and above) OR PLS 101 Introduction to Political Science (513) (C- and above)) AND PLS 210 Political Science Research Methods (129) (C- and above)			1 year UG SHSS Political Sciences and International Relations, 2 year UG SHSS Political Sciences and International Relations, 3 year UG SHSS Political Sciences and International Relations, 4 year UG SHSS Political Sciences and International Relations	SHSS	3 year UG SEng Civil Engineering, SST	

178	PLS 341	Politics of Development	3	6	PLS 210 Political Science Research Methods (129) (C- and above)			1 year UG SHSS Political Sciences and International Relations, 2 year UG SHSS Political Sciences and International Relations, 3 year UG SHSS Political Sciences and International Relations, 4 year UG SHSS Political Sciences and International Relations	SHSS	3 year UG SEng Civil Engineering, SST	
179	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)			1 year UG SHSS Political Sciences and International Relations, 2 year UG SHSS Political Sciences and International Relations, 3 year UG SHSS Political Sciences and International Relations, 4 year UG SHSS Political Sciences and International Relations	SHSS	3 year UG SEng Civil Engineering, SST	
180	PLS 352	International Relations Theory	3	6	PLS 150 Introduction to International Relations (511) (C- and above) AND PLS 210 Political Science Research Methods (129) (C- and above)			1 year UG SHSS Political Sciences and International Relations, 2 year UG SHSS Political Sciences and International Relations, 3 year UG SHSS Political Sciences and International Relations, 4 year UG SHSS Political Sciences and International Relations	SHSS	3 year UG SEng Civil Engineering, SST	

181	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)			1 year UG SHSS Political Sciences and International Relations, 2 year UG SHSS Political Sciences and International Relations, 3 year UG SHSS Political Sciences and International Relations, 4 year UG SHSS Political Sciences and International Relations	SHSS	3 year UG SEng Civil Engineering, SST	
182	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)			1 year UG SHSS Political Sciences and International Relations, 2 year UG SHSS Political Sciences and International Relations, 3 year UG SHSS Political Sciences and International Relations, 4 year UG SHSS Political Sciences and International Relations	SHSS	3 year UG SEng Civil Engineering, SST	
183	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)			1 year UG SHSS Political Sciences and International Relations, 2 year UG SHSS Political Sciences and International Relations, 3 year UG SHSS Political Sciences and International Relations, 4 year UG SHSS Political Sciences and International Relations	SHSS	3 year UG SEng Civil Engineering, SST	

184	PLS 371	Comparative Welfare States	3	6	PLS 210 Political Science Research Methods (129) (C- and above)			1 year UG SHSS Political Sciences and International Relations, 2 year UG SHSS Political Sciences and International Relations, 3 year UG SHSS Political Sciences and International Relations, 4 year UG SHSS Political Sciences and International Relations	SHSS	3 year UG SEng Civil Engineering, SST	
185	PLS 391	Intermediate Special Topics in Comparative Politics	3	6	PLS 210 Political Science Research Methods (129) (C- and above)			1 year UG SHSS Political Sciences and International Relations, 2 year UG SHSS Political Sciences and International Relations, 3 year UG SHSS Political Sciences and International Relations, 4 year UG SHSS Political Sciences and International Relations	SHSS	3 year UG SEng Civil Engineering, SST	
186	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 form only			
187	PLS 416	Experimental Political Science	3	6	PLS 210 Political Science Research Methods (129) (C- and above) AND PLS 211 Quantitative Methods (221) (C- and above)			1 year UG SHSS Political Sciences and International Relations, 2 year UG SHSS Political Sciences and International Relations, 3 year UG SHSS Political Sciences and International Relations, 4 year UG SHSS Political Sciences and International Relations	SHSS	3 year UG SEng Civil Engineering, SST	

188	PLS 421	Theories of Political Obligations	3	6	PLS 325 Ancient Political Theory (675) (C- and above) OR PLS 326 Modern Political Theory (1131) (C- and above)			1 year UG SHSS Political Sciences and International Relations, 2 year UG SHSS Political Sciences and International Relations, 3 year UG SHSS Political Sciences and International Relations, 4 year UG SHSS Political Sciences and International Relations	SHSS	3 year UG SEng Civil Engineering, SST	
189	PLS 422	Just War Theory	3	6	PLS 120 Introduction to Political Theory (512) (C- and above) AND PLS 210 Political Science Research Methods (129) (C- and above)			1 year UG SHSS Political Sciences and International Relations, 2 year UG SHSS Political Sciences and International Relations, 3 year UG SHSS Political Sciences and International Relations, 4 year UG SHSS Political Sciences and International Relations	SHSS	3 year UG SEng Civil Engineering, SST	
190	PLS 431	Politics and Governance of the Russian Federation	3	6	PLS 210 Political Science Research Methods (129) (C- and above)			1 year UG SHSS Political Sciences and International Relations, 2 year UG SHSS Political Sciences and International Relations, 3 year UG SHSS Political Sciences and International Relations, 4 year UG SHSS Political Sciences and International Relations	SHSS	3 year UG SEng Civil Engineering, SST	

