Course Requirements and Registration Priorities
Spring 2017

#	Abbr	Title	Cr(US)	Cr(ECTS)	PreRequisite	CoRequisite	AntiRequisite	1st priority registration	2nd priority registration	3rd priority registration	4th priority registration
SHSS											
Economics											
1	ECON 329	International Finance	3	6	ECON 202 Intermediate Macroeconomics (207) (C- and above)			Economics	SHSS	3 year UG SEng Civil Engineering, SST	
History, Philosophy and Religious Studies, Sociology and Anthropology											
2	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		
Kazakh Language and Turkic Studies											
3	KAZ 314	Speech Culture in Business	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"						
4	KAZ 358	Technique of Translation	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"						
5	KAZ 370	Kazakh for Career Development	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"						
Political Science and International Relations											
6	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	
7	PLS 521	Theories of Political Obligations	4	8							
CPS											
NUFYP											
8	FEAP 020	Foundation English for Academic Purposes 2	0	0							
9	FHUM 030	Foundations of Humanities and Social Sciences 2	0	0							
10	FMAT 020	Foundation 'Statistics'	0	0							
11	FMAT 030	Mathematics for Life Sciences (Biology And Chemistry)	0	0							
12	FMAT 040	Mathematics for Physical Sciences	0	0							
13	FPHY 030	Foundation 'Physics 2'	0	0							
14	FSCI 030	Essential Biology and Chemistry 2	0	0							
GSB											
Economics											
15	ECON 101	Introduction to Microeconomics	3	6				1 year UG SHSS, 2 year UG SHSS	SHSS	3 year UG SEng Civil Engineering, SST	

16	ECON 102	Introduction to Macroeconomics	3	6				1 year UG SHSS, 2 year UG SHSS	SHSS	3 year UG SEng Civil Engineering, SST	
17	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	
18	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	
19	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	
20	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) OR CSCI 151 Programming for Scientists and Engineers (192) (C- and above) OR CSCI 235 Programming Languages (638) (C- and above) OR CSCI 390 Artificial Intelligence (643) (C- and above) OR MATH 321 Probability (482) (C- and above) OR MATH 322 Mathematical Statistics (1165) (C- and above)			Through Add form only			
21	ECON 302	Game Theory and Economic Analysis	3	6	ECON 201 Intermediate Microeconomics (133) (C- and above) OR ECON 101 Introduction to Microeconomics (379) (C- and above) AND MATH 251 Discrete Mathematics (85) (C- and above)		PLS 315 Political Game Theory (704) (C- and above)	Economics	SHSS	3 year UG SEng Civil Engineering, SST	
22	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	
23	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	
24	ECON 328	Labor Economics	3	6	ECON 201 Intermediate Microeconomics (133) (C- and above)			Economics	SHSS	3 year UG SEng Civil Engineering, SST	
25	ECON 399	Independent Study in Economics	3	6				Through Add form only			
26	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	
27	ECON 412	Industrial Organization	3	6	ECON 301 Econometrics I (664) (C- and above)			Economics	SHSS	3 year UG SEng Civil Engineering, SST	
28	ECON 413	Econometrics II	3	6	ECON 301 Econometrics I (664) (C- and above)			Economics	SHSS	3 year UG SEng Civil Engineering, SST	
29	ECON 521	Microeconomic Theory II	4	8	ECON 501 Microeconomics (2187) (C- and above) AND ECON 512 Mathematical Economics (2154) (C- and above)						
30	ECON 522	Macroeconomics II	4	8	() (and above)						
31	ECON 524	Research Methodology	4	8	ECON 501 Microeconomics (2187) (C- and above) AND ECON 502 Macroeconomics (2186) (C- and above) AND ECON 511 Mathematics and Statistics (2188) (C- and above)	ECON 531 Econometrics (2505) (D and above)					

32	ECON 531	Econometrics	4	8	ECON 511 Mathematics and Statistics (2188) (C- and above) AND ECON 512 Mathematical Economics (2154) (C- and above)						
33	ECON 590	Thesis II	8	16	ECON 589 Thesis I (3714) (P)						
GSB											
34	MBA 06	Global Financial management	2	4							
35	MBA 10	Foundations of Strategy	2	4							
36	MBA 12	Operations Management	2	4							
37	MBA 13	Macroeconomics	2	4							
38	MBA 14	Decision Models	2	4							
39	MBA 15	Corporate Finance	2	4							
40	MBA 16	Entrepreneurship	2	4							
41	MBA 18	Financial Statement Analysis	2	4							
GSPP											
Master in Public Administration											
42	MPA 608	Strategic Management and Leadership	4	8							
43	MPA 610	National Identity and Public Policy	4	8				1 year GSPP Public Administration	GSPP		
44	MPA 611	Benefit Cost Analysis	3	6							
45	MPA 615	Law, institutions and development	3	6							
46	MPA 616	Development, Industrial and Finance Policies	3	6							
47	MPA 617	Law, institutions and development	4	8				1 year GSPP Public Administration	GSPP		
48	MPA 621	Global Health Policies and Systems	3	6							
49	MPA 622	Public Policy and Economics of Health Systems	4	8				1 year GSPP Public Administration	GSPP		
50	MPA 639	International Financial Policy	4	8				1 year GSPP Public Administration	GSPP		
51	MPA 699	Master's Project	6	12							
52	MPP 623	International Political Economy	4	8				Public Policy	GSPP		
Master in Public Policy											
53	MPP 602	Macroeconomics and Public Policy	4	8							
54	MPP 613	Public Policy Research Design and Analysis	4	8							
55	MPP 622	Economics, Philosophy and Public Policy	4	8				Public Policy	GSPP		
56	MPP 626	International Political Economy of Energy and Climate Change	4	8				Public Policy	GSPP		
57	MPP 632	Public International Law	4	8				Public Policy	GSPP		
58	MPP 641	Public Management and Leadership	4	8							
59	MPP 662	Public Project Evaluation and Analysis	4	8	MPP 601 Microeconomics and Public Policy (1449) (D and above)			Public Policy	GSPP		

