Course Requirements and Registration Priorities
Summer 2025

#	Abbr	Title	Cr(US)	Cr(ECTS)	PreRequisite	CoRequisite	AntiRequisite	1st priority registration	2nd priority registration	3rd priority registration	4th priority registration
GSB											
Economics											
1	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)						
2	ECON 580	Research and Thesis	0	0							
GSB											
3	BUS 101	Core Course in Business	3	6				2 year UG SOM Medical Sciences, 2 year UG SOM Nursing, 3 year UG SOM, 4 year UG SEDS, 4 year UG SEDS (pending graduation), 4 year UG SMG, 4 year UG SMG (pending graduation), 4 year UG SOM, 4 year UG SSH, 4 year UG SSH (pending graduation), 5 year UG SEDS (pending graduation), 5 year UG SMG (pending graduation), 5 year UG SSH (pending graduation)	3 year UG SEDS, 3 year UG SMG, 3 year UG SSH	1 year UG SEDS, 1 year UG SMG, 1 year UG SOM, 1 year UG SSH, 2 year UG SEDS, 2 year UG SMG, 2 year UG SSH	
4	GSBF 541	Global Finance Experience Residency (I)	.5	1							
5	GSBF 542	Global Finance Experience Residency (II)	2.5	5							
6	GSBPHD 04	Core Research Skills I	4	8				GSB			
7	GSBPHD 08	Core Research Skills II	4	8				GSB			

8	GSBPHD 13	PhD Qualifying Exam	5	10				GSB			
9	GSBPHD 14	Thesis Research Progress	0	0				GSB			
10	MBA 10	Foundations of Strategy	3	6							
11	MBA 11	Operations Management	3	6							
12	MBA 12	Environmental, Social and Governance Factors (ESG) for Business	3	6							
13	MBAE 01	Corporate Finance	3	6							
14	MBAE 07	Global Economics for Managers	3	6							
15	MBAE 08	Entrepreneurial Finance	3.5	7							
16	MSF 05	Internship	3	6							
17	MSF 513a	Industry Insights Initiative	0	0							
GSPP											
Master in Public Administration											
18	MPA 609	Human Resource Policy and Management	4	8				1 year GSPP Public Administration			
19	MPA 699	Master’s Project with Overseas Component	0	0				1 year GSPP Public Administration			

20	MPE 600	Internship in Public Policy	4	8	(MPP 601 Microeconomics and Public Policy (1449) (C- and above) AND MPP 602 Macroeconomics and Public Policy (1023) (C- and above) AND MPP 611 Statistics for Public Policy (1450) (C- and above) AND MPP 621 Public Policy and Analysis (1451) (C- and above) AND MPP 641 Public Management and Leadership (1907) (C- and above) AND MPP 603 Data Analytics in Public Policy (6618) (C- and above)) OR (MPA 602 Public Administration in Theory and Practice (2077) (C- and above) AND MPA 603 Economic Applications for Public Managers (2074) (C- and above) AND MPA 605 Research Methods for Public Managers (2108) (C- and above) AND MPE 608 Strategic Management and Leadership (2491) (C- and above) AND MPA 610 Program Evaluation (6617) (C- and above))			1 year GSPP Public Administration, 1 year GSPP Public Policy			
Master in Public Policy											
21	MPP 699-0	Policy Analysis Exercise with Overseas Component	0	0	MPP 613 Policy Research Design and Methods (1301) (C- and above)			1 year GSPP Public Policy			
PhD in Public Policy											
22	DPP 600	Developing Dissertation Research	0	0				Public Policy			
GSE											
MA in Multilingual Education											
23	EDML 692	Thesis Research III	3	6				2 year GSE MA in Multil.Education			
24	EDML 693	Thesis Research 1	0	0				1 year GSE MA in Multil.Education			
MSc Educational Leadership HE											
25	EDHE 601	Thesis Seminar 1	0	0				1 year GSE Educ.Leadership			
26	EDHE 602	Thesis Seminar 2	0	0				1 year GSE Educ.Leadership			
27	EDUC 610	Management in Education	3	6				1 year GSE Educ.Leadership			