191	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)			1 year UG SHSS Political Sciences and International Relations, 2 year UG SHSS Political Sciences and International Relations, 3 year UG SHSS Political Sciences and International Relations, 4 year UG SHSS Political Sciences and International Relations	SHSS	3 year UG SEng Civil Engineering, SST	
192	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)			1 year UG SHSS Political Sciences and International Relations, 2 year UG SHSS Political Sciences and International Relations, 3 year UG SHSS Political Sciences and International Relations, 4 year UG SHSS Political Sciences and International Relations	SHSS	3 year UG SEng Civil Engineering, SST	
193	PLS 451	Advanced Topics in International Relations	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)			1 year UG SHSS Political Sciences and International Relations, 2 year UG SHSS Political Sciences and International Relations, 3 year UG SHSS Political Sciences and International Relations, 4 year UG SHSS Political Sciences and International Relations	SHSS	3 year UG SEng Civil Engineering, SST	

194	PLS 472	Negotiation, Cooperation and Strategy	3	6	ECON 302 Game Theory and Economic Analysis (1378) (C- and above) OR PLS 315 Political Game Theory (704) (C- and above)		1 year UG SHSS Political Sciences and International Relations, 2 year UG SHSS Political Sciences and International Relations, 3 year UG SHSS Political Sciences and International Relations, 4 year UG SHSS Political Sciences and International Relations	SHSS	3 year UG SEng Civil Engineering, SST	
<b>Sociology and Anthropology</b>										
195	ANT 101	Introduction to Sociocultural Anthropology	3	6			1 year UG SHSS, Anthropology	3 year UG SEng Civil Engineering, SHSS, SST		
196	ANT 140	World Prehistory	3	6			1 year UG SHSS, Anthropology	2 year UG SHSS, 4 year UG SST	3 year UG SEng Civil Engineering, SHSS, SST	
197	ANT 160	Introduction to Biological Anthropology	3	6		ANT 361 Human Evolution: Bones, Stones and Genomes (160) (C- and above)	2 year UG SHSS, Anthropology	SHSS	3 year UG SEng Civil Engineering, SST	
198	ANT 231	Frauds and Fallacies in Archaeology	3	6			2 year UG SHSS, Anthropology	SHSS	3 year UG SEng Civil Engineering, SST	
199	ANT 232	Life, Death and Economy: Archaeology of Central Asia	3	6			2 year UG SHSS, Anthropology	SHSS	3 year UG SEng Civil Engineering, SST	
200	ANT 286	Nomads: Around the world and through time	3	6			2 year UG SHSS, Anthropology	3 year UG SEng Civil Engineering, SHSS, SST		
201	ANT 306	Anthropology of Performance	3	6			3 year UG SHSS, 4 year UG SHSS, Anthropology	3 year UG SEng Civil Engineering, SHSS, SST		

202	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			1 year UG SHSS Political Sciences and International Relations, 2 year UG SHSS Political Sciences and International Relations, 3 year UG SHSS Political Sciences and International Relations, 4 year UG SHSS Political Sciences and International Relations, Anthropology	SHSS	3 year UG SEng Civil Engineering, SST	
203	ANT 361	Human Evolution: Bones, Stones and Genomes	3	6				2 year UG SHSS, Anthropology	SHSS	3 year UG SEng Civil Engineering, SST	
204	ANT 400	Research Assistance in Anthropology	1	2				Through Add form only			
205	ANT 403	Research Assistance in Anthropology	2	4				Through Add form only			
206	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)			3 year UG SHSS, 4 year UG SHSS, 4 year UG SST Computer Science, Anthropology	SHSS	3 year UG SEng Civil Engineering, SST	
207	ANT 499	Capstone Seminar II	3	6	ANT 498 Capstone Seminar I (2965) (C- and above)			4 year UG SHSS Anthropology, 4 year UG SHSS Sociology			
208	SOC 101	Introduction to Sociology	3	6				Anthropology, Sociology	1 year UG SHSS, 2 year UG SHSS	3 year UG SEng Civil Engineering, SHSS, SST	
209	SOC 115	Global Social Problems	3	6				Anthropology, Sociology	1 year UG SHSS, 2 year UG SHSS	3 year UG SEng Civil Engineering, SHSS, SST	
210	SOC 201	Social Science Research Methods	3	6				Anthropology, Sociology	SHSS	3 year UG SEng Civil Engineering, SST	