60	MPP 699	Policy Analysis Exercise with Singapore Component	4	8	MPP 601 Microeconomics and Public Policy (1449) (C- and above) AND MPP 611 Statistics for Public Policy (1450) (C- and above) AND MPP 613 Policy Research Design and Methods (1301) (C- and above) AND MPP 621 Public Policy and Analysis (1451) (C- and above)						
GSE											
MA in Multilingual Education											
61	EDML 611	Plurilingual Individual	3	6							
62	EDML 612	Multilingual Society	3	6							
63	EDML 629	Multiliteracies: Teaching Language and Literacy for a Multilingual Context	3	6							
64	EDUC 627	Multilingual curriculum development and assessment	3	6							
65	EDUC 658	Thesis Research II	6	12							
MSc Educational Leadership HE											
66	EDHE 642	Globalisation and higher education	3	6							
67	EDHE 649	Fundamentals of Higher Education	3	6							
68	EDUC 503	English for Thesis writing	1.5	3							
69	EDUC 504	English for Thesis Writing II	3	6							
70	EDUC 506	Academic English II	1.5	3							
71	EDUC 511	Advanced English for Education Professionals II	3	6							
72	EDUC 571	Basic Kazakh	3	6							
73	EDUC 572	Kazakh for Professional Purposes	3	6							
74	EDUC 573	Academic Writing in Kazakh	3	6							
75	EDUC 591	Academic English Writing for Doctoral Students II	3	6							
76	EDUC 600	Research Methods II	3	6							
77	EDUC 640	Thesis Seminar (Part III)	1.5	3							
78	EDUC 670	Internship Project	6	12							
79	EDUC 671	Work-based project	6	12							
80	EDUC 704	Advanced Methods of Education Research	3	6							
81	EDUC 705	Advanced Methods of Education Research: Qualitative Methods	3	6							
82	EDUC 711	Globalisation and Education	3	6							
83	EDUC 730	Preparation for Proposal Defence I	6	12							

84	EDUC 737	Pre-Dissertation Seminar	3	6							
85	EDUC 740	Doctoral Seminar	3	6							
86	EDUC 750	Dissertation Research	9	18							
MSc Educational Leadership IE											
87	EDIE 651	Inclusive Education: Policy Perspectives	3	6							
MSc Educational Leadership SE											
88	EDSE 623	Foundations of Early Childhood Education	3	6							
89	EDSE 630	Professional Identity	3	6							
SoM											
Biological Science											
90	BIOL 101	Biology for non-Science majors	3	6			BIOL 110 Modern Biology I (1070) (C- and above)	SHSS			
91	BIOL 110	Modern Biology I with Lab	4	8				Biological Sciences, Chemistry	SST	SHSS	
92	BIOL 120	Modern Biology II with Lab	4	8	BIOL 110 Modern Biology I (1070) (C and above)			Biological Sciences, Chemistry	SST	SHSS	
93	BIOL 220	Molecular Biology of Cell with Lab	4	8	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	
94	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	
95	BIOL 341	Biochemistry I	3	6	CHEM 211 Organic Chemistry I (154) (C and above)			Biological Sciences, Chemistry	SST	SHSS	
96	BIOL 356	Junior Research	3	6		BIOL 355 Critical Research Reasoning (1000) (C and above)		Biological Sciences			
97	BIOL 370	Genetics	3	6	BIOL 120 Modern Biology II (1195) (C and above)			Biological Sciences			
98	BIOL 399	Biology Internship - 2B	3	6				Biological Sciences			
99	BIOL 420	Bioethics	3	6	BIOL 120 Modern Biology II (1195) (C and above)			4 year UG SST Biological Sciences	Biological Sciences		
100	BIOL 430	Histology	3	6	BIOL 230 Human Anatomy and Physiology I (72) (C and above) OR BIOL 230 Human Anatomy and Physiology I (6217) (C and above)			Biological Sciences			
101	BIOL 440	Neuroscience	3	6	BIOL 230 Human Anatomy and Physiology I (72) (C and above) OR BIOL 230 Human Anatomy and Physiology I (6217) (C and above)			Biological Sciences			
102	BIOL 491	Senior Thesis 2	4	8	BIOL 490 Honors Thesis Research (1581) (C and above)			Biological Sciences			
103	BIOL 530	Bioethics Principles and Practices	3	6							
104	BIOL 550	The Eukaryotic Cells in Health and Disease	3	6							
105	BIOL 560	Molecular Biology of Prokaryotic Cells	3	6							