28	EDUC 729	Developing the Research Topic	0	0				1 year GSE PhD Education			
29	EDUC 730	Preparation for Proposal Defence	0	0				2 year GSE PhD Education			
30	EDUC 733	Thesis Proposal Defense	12.5	25				2 year GSE PhD Education, 3 year GSE PhD Education			
31	EDUC 752	Dissertation Research: Independent Study	0	0				3 year GSE PhD Education, 4 year GSE PhD Education			
MSc Educational Leadership IE											
32	EDIE 601	Thesis Seminar 1	0	0				1 year GSE Educ.Leadership			
33	EDIE 602	Thesis Seminar 2	0	0				1 year GSE Educ.Leadership			
MSc Educational Leadership SE											
34	EDSE 601	Thesis Seminar 1	0	0				1 year GSE Educ.Leadership			
35	EDSE 602	Thesis Seminar 2	0	0				1 year GSE Educ.Leadership			
Other											
Other											
36	STUMOB 001	Student Mobility Course	0	0							
37	T - 17390-S25	Literary and Cultural Theories: Reading the Past: Historicism, Presentism, Hauntology	4	8							
38	T - 2ABWL 415	Startup Center: Entrepreneurship Essentials	3	6							
39	T - AIML 12	Artificial Intelligence and Machine Learning: Theory and Practice	3	6							
40	T - ILS 2025	S: Introduction to Literary Studies	3	6							
41	T - S 321	Applied Econometrics	3	6							
42	T - SM 2025	PS: Structure and Meaning	3	6							
43	T -17387c-S25	Negotiating Gender: Queering the Sublime	4	8							
44	T -17388d-S25	Negotiating Gender: Aesthetic Theory: Undoing Binaries	4	8							
45	T -DaF-BG- 07	German A2.2 for Erasmus and Exchange Students	3	6							
SoM											

Biological Science											
46	BIOL 392	Directed Study in Biology	3	6							
47	BIOL 399	Biology Internship - 2B	3	6							
48	BIOL 490	Honors Thesis Research	0	0	BIOL 355 Critical Research Reasoning (1000) (B and above)						
49	BIOL 599	Master’s Thesis Research	0	0							
50	BIOL 800	Doctoral Thesis	90	180							
51	BIOL 800-0	Thesis Research	0	0							
MSMR											
52	MSMR 513	Internship in Sports Medicine and Rehabilitation	1.5	3				1 year Gr SOM Sports Medicine and Rehabilitation			
PHD											
53	PHDBS 701	Thesis Research	90	180				4 year PhD SOM BioMed Sciences, 5 year PhD SOM BioMed Sciences (pending graduation)			
54	PHDBS 701-0	Thesis Research	0	0				1 year PhD SOM BioMed Sciences, 2 year PhD SOM BioMed Sciences, 3 year PhD SOM BioMed Sciences, 4 year PhD SOM BioMed Sciences, 5 year PhD SOM BioMed Sciences (pending graduation)			
55	PHDGH 701-0	Thesis Research	0	0				1 year PhD SOM Global Health, 2 year PhD SOM Global Health, 3 year PhD SOM Global Health			
SSH											
Area Studies											
56	EAS 505	Research and Fieldwork Practicum	4	8				Eurasian Studies			
57	EAS 800	Doctoral Thesis in Eurasian Studies	70	140							
58	EAS 800-0	Dissertation Research in Eurasian Studies	0	0				Eurasian Studies			
Chemistry											