211	SOC 218	Introduction to Social Policy	3	6				Sociology	2 year UG SHSS, 3 year UG SHSS, 4 year UG SHSS	3 year UG SEng Civil Engineering, SHSS, SST	
212	SOC 220	Science, Technology, and Society	3	6				Sociology	2 year UG SHSS, 3 year UG SHSS, 3 year UG SST, 4 year UG SHSS, 4 year UG SST	3 year UG SEng Civil Engineering, SHSS, SST	
213	SOC 221	International Migration	3	6				Sociology	2 year UG SHSS, 3 year UG SHSS, 3 year UG SST, 4 year UG SHSS, 4 year UG SST	3 year UG SEng Civil Engineering, SHSS, SST	
214	SOC 225	Environment and Society	3	6				Sociology	SHSS	3 year UG SEng Civil Engineering, SST	
215	SOC 227	Economy and Society	3	6				Sociology	2 year UG SHSS, 3 year UG SHSS, 4 year UG SHSS	3 year UG SEng Civil Engineering, SHSS, SST	
216	SOC 403	Research Assistance in Sociology	2	4				Through Add form only			
217	SOC 499	Capstone Seminar II	3	6	SOC 498 Capstone Seminar Part I (3043) (C- and above)			4 year UG SHSS Anthropology, 4 year UG SHSS Sociology			
<b>Sociology and Anthropology, Sociology and Anthropology</b>											
218	ANT 214/SOC 214	Qualitative Methods	3	6				Sociology	2 year UG SHSS, 3 year UG SHSS, 4 year UG SHSS	3 year UG SEng Civil Engineering, SHSS, SST	
219	ANT 222/SOC 222	Approaches to Global Development	3	6			ANT 222/SOC 222 Approaches to Global Development (158) (C- and above)	2 year UG SHSS, Anthropology, Sociology	SHSS	3 year UG SEng Civil Engineering, SST	
220	ANT 480/SOC 418	Gender, Power and Social Change in South Asia	3	6	SOC 101 Introduction to Sociology (508) (C- and above) OR SOC 115 Global Social Problems (1032) (C- and above) OR SOC 210 Gender and Society (226) (C- and above)			Anthropology, Sociology	3 year UG SHSS, 4 year UG SHSS	3 year UG SEng Civil Engineering, SHSS, SST	
<b>SEDS</b>											
<b>Chemical and Materials Engineering</b>											
221	ECHE 210	Foundations of Unit Operations	3	6							

222	ECHE 221	Engineering Fluid Mechanics	3	6							
223	ECHE 270	Transport Phenomena-I	3	6							
224	ECHE 319	Chemical Engineering Thermodynamics	3	6							
225	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)					
226	ECHE 327	Micro and Nanotechnology	3	6							
227	ECHE 328	Mineral Processing	3	6							
228	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)						
229	ECHE 384	Interdisciplinary Design Project	3	6							
230	ECHE 478	Electrochemical Engineering and Corrosion Protection	3	6	ECHE 222 Chemistry I (731) (D and above)						
231	ECHE 479	Capstone Project II	9	18	ECHE 418 Capstone project 1 (1278) (D and above)						
232	ECHE 481	Chemical Reaction Engineering	3	6	ECHE 126 Introduction to Chemical Engineering (33) (D and above) AND BENG 124 Engineering Mathematics I (101) (D and above) AND BENG 225 Engineering Mathematics II (48) (D and above)						
233	ECHE 483	Chemistry II	3	6	ECHE 222 Chemistry I (731) (D and above)						
<b>Civil Engineering</b>											
234	ECE 210	Soil Mechanics	3	6							
235	ECE 218	Environmental Chemistry	3	6							
236	ECE 219	Hydraulics	3	6							
237	ECE 302	Civil Engineering Materials	3	6	BENG 221 Engineering Materials (47) (D and above)						
238	ECE 306	Geotechnical Design	3	6	ECE 210 Soil Mechanics (862) (D and above)						