106	BIOL 600	Graduate Seminar Series	3	6							
107	BIOL 699	Research Thesis II	6	12							
Public Health											
108	PUBH 512	Biostatistical Modeling and Sampling	3	6							
109	PUBH 522	Advanced Analytical Epidemiology	3	6							
110	PUBH 561	Graduate Research Seminar I	3	6							
111	PUBH 631	Social and Behavioral Sciences in Public Health	3	6							
SSH											
Academic Success Centre, Communication and Composition											
112	SHSS 150	Rhetoric and Composition	3	6				1 year UG SHSS, 2 year UG SHSS	SST	3 year UG SEng Civil Engineering, SHSS	
Area Studies											
113	EAS 502	Disciplinary Methodology	4	8							
114	EAS 504	Thesis II	12.5	25	EAS 500 Introduction to Eurasia (1632) (C- and above) AND EAS 501 General Methodology (1633) (C- and above) AND EAS 502 Disciplinary Methodology (1379) (C- and above) AND EAS 503 Thesis I (2141) (C- and above)						
Chemistry											
115	CHEM 090	Chemistry for Non-Science majors	3	6				SHSS			
116	CHEM 092	Survey of Environmental Sciences for Non-Science Majors	3	6				SHSS			
117	CHEM 101	General Chemistry I	3	6				Chemistry	Biological Sciences	SST	
118	CHEM 102	General Chemistry II	3	6	CHEM 101 General Chemistry I (113) (C and above)			Biological Sciences, Chemistry	SST		
119	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)					
120	CHEM 189c	Independent Study	3	6				Through Add form only			
121	CHEM 211	Organic Chemistry I	3	6	CHEM 102 General Chemistry II (232) (C and above)						
122	CHEM 211L	Organic Chemistry I Lab	2	4	CHEM 101L General Chemistry I lab (179) (C and above)	CHEM 211 Organic Chemistry I (154) (C and above)					
123	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	

124	CHEM 212L	Organic Chemistry II Lab	2	4	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	
125	CHEM 320	Instrumental Analysis with Labs	4	8	CHEM 220 Quantitative Chemical Analysis (555) (C and above)			Chemistry	Biological Sciences	SST	
126	CHEM 332	Physical Chemistry II	3	6	CHEM 331 Physical Chemistry I (634) (C and above)	MATH 274 Introduction to Differential Equations (484) (C and above)		Chemistry	Biological Sciences	SST	
127	CHEM 332L	Physical Chemistry II Lab	1	2		CHEM 332 Physical Chemistry II (1056) (C and above) AND CHEM 331L Physical Chemistry Lab (1060) (C and above)		Chemistry	Biological Sciences	SST	
128	CHEM 341	Biochemistry I	3	6	CHEM 211 Organic Chemistry I (154) (C and above)						
129	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)					
130	CHEM 380	Research Methods	3	6							
131	CHEM 400	Chemistry Seminar	1	2	CHEM 380 Research Methods (636) (C and above)			Chemistry	Biological Sciences	SST	
132	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)						
133	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)						
134	CHEM 451	Applied Homogenous Catalysis	3	6	CHEM 350 Advanced Inorganic Chemistry (1905) (C and above)						
135	CHEM 471	Environmental Chemistry	3	6	CHEM 102 General Chemistry II (232) (C and above)			Chemistry	Biological Sciences	SST	
136	CHEM 490	Nanochemistry	3	6	CHEM 331 Physical Chemistry I (634) (C and above) AND CHEM 250 Descriptive Inorganic Chemistry (445) (C and above)						
Communication and Composition											
137	COMM 102	Communication Foundations II	3	6	WCS 150/ASC 100 Advanced English for Academic Purposes (2183) (C- and above)			3 year UG SEng Civil Engineering, SHSS, SST			
138	COMM 240	Health Communication	3	6	WCS 101 Communication and Society (199) (C- and above)			3 year UG SEng Civil Engineering, SHSS, SST			
139	COMM 350	Science, Health, and Social Influence	3	6				3 year UG SEng Civil Engineering, SHSS, SST			
140	SHSS 250	Advanced Rhetoric and Composition	3	6	WCS 150/ASC 100 Advanced English for Academic Purposes (2183) (C- and above)			SHSS	SST	3 year UG SEng Civil Engineering	

141	SHSS 331	Writing Fellows – Practicum in Composition & Collaboration II	3	6	WCS 390 Writing Fellows I – Composition and Collaboration in Theory and Practice (1969) (B and above)			Through Add form only			
History, Philosophy and Religious Studies											
142	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	
143	HST 122	World History II (from 1500)	3	6				1 year UG SHSS, 1 year UG SST, History	SEng, SHSS, SST		
144	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		
145	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		
146	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	
147	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	
148	HST 399	Independent Study	3	6				Through Add form only			
149	HST 499	History Capstone: Undergraduate Dissertation	4	8	HST 498 Directed Reading (1365) (C- and above)			Through Add form only			
150	PHIL 101	Introduction to Philosophy	3	6				1 year UG SHSS	3 year UG SEng Civil Engineering, SHSS, SST		
151	PHIL 123	Philosophy of Science	3	6				1 year UG SHSS	3 year UG SEng Civil Engineering, SHSS, SST		
152	PHIL 210	Ethics	3	6				Chemistry	3 year UG SEng Civil Engineering, SHSS, SST		
153	PHIL 215	Bioethics	3	6				4 year UG SST Biological Sciences	3 year UG SEng Civil Engineering, SHSS, SST		
154	PHIL 240	Formal Logic	3	6				SHSS	3 year UG SEng Civil Engineering, SST		
155	PHIL 325	Truth, Lies, Media, and Propaganda	3	6				SHSS	3 year UG SEng Civil Engineering, SST		
156	REL 212	Buddhist Religious Traditions	3	6				SHSS	3 year UG SEng Civil Engineering, SST		
History, Philosophy and Religious Studies, History, Philosophy and Religious Studies											
157	HST 472/REL 472	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	
158	HST 572/REL 572	History of Sufism in the Middle East and Central Asia	4	8							
History, Philosophy and Religious Studies, Languages, Literature and Linguistics											
159	PHIL 102/WLL 102	Language, Experience, Culture	3	6				1 year UG SHSS	3 year UG SEng Civil Engineering, SHSS, SST		
History, Philosophy and Religious Studies, Political Science and International Relations											