59	CHEM 101L	General Chemistry I lab	1	2		CHEM 101 General Chemistry I (113) (C and above)		Biological Sciences, Chemistry, SoM	SEDS, SMG		
60	CHEM 102	General Chemistry II	3	6	CHEM 101 General Chemistry I (113) (C and above)			Biological Sciences, Chemistry, SoM	SEDS, SMG		
61	CHEM 189c	Independent Study	3	6				Chemistry			
62	CHEM 211	Organic Chemistry I	3	6	CHEM 102 General Chemistry II (232) (C and above)			Biological Sciences, Chemistry, SoM	SEDS, SMG		
63	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)		Biological Sciences, Chemistry, SoM	SEDS, SMG		
64	CHEM 350	Advanced Inorganic Chemistry	3	6	CHEM 212 Organic Chemistry II (443) (C and above) AND CHEM 212L Organic Chemistry II Lab (444) (C and above) AND CHEM 250 Descriptive Inorganic Chemistry (445) (C and above)						
65	CHEM 560	Directed research in chemistry	0	0				Chemistry			
66	CHEM 798-0	Thesis Research	0	0				Chemistry			
Communication and Composition											
67	WCS 240	Writing for Digital Media	3	6	WCS 150/ASC 100 Advanced English for Academic Purposes (2183) (C- and above)			SEDS, SMG, SSH, SoM			
History, Philosophy and Religious Studies											
68	HST 100	History of Kazakhstan	3	6				4 year UG SEDS, 4 year UG SEDS (pending graduation), 4 year UG SMG, 4 year UG SOM, 4 year UG SSH, 4 year UG SSH (pending graduation), 5 year UG SEDS (pending graduation), 5 year UG SMG (pending graduation), 5 year UG SSH (pending graduation), 6 year UG SEDS (pending graduation), 6 year UG SSH (pending graduation)	SEDS, SMG, SSH, SoM		
69	HST 206	The Age of the Dragon Throne: Chinese Civilizations from the Mongols through the Qing	3	6				1 year UG SSH Undeclared, History	SEDS, SMG, SSH, SoM		

70	HST 399	Independent Study	3	6							
71	HST 400	Research Assistance	1	2	HST 100 History of Kazakhstan (172) (B and above) AND Subject "HST" BETWEEN 100 and 499						
72	PHIL 210	Ethics	3	6				3 year UG SOM Medical Sciences, 3 year UG SSH, 4 year UG SEDS, 4 year UG SEDS (pending graduation), 4 year UG SMG, 4 year UG SOM, 4 year UG SSH, 4 year UG SSH (pending graduation), 5 year UG SEDS (pending graduation), 5 year UG SMG (pending graduation), 5 year UG SSH (pending graduation), 6 year UG SEDS (pending graduation), 6 year UG SSH (pending graduation)	SEDS, SMG, SSH, SoM		
73	PHIL 398	Independent Study	3	6							
Kazakh Language and Turkic Studies											
74	KAZ 150	Basic Kazakh	3	6	KLL "[A2] Basic"			SEDS, SMG, SSH, SoM			
75	KAZ 201	Academic Kazakh I	3	6	KAZ 150 Basic Kazakh (1215) (C- and above) OR KLL "[B1.2] Intermediate"			SEDS, SMG, SSH, SoM			
76	KAZ 202	Academic Kazakh II	3	6	KAZ 201 Academic Kazakh I (4561) (C- and above) OR KLL "[B2.2] Upper-Interm."			SEDS, SMG, SSH, SoM			
77	KAZ 312	Kazakh discourse	3	6	KAZ 202 Academic Kazakh II (4562) (C and above) OR KLL "[C1.1] Advanced"			2 year UG SEDS, 2 year UG SMG, 2 year UG SOM, 2 year UG SSH, 3 year UG SEDS, 3 year UG SMG, 3 year UG SOM, 3 year UG SSH	SEDS, SMG, SSH, SoM		
78	KAZ 350	Kazakh Literature	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"			2 year UG SEDS, 2 year UG SMG, 2 year UG SOM, 2 year UG SSH, 3 year UG SEDS, 3 year UG SMG, 3 year UG SOM, 3 year UG SSH	SEDS, SMG, SSH, SoM		
79	KAZ 378	Kazakh for Social Science	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"			2 year UG SEDS, 2 year UG SMG, 2 year UG SOM, 2 year UG SSH, 3 year UG SEDS, 3 year UG SMG, 3 year UG SOM, 3 year UG SSH	SEDS, SMG, SSH, SoM		
Languages, Literature and Linguistics											
80	WLL 399	Independent Study	3	6							