239	ECE 315	Structural Engineering Applications II	3	6	ECE 213 Structural Engineering Analysis (863) (D and above) OR ECE 217 Structural Analysis I (3156) (D and above)						
240	ECE 405	Environmental Engineering	3	6	ECE 473 Environmental Systems (1953) (D and above) OR ECE 218 Environmental Chemistry (3296) (D and above)						
241	ECE 478	Capstone Project II	9	18	ECE 401 Capstone Project 1 (1270) (D and above)						
242	ECE 479	Structural Analysis II	3	6	ECE 217 Structural Analysis I (3156) (D and above)						
<b>Computer Science</b>											
243	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	SST	SHSS
244	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
245	CSCI 235	Programming Languages	4	8	CSCI 152 Performance and Data Structures (489) (C and above)				3 year UG SST Computer Science	Computer Science	SST
246	CSCI 245	System Analysis and Design	3	6	CSCI 341 Database Systems (195) (C- and above)				Computer Science	SST	SHSS
247	CSCI 307	Research Methods	3	6					3 year UG SST Computer Science		
248	CSCI 332	Operating Systems	3	6	CSCI 231 Computer Systems and Organization (194) (C- and above)				2 year UG SST Computer Science	Computer Science	SST
249	CSCI 333	Computer Networks	3	6	CSCI 152 Performance and Data Structures (489) (C- and above)				Computer Science	SST	SHSS
250	CSCI 336	Ubiquity and Sensing	3	6	CSCI 333 Computer Networks (1145) (C- and above)				Computer Science	SST	SHSS
251	CSCI 398	Directed Study	3	6					Through Add form only		
252	CSCI 408	Senior Project I	3	6							

253	CSCI 409	Senior Project II	3	6	CSCI 408 Senior Project I (1481) (C- and above)			Through Add form only			
254	CSCI 455	Scripting Languages	3	6		CSCI 235 Programming Languages (638) (C- and above)		Computer Science	SST	SHSS	
255	CSCI 462	Open Source Software	3	6	CSCI 361 Software Engineering (640) (C- and above)			Computer Science	SST	SHSS	
<b>Electrical and Electronic Engineering</b>											
256	EEE 210	Software Engineering	3	6	BENG 146 Programming for Engineers (2234) (D and above)						
257	EEE 211	Computer Systems Architecture	3	6	ECHE 126 Introduction to Chemical Engineering (33) (D and above)						
258	EEE 212	Signals and Systems	3	6	BENG 225 Engineering Mathematics II (48) (D and above)						
259	EEE 239	Communication systems	3	6							
260	EEE 340	Data Communications	3	6							
261	EEE 341	Digital Electronic System Design	3	6							
262	EEE 379	Power Systems Analysis	3	6							
263	EEE 380	Integrated Circuits Design	3	6							
264	EEE 381	Electrical Machines and Drives	3	6							
265	EEE 410	Nonlinear Circuits and Systems	3	6	EEE 380 Integrated Circuits Design (1954) (D and above)						
266	EEE 411	Special Topics in Signal Processing	3	6							
267	EEE 480	Capstone Project II	9	18							
<b>Mechanical Engineering</b>											
268	EME 262	Machine Dynamics I	3	6							
269	EME 275	Fluid Mechanics I	3	6							
270	EME 354	Advanced Control Systems	3	6	BENG 219 Control Systems (728) (D and above)						
271	EME 377	Mechanical Systems Design	3	6	EME 361 Machine Design (1051) (D and above)						
272	EME 410	Aerodynamics	3	6	EME 357 Fluid Mechanics 2 (1280) (D and above)						
273	EME 411	Air Conditioning and Fire Engineering	3	6	BENG 226 Engineering Thermodynamics (1553) (D and above)						

274	EME 463	Machine Dynamics II	3	6							
275	EME 464	Materials and Manufacturing 1	3	6							
276	EME 476	Materials and Manufacturing II	3	6							
277	EME 477	Capstone Project II	9	18							
278	EME 480	Industrial Automation	3	6							
<b>Robotics and Mechatronics</b>											
279	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		
280	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		
281	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		
282	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		
283	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		
284	ROBT 308	Industrial Automation	3	6				Computer Science, Robotics and Mechatronics	SST		
285	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		

286	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			
287	ROBT 491	Graduation Project	3	6				Robotics and Mechatronics			
<b>School of Engineering</b>											
288	BENG 114	Introduction to Electrical Systems	3	6							
289	BENG 147	Introduction to Fluid Mechanics and Thermodynamics	3	6	BENG 124 Engineering Mathematics I (101) (D and above)						
290	BENG 148	Engineering Practice	3	6							
291	BENG 201	Engineering Economy	3	6							
292	BENG 225	Engineering Mathematics II	3	6							
293	BENG 226	Engineering Thermodynamics	3	6							
294	BENG 343	Interdisciplinary Design Project	3	6							