160	HST 424/PLS 430	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	
161	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 437 Nationalism and Multi-Ethnic Governance (99) (C- and above)			SHSS	3 year UG SEng Civil Engineering, SST		
History, Philosophy and Religious Studies, Political Science and International Relations, Sociology and Anthropology											
162	ANT 313/PLS 332/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	
Kazakh Language and Turkic Studies											
163	KAZ 101	Basic Kazakh I	3	6	KLL "[A2] Basic"						
164	KAZ 105	Basic Kazakh II	3	6	KLL "[A2] Basic"						
165	KAZ 111	Intermediate Kazakh I	3	6	KLL "[B1.2] Intermediate"						
166	KAZ 114	Intermediate Kazakh II	3	6	KLL ""						
167	KAZ 121	Upper-Intermediate Kazakh	3	6	KLL "[B2.2] Upper-Interm."						
168	KAZ 211	Kazakh Rhetoric	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"		KAZ 303 Academic Speaking in Kazakh (702) (C- and above) OR KAZ 304 Academic Writing in Kazakh (703) (C- and above)				
169	KAZ 212	Academic Kazakh	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"		KAZ 304 Academic Writing in Kazakh (703) (C- and above) OR KAZ 303 Academic Speaking in Kazakh (702) (C- and above)				
170	KAZ 213	Kazakh Terminology	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"						
171	KAZ 225	Kazakh Diplomacy	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"						
172	KAZ 226	Kazakh for Medical School	3	6	KLL "[B1.2] Intermediate"						
173	KAZ 230	Kazakh Culture through Ethnography, Literature, and Film	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"						
174	KAZ 263	Business Etiquette	3	6	KLL "[B2.2] Upper-Interm." OR KLL "[C1.1] Advanced"						

175	KAZ 264	Language and ethnicity	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"						
176	KAZ 313	Kazakh for Business	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"						
177	KAZ 351	Kazakh Short Stories	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"						
178	KAZ 357	Literature of Alash	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"						
179	KAZ 362	Creative Writing in Kazakh Language	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"						
180	KAZ 364	Kazakh for Civil Service	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"						
181	KAZ 366	Kazakh Language for Engineers	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"						
182	KAZ 368	Onomastics: History and Function of Names	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"						
183	KAZ 371	Contemporary Kazakh Literature	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"						
Languages, Literature and Linguistics											
184	CHN 102	Beginning Mandarin II	4	8	CHN 101 Beginning Mandarin I (1384) (C and above)			World Languages, Literature and Culture	SHSS	3 year UG SEng Civil Engineering, SST	
185	CHN 201	Intermediate Mandarin I	4	8	CHN 102 Beginning Mandarin II (1844) (C and above)			World Languages, Literature and Culture	SHSS	3 year UG SEng Civil Engineering, SST	
186	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	
187	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	
188	GER 101	Beginning German	4	8				1 year UG SHSS	World Languages, Literature and Culture	3 year UG SEng Civil Engineering, SHSS, SST	
189	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	
190	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		
191	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		
192	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		
193	WLL 110	Introduction to Literary Studies	3	6				1 year UG SHSS	3 year UG SEng Civil Engineering, SHSS, SST		
194	WLL 111	Introduction to Theatre	3	6				1 year UG SHSS	3 year UG SEng Civil Engineering, SHSS, SST		
195	WLL 112	Introduction to Poetry	3	6				1 year UG SHSS	3 year UG SEng Civil Engineering, SHSS, SST		
196	WLL 121	Introduction to Cultural Studies	3	6				1 year UG SHSS	3 year UG SEng Civil Engineering, SHSS, SST		

197	WLL 131	Introduction to Linguistics	3	6				1 year UG SHSS	3 year UG SEng Civil Engineering, SHSS, SST		
198	WLL 155	Introduction to the Comic Book	3	6				1 year UG SHSS	3 year UG SEng Civil Engineering, SHSS, SST		
199	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		
200	WLL 222	Acting: Praxis, Theory and History	3	6				World Languages, Literature and Culture	3 year UG SEng Civil Engineering, SHSS, SST		
201	WLL 241	Survey of Folk Tales	3	6				World Languages, Literature and Culture	3 year UG SEng Civil Engineering, SHSS, SST		