81	WLL 400	Research Assistance in Linguistics and Literature	1	2							
Physics											
82	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 SEDS, 1 year UG SMG, 1 year UG SSH Mathematics, 1 year UG SSH Physics	SoM	SEDS, SMG, SSH	
83	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 SEDS, 1 year UG SMG, 1 year UG SSH Mathematics, 1 year UG SSH Physics	SEDS, SMG, SSH, SoM		
84	PHYS 299	Research project and internship	3	6							
85	PHYS 399	Physics Research Project	3	6							
86	PHYS 600	Thesis Research	0	0				Physics			
87	PHYS 700-0	Thesis Research	0	0				Physics			
Political Science and International Relations											
88	PLS 120	Introduction to Political Theory	3	6				(ND-CC) Undeclared SSH, Undeclared SSH	SEDS, SMG, SSH, SoM		
89	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)						
90	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)			Political Science and International Relations			
91	PLS 495	Research Practicum in PSIR	1	2	PLS 210 Political Science Research Methods (129) (C- and above) AND PLS 211 Quantitative Methods (221) (C- and above)						
92	PLS 597	Research for Thesis	6	12				Political Science and International Relations			
SSH											
93	SSH 300	School of Sciences and Humanities Internship	3	6							
94	SSH 301	School of Sciences and Humanities Internship: Second Experience	3	6							

Sociology and Anthropology											
95	ANT 110	Introduction to Sociocultural Anthropology	3	6				5 year UG SEDS (pending graduation), 5 year UG SSH (pending graduation), Anthropology, Undeclared SEDS, Undeclared SMG, Undeclared SSH	SEDS, SMG, SSH		
96	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 OR Subject "SOC" BETWEEN 100 and 499 OR Subject "ANT" BETWEEN 100 and 499			Anthropology	SEDS, SMG, SSH, SoM		
97	ANT 345	Archaeology Field School	3	6	ANT 110 Introduction to Sociocultural Anthropology (501) (C and above) OR ANT 120 Anthropology Theory (137) (C and above) OR ANT 120 Sociology Theory/Anthropology Theory (135) (C and above) OR ANT 140 World Prehistory (227) (C and above) OR ANT 160 Introduction to Biological Anthropology (161) (C and above) OR ANT 101 Being Human: An Introduction to Four Field Anthropology (2960) (C and above)						
98	ANT 400	Research Assistance in Anthropology	1	2							
99	ANT 483	Applied Public Heritage	3	6	ANT 101 Being Human: An Introduction to Four Field Anthropology (2960) (C+ and above) OR ANT 110 Introduction to Sociocultural Anthropology (501) (C+ and above) OR ANT 120 Anthropology Theory (137) (C+ and above) OR ANT 120 Sociology Theory/Anthropology Theory (135) (C+ and above) OR ANT 140 World Prehistory (227) (C+ and above) OR ANT 160 Introduction to Biological Anthropology (161) (C+ and above)						
100	ANT 583	Applied Public Heritage	4	8							

101	SOC 400	Research Assistance in Sociology	1	2							
102	SOC 401	Research Assistance in Sociology	1	2							
103	SOC 402	Research Assistance in Sociology	1	2							
SEDS											
Computer Science											
104	SEDS 502	Teaching Practicum	3	6							
Electrical and Computer Engineering											
105	DELCE 700	Thesis Research	89	178				Electrical Engineering			
SoE											
Chemical and Materials Engineering											
106	CHME 400	Process Design and Simulation	3	6	CHME 300 Heat and Mass Transfer (5952) (D and above) AND CHME 304 Chemical Reaction Engineering (6168) (D and above)			4 year UG SEDS Chemical and Materials Engineering			
107	CHME 403	Chemical Process Control and Safety	3	6				4 year UG SEDS Chemical and Materials Engineering			
108	DCHME 700	Thesis Research	89	178				Chemical Engineering			
109	DCHME 700-0	Thesis Research	0	0				Chemical Engineering			
110	MBME 700	Strategies for Controlled Topical Delivery of Drugs	3	6				2 year Gr SEDS (pending graduation)			
111	MCHME 602	MSc Thesis II	12	24				2 year Gr SEDS (pending graduation)			
112	MCHME 606	Advanced Heat and Mass Transfer	3	6				2 year Gr SEDS Chemical and Materials Engineering			
Civil and Environmental Engineering											
113	DCEE 700-0	Thesis Research	0	0				Civil Engineering			
Electrical and Computer Engineering											
114	DELCE 700-0	Thesis Research	0	0				Electrical Engineering			
115	ELCE 203	Signals and Systems	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)						