202	WLL 245	Terrible Perfection: Heroines of Classical Russian Literature	3	6	WLL 101 Introduction to Critical Issues in the Humanities and Social Sciences (234) (C and above) OR WLL 102 /PHIL 102 Language, Experience, Culture (2481) (C and above) OR WLL 110 Introduction to Literary Studies (244) (C and above) OR WLL 111 Introduction to Theatre (2160) (C and above) OR WLL 121 Introduction to Cultural Studies (243) (C and above) OR WLL 155 Introduction to the Comic Book (3046) (C and above) OR WLL 171/ANT 175 Introduction to Linguistic Anthropology (4417) (C and above) OR WLL 201 World Literature I (686) (C and above) OR WLL 209 Introduction to Translation Studies (2178) (C and above) OR WLL 210 Migrants, Nomads and Exiles (217) (C and above) OR WLL 211 World Literature II: from the 18th to the 20th century (492) (C and above) OR WLL 212 Introduction to Poetry (2167) (C and above) OR WLL 213/SPA 211 Introduction to the Hispanic World (1030) (C and above) OR WLL 218 Renaissance in Italy and Beyond (6573) (C and above) OR WLL 219 Myth and Adaptation (2489) (C and above) OR WLL 220 Ancient World Literature (to 1650) (218) (C and above) OR WLL 221 Creative Writing/Theatre (245) (C and above) OR WLL 222 Acting: Praxis, Theory and History (3336) (C and above) OR WLL 231 Beginning and Intermediate Playwriting (1625) (C and above) OR WLL 240 Introduction to the Novel (687) (C and above) OR WLL 241 Survey of Folk Tales (466) (C and above) OR WLL 243 Western Theatre, Literature and History From Ancient Creece to 1800 (1082) (C and above) OR WLL 244 Survey of Nineteenth-Century Russian Literature (1395) (C and above) OR WLL 246 Survey of Contemporary Russian Literature and Culture (3604) (C and above) OR WLL 247 Survey of East Asian Literature (1382) (C and above) OR WLL 248 Survey of Soviet Literature and Culture (3842) (C and above) OR WLL 250 From Page to Screen (472) (C and above) OR WLL 251 Hong Kong Cinema (3337) (C and above) OR WLL 253 Western Theatre Literature and History: 1800-Present (1396) (C and above) OR WLL 254/SPA 254 Superstition, Magical Realism, and Horror in Hispanic Culture (1851) (C and above) OR WLL 255 The Comic Book in Japan and America (1849) (C and above) OR WLL 257 Fan Culture in the Age of Convergence (2487) (C and above) OR WLL 291 Theatre Practicum (2168) (C and above)			World Languages, Literature and Culture	3 year UG SEng Civil Engineering, SHSS, SST		
203	WLL 251	Hong Kong Cinema	3	6				World Languages, Literature and Culture	3 year UG SEng Civil Engineering, SHSS, SST		
204	WLL 257	Fan Culture in the Age of Convergence	3	6				World Languages, Literature and Culture	3 year UG SEng Civil Engineering, SHSS, SST		
205	WLL 270	Languages of Eurasia	3	6				World Languages, Literature and Culture	3 year UG SEng Civil Engineering, SHSS, SST		
206	WLL 399	Independent Study	3	6				Through Add form only			

207	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		
208	WLL 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 LING 275 Second Language Acquisition Theory and Research I (4473) (C- and above)			World Languages, Literature and Culture	3 year UG SEng Civil Engineering, SHSS, SST		
209	WLL 499	Languages and Literature Capstone II	3	6	WLL 498 Languages, Linguistics, and Literatures Capstone I (3048) (C- and above)			Through Add form only			
210	WLL 542	Contemporary Russian and Russophone Literature	4	8							
211	WLL 570	Multilingualism and Language Contact	4	8							
Languages, Literature and Linguistics, Languages, Literature and Linguistics											
212	SPA 352/WLL 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		
Physics											
213	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	
214	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	
215	PHYS 202	Introductory Astronomy II	3	6	PHYS 162 Physics II for Scientists and Engineers with Laboratory (173) (C- and above)			SST	SHSS		
216	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		
217	PHYS 270	Computational Physics	4	8	(CSCI 150 Fundamentals of Programming (1501) (C- and above) OR CSCI 151 Programming for Scientists and Engineers (192) (C- and above) OR CSCI 115 Programming Fundamentals (5257) (C- and above)) AND MATH 162 Calculus II (170) (C- and above)	MATH 273 Linear Algebra with Applications (84) (D and above)		Physics	Mathematics	SST	
218	PHYS 271	Applied Methods of Computational Physics with Laboratory	4	8	MATH 162 Calculus II (170) (C- and above) AND MATH 273 Linear Algebra with Applications (84) (C- and above)		PHYS 270 Introduction to Scientific Computing and Data Analysis (488) (C- and above)	Economics	Mathematics	SST	
219	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		
220	PHYS 362	Classical Electrodynamics II	3	6	PHYS 361 Classical Electrodynamics I (651) (C- and above)			Physics	SST		

221	PHYS 370	Optics with Laboratory	4	8	PHYS 361 Classical Electrodynamics I (651) (C- and above)			Physics	SST		
222	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)						
223	PHYS 474	Lasers and Photonics	3	6	PHYS 370 Optics with Laboratory (1405) (C- and above)			Physics	SST		
224	PHYS 491	Directed Study of Advanced Physics Topics	3	6				Through Add form only			
225	PHYS 495	Physics Colloquium	0	0				Physics	SST		
226	PHYS 499	Graduation Project	3	6				Through Add form only			
227	PHYS 510	Quantum Mechanics	3	6							
228	PHYS 520	Statistical Physics	3	6							
Political Science and International Relations											
229	PLS 101	Introduction to Political Science	3	6				1 year UG SHSS	SST	3 year UG SEng Civil Engineering, SHSS	
230	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	
231	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	
232	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	
233	PLS 180	European Union	1	2				Through Add form only			

234	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	
235	PLS 211	Quantitative Methods in Political Science	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	
236	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	
237	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	
238	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	
239	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	

240	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	
241	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	
242	PLS 354	Introduction to International Law	3	6	PLS 150 Introduction to International Relations (511) (C- and above) AND PLS 140 Introduction to Comparative Politics (223) (C- and above) AND 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	
243	PLS 360	Foreign Policy Analysis	3	6	PLS 150 Introduction to International Relations (511) (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	
244	PLS 365/SOC 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	
245	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	
246	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			

247	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	
248	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	
249	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	
250	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	
251	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	
252	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	

253	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	
254	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	
255	PLS 510	Advanced Research II	4	8							
256	PLS 516	Experimental Political Science	4	8	PLS 511 Qualitative Methods in Political Science (1631) (C- and above)						
257	PLS 522	Just War Theory	4	8							
258	PLS 541	Advanced Topics in Comparative Politics	4	8							
259	PLS 547	Comparative Political Parties	4	8							
260	PLS 557	International Security and Conflict	4	8							
261	PLS 598	MA Thesis for Political Science and International Relations	10	20							
SSH											
262	SHSS 300	School of Humanities and Social Sciences Internship	3	6				Through Add form only			
263	SHSS 301	School of Humanities and Social Sciences Internship: Second Experience	3	6				Through Add form only			
264	SHSS 398	Independent Study	1	2				Through Add form only			
Sociology and Anthropology											
265	ANT 101	Introduction to Sociocultural Anthropology	3	6				1 year UG SHSS, Anthropology	3 year UG SEng Civil Engineering, SHSS, SST		
266	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	
267	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	
268	ANT 231	Frauds and Fallacies in Archaeology	3	6				2 year UG SHSS, Anthropology	SHSS	3 year UG SEng Civil Engineering, SST	
269	ANT 232	Archaeology of Central Asia	3	6				2 year UG SHSS, Anthropology	SHSS	3 year UG SEng Civil Engineering, SST	
270	ANT 286	Nomads: Around the world and through time	3	6				2 year UG SHSS, Anthropology	3 year UG SEng Civil Engineering, SHSS, SST		

271	ANT 306	Anthropology of Performance	3	6				3 year UG SHSS, 4 year UG SHSS, Anthropology	3 year UG SEng Civil Engineering, SHSS, SST		
272	ANT 314/PLS 335	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 OR Subject "SOC" BETWEEN 100 and 499 OR Subject "ANT" 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	
273	ANT 361	Human Evolution: Bones, Stones and Genomes	3	6				2 year UG SHSS, Anthropology	SHSS	3 year UG SEng Civil Engineering, SST	
274	ANT 400	Research Assistance in Anthropology	1	2				Through Add form only			
275	ANT 403	Research Assistance in Anthropology	2	4				Through Add form only			
276	ANT 475	Digital Ethnographies	3	6	ANT 110 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	
277	ANT 499	Capstone Seminar	4	8	ANT 498 Capstone Seminar I (2965) (C- and above)			4 year UG SHSS Anthropology, 4 year UG SHSS Sociology			
278	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	
279	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	
280	SOC 201	Social Science Research Methods	3	6				Anthropology, Sociology	SHSS	3 year UG SEng Civil Engineering, SST	
281	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	
282	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	
283	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	
284	SOC 225	Environment and Society	3	6				Sociology	SHSS	3 year UG SEng Civil Engineering, SST	
285	SOC 317	Economy and Society	3	6	SOC 101 Introduction to Sociology (508) (C- and above) OR Subject "SOC" BETWEEN 200 and 299 OR Subject "SOC" BETWEEN 200 and 299 OR ECON 102 Introduction to Macroeconomics (503) (C- and above) OR PLS 120 Introduction to Political Theory (512) (C- and above) OR PLS 150 Introduction to International Relations (511) (C- and above)			Sociology	2 year UG SHSS, 3 year UG SHSS, 4 year UG SHSS	3 year UG SEng Civil Engineering, SHSS, SST	

286	SOC 403	Research Assistance in Sociology	2	4				Through Add form only			
287	SOC 499	Capstone Seminar	4	8	SOC 498 Capstone Seminar Part I (3043) (C- and above)			4 year UG SHSS Anthropology, 4 year UG SHSS Sociology			
Sociology and Anthropology, Sociology and Anthropology											
288	ANT 222/SOC 222	Approaches to Global Development	3	6				2 year UG SHSS, Anthropology, Sociology	SHSS	3 year UG SEng Civil Engineering, SST	
289	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	
290	ANT 580/SOC 518	Gender, Power and Social Change in South Asia	4	8							
291	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	
SEDS											
Chemical Engineering											
292	MCHE 601	Pipeline Engineering & Flow Assurance	3	6							
293	MCHE 602	Process Engineering and Simulation	3	6	MCHE 615 Advanced Unit Operations (3145) (D and above)						
294	MCHE 603	Crude Oil Processing	3	6							
295	MCHE 604	Natural Gas Processing	3	6							
296	MCHE 605	Petroleum Refining Water/Wastewater Use and Management	3	6							
Civil Engineering											
297	MCE 610	Sustainable Transportation Systems	3	6							
298	MCE 611	Sustainable Infrastructure Systems	3	6							
299	MCE 612	Resilient Structural and Geotechnical Systems	3	6							
300	MCE 613	Numerical Method in Geotechnical Engineering	3	6							
301	MCE 615	Applications of Geomatics in Civil Engineering	3	6							
Computer Science											
302	SST 502	Teaching Practicum	3	6							
303	SST 504	Innovation & Entrepreneurship	3	6							
Electrical and Electronic Engineering											
304	MEE 601	Industrial and Commercial Power System	3	6							
305	MEE 602	Advanced Power Electronics	3	6							
306	MEE 603	Special Topics in Power Engineering	3	6							
307	MEE 609	Internet of Things	3	6							
308	MEE 615	Wireless Communications	3	6							