116	ELCE 301	Electronic Circuits	3	6	ELCE 201 Circuit Theory (5507) (C- and above)			5 year UG SEDS Electrical and Computer Engineering, 5 year UG SEDS Electrical and Computer Engineering (pending graduation)	4 year UG SEDS Electrical and Computer Engineering	3 year UG SEDS Electrical and Computer Engineering	
Geosciences											
117	GEOL 206	Field Geology 1	3	6	GEOL 202 Geologic Maps and Cross-Sections (5123) (C- and above)			2 year UG SMG Geology, 2 year UG SMG Mining Engineering, 3 year UG SMG Mining Engineering			
118	GEOL 509	Advanced Field Geology	3	6				1 year Gr SMG Geosciences			
Mechanical and Aerospace Engineering											
119	DMAE 700	Thesis Research	89	178				Mechanical Engineering			
120	DMAE 700-0	Thesis Research	0	0				Mechanical Engineering			
121	MAE 353	Summer Internship	1.5	3				3 year UG SEDS Mechanical and Aerospace Engineering			
Mining Engineering											
122	MINE 691	Thesis II	15	30	MINE 690 Thesis I (4531) (P)			2 year Gr SMG (pending graduation), 2 year Gr SMG Mining Engineering			
123	MINE 890	Doctoral Thesis	90	180				4 year PhD SMG Mining Engineering, 5 year PhD SMG Mining Engineering (pending graduation)			
124	MINE 890-0	Thesis Research	0	0				1 year PhD SMG Mining Engineering, 2 year PhD SMG Mining Engineering, 3 year PhD SMG Mining Engineering, 4 year PhD SMG Mining Engineering, 5 year PhD SMG Mining Engineering (pending graduation)			
Petroleum Engineering											
125	PETE 620	Thesis II	12	24				2 year Gr SMG (pending graduation), 2 year Gr SMG Petroleum Engineering			
126	PETE 805	Special Topics in Petroleum Engineering: Data Analytics	4	8				4 year PhD SMG Mining Engineering, 4 year PhD SMG Mining Engineering (pending graduation)			

127	PETE 890	Doctoral Thesis	90	180				4 year PhD SMG Petroleum Engineering, 5 year PhD SMG Petroleum Engineering (pending graduation)			
128	PETE 890-0	Thesis Research	0	0				1 year PhD SMG Petroleum Engineering, 2 year PhD SMG Petroleum Engineering, 3 year PhD SMG Petroleum Engineering, 4 year PhD SMG Petroleum Engineering, 5 year PhD SMG Petroleum Engineering (pending graduation)			
School of Engineering											
129	DENG 700	Thesis Research	89	178							
130	DENG 700-0	Thesis Research	0	0				Science, Engineering and Technology			
131	DENG 794	Dissertation Research	12	24	DENG 785 PhD Proposal Oral Defence (2604) (P)			Science, Engineering and Technology			
SCAI											
Computer Science											
132	CSCI 152	Performance and Data Structures	4	8	CSCI 151 Programming for Scientists and Engineers (192) (C- and above)			Computer Science, Robotics Engineering, Robotics and Mechatronics	Undeclared SEDS		
133	CSCI 299	Internship I	3	6							
134	CSCI 333	Computer Networks	3	6	CSCI 152 Performance and Data Structures