309	MEE 618	Optical Communication	3	6							
310	MEE 619	Photonics Technology	3	6							
311	MEE 620	RF and Microwave Communications Systems	3	6							
Mechanical Engineering											
312	MME 622	Advanced Design and Manufacturing	3	6							
313	MME 623	Design and Manufacturing with Environmental Concern	3	6							
314	MME 624	Design Optimization	3	6							
315	MME 625	Advanced Computer Aided Engineering	3	6							
316	MME 626	Modern Methods in Manufacturing	3	6							
School of Engineering											
317	BENG 114	Introduction to Electrical Systems	3	6							
318	BENG 147	Introduction to Fluid Mechanics and Thermodynamics	3	6	BENG 124 Engineering Mathematics I (101) (D and above)						
319	BENG 148	Engineering Practice	3	6							
320	BENG 201	Engineering Economy	3	6							
321	BENG 225	Engineering Mathematics II	3	6							
322	BENG 226	Engineering Thermodynamics	3	6							
323	BENG 343	Interdisciplinary Design Project	3	6							
SoE											
Chemical and Materials Engineering											
324	ECHE 210	Foundations of Unit Operations	3	6							
325	ECHE 270	Transport Phenomena-l	3	6							
326	ECHE 319	Chemical Engineering Thermodynamics	3	6							
327	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)					
328	ECHE 327	Micro and Nanotechnology	3	6							
329	ECHE 328	Mineral Processing	3	6							
330	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)						
331	ECHE 384	Interdisciplinary Design Project	3	6							

332	ECHE 478	Electrochemical Engineering and Corrosion Protection	3	6	ECHE 222 Chemistry I (731) (D and above)						
333	ECHE 479	Capstone Project II	9	18	ECHE 418 Capstone project 1 (1278) (D and above)						
334	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)						
335	ECHE 483	Chemistry II	3	6	ECHE 222 Chemistry I (731) (D and above)						
336	EME 268	Engineering Fluid Mechanics	3	6							
Civil and Environmental Engineering											
337	ECE 210	Soil Mechanics	3	6							
338	ECE 218	Environmental Chemistry	3	6							
339	ECE 219	Hydraulics	3	6							
340	ECE 302	Civil Engineering Materials	3	6	BENG 221 Engineering Materials (47) (D and above)						
341	ECE 306	Geotechnical Design	3	6	ECE 210 Soil Mechanics (862) (D and above)						
342	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)						
343	ECE 405	Environmental Engineering	3	6	ECE 473 Environmental Systems (1953) (D and above) OR ECE 218 Environmental Chemistry (3296) (D and above)						
344	ECE 478	Capstone Project II	9	18	ECE 401 Capstone Project 1 (1270) (D and above)						
345	ECE 479	Structural Analysis II	3	6	ECE 217 Structural Analysis I (3156) (D and above)						
346	EMEM 510	Managerial Accounting	2	4							
347	EMEM 511	Business Strategy	2	4							
348	EMEM 512	Leading Change	2	4							
349	EMEM 513	Entrepreneurship	2	4							
350	EMEM 514	Finance	2	4							
351	EMEM 516	Management of Organizations	2	4							
352	EMEM 517	Marketing	2	4							
353	EMEM 527	Globalization and Engineering	1.5	3							
354	EMEM 529	Capstone Project	7.5	15							
355	EMEM 544	Lean Production	1.5	3							
356	EMEM 545	Business Communication	2	4							
Electrical and Computer Engineering											
357	EEE 210	Software Engineering	3	6	BENG 146 Programming for Engineers (2234) (D and above)						

358	EEE 211	Computer Systems Architecture	3	6	ECHE 126 Introduction to Chemical Engineering (33) (D and above)						
359	EEE 212	Signals and Systems	3	6	BENG 225 Engineering Mathematics II (48) (D and above)						
360	EEE 239	Communication systems	3	6							
361	EEE 340	Data Communications	3	6							
362	EEE 341	Digital Electronic System Design	3	6							
363	EEE 379	Power Systems Analysis	3	6							
364	EEE 380	Integrated Circuits Design	3	6							
365	EEE 381	Electrical Machines and Drives	3	6							
366	EEE 410	Nonlinear Circuits and Systems	3	6	EEE 380 Integrated Circuits Design (1954) (D and above)						
367	EEE 411	Special Topics in Signal Processing	3	6							
368	EEE 480	Capstone Project II	9	18							
Mechanical and Aerospace Engineering											
369	EME 262	Machine Dynamics I	3	6							
370	EME 275	Fluid Mechanics I	3	6							
371	EME 354	Advanced Control Systems	3	6	BENG 219 Control Systems (728) (D and above)						
372	EME 377	Mechanical Systems Design	3	6	EME 361 Machine Design (1051) (D and above)						
373	EME 410	Aerodynamics	3	6	EME 357 Fluid Mechanics II (1280) (D and above)						
374	EME 411	Air Conditioning and Fire Engineering	3	6	BENG 226 Engineering Thermodynamics (1553) (D and above)						
375	EME 463	Machine Dynamics II	3	6							
376	EME 464	Materials and Manufacturing I	3	6							
377	EME 476	Materials and Manufacturing II	3	6							
378	EME 477	Capstone Project II	9	18							
379	EME 480	Industrial Automation	3	6							
SMG											
380	DENG 783	Research Methods and Statistics	1.5	3							
School of Engineering											
381	DENG 784	Doctoral Proposal I	0	6							
382	DENG 785	PhD Proposal Oral Defence	0	0							
383	DENG 787	Doctoral Proposal II	3	6	DENG 784 Doctoral Proposal I (1774) (P)	DENG 785 PhD Proposal Oral Defence (2604) (P)					
384	DENG 794	Dissertation Research	12	24	DENG 785 PhD Proposal Oral Defence (2604) (P)						
SCAI											
Computer Science											

385	CSCI 151	Programming for Scientists and Engineers	4	8			CSCI 111 Web Programming and Problem Solving (110) (D and above) OR CSCI 115 Programming Fundamentals (5257) (D and above) OR ENG 101 Programming for Engineers (4517) (B- and above)	1 year UG SST	SST	SHSS	
386	CSCI 152	Performance and Data Structures	4	8	CSCI 151 Programming for Scientists and Engineers (192) (C- and above)			1 year UG SST	SST	SHSS	
387	CSCI 232	Operating Systems	3	6	CSCI 231 Computer Systems and Organization (194) (D and above)			2 year UG SST Computer Science	Computer Science	SST	
388	CSCI 233	Computer Networks	3	6	CSCI 152 Performance and Data Structures (489) (C- and above)			Computer Science	SST	SHSS	
389	CSCI 245	System Analysis and Design	3	6	CSCI 152 Performance and Data Structures (489) (C- and above)			Computer Science	SST	SHSS	
390	CSCI 307	Computer Science Seminar	3	6				3 year UG SST Computer Science			
391	CSCI 336	Ubiquity and Sensing	3	6	CSCI 333 Computer Networks (1145) (C- and above)			Computer Science	SST	SHSS	
392	CSCI 353	Programming Paradigms	4	8	CSCI 152 Performance and Data Structures (489) (C- and above)			3 year UG SST Computer Science	Computer Science	SST	
393	CSCI 398	Directed Study	3	6				Through Add form only			
394	CSCI 408	Senior Project I	3	6							
395	CSCI 409	Senior Project II	3	6	CSCI 408 Senior Project I (1481) (C- and above)			Through Add form only			
396	CSCI 455	Scripting Languages	3	6		CSCI 235 Programming Languages (638) (C- and above)		Computer Science	SST	SHSS	
397	CSCI 462	Open Source Software	3	6	CSCI 361 Software Engineering (640) (C- and above)			Computer Science	SST	SHSS	
398	CSCI 502	Hardware Software Co-Design	3	6	CSCI 501 Software Principles and Practice (2408) (C- and above)						
399	CSCI 591	Advanced Artificial Intelligence	3	6	CSCI 501 Software Principles and Practice (2408) (C- and above) OR DS 501 Fundamentals of Data Science (5218) (C- and above)						
400	SST 592	Research Seminar	3	6							
401	SST 692	Thesis	15	30							
Mathematics											
402	MATH 161	Calculus I	4	8				Biological Sciences, Chemistry	SST	SHSS	
403	MATH 162	Calculus II	4	8	MATH 161 Calculus I (118) (C and above)			1 year UG SST	SST	SHSS	
404	MATH 251	Discrete Mathematics	3	6	MATH 161 Calculus I (118) (C and above)			Mathematics	SST	SHSS	
405	MATH 263	Calculus III	4	8	MATH 162 Calculus II (170) (C and above)			Mathematics	SST	SHSS	

406	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	
407	MATH 274	Introduction to Differential Equations	3	6	MATH 162 Calculus II (170) (C and above)			Mathematics	SST	SHSS	
408	MATH 310	Applied Statistical Methods	3	6	MATH 161 Calculus I (118) (C and above)		MATH 321 Probability (482) (C and above)	Mathematics	SST	SHSS	
409	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	
410	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	
411	MATH 351	Introduction to 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	
412	MATH 361	Introductory 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	
413	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	
414	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	
415	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	
416	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	
417	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	
418	MATH 444	Nonparametric Methods	3	6	MATH 322 Mathematical Statistics (1165) (C and above)			Mathematics	SST	SHSS	
419	MATH 460	Topology	3	6	MATH 361 Real Analysis I (483) (C and above)			Mathematics	SST	SHSS	
420	MATH 461	Real Analysis II	3	6	MATH 361 Real Analysis I (483) (C and above)			Mathematics	SST	SHSS	

421	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	
422	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	
423	MATH 499	Capstone Project	3	6				Through Add form only			
Robotics and Mechatronics											
424	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		
425	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		
426	ROBT 206	Microcontrollers with Lab	4	8	CSCI 150 Fundamentals of Programming (1501) (C- and above) OR CSCI 151 Programming for Scientists and Engineers (192) (C- and above) OR ENG 101 Programming for Engineers (4517) (C- and above)			Computer Science, Robotics and Mechatronics	SST		
427	ROBT 302	Mechanical Design II	3	6	ROBT 301 Mechanical Design I with CAD Laboratory (622) (C- and above)			Robotics and Mechatronics	SST		
428	ROBT 304	Electromechanical Systems with lab	4	8	ROBT 203 Electrical and Electronic Circuits I with Lab (62) (C- and above)			Robotics and Mechatronics	SST		
429	ROBT 308	Industrial Automation	3	6				Computer Science, Robotics and Mechatronics	SST		
430	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		
431	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)			Robotics and Mechatronics			
432	ROBT 491	Graduation Project	3	6	ROBT 391 Research methods (7418) (C- and above)			Robotics and Mechatronics			
433	ROBT 502	Robot Perception & Vision	3	6	ROBT 501 Advanced Robot Kinematics (2263) (C- and above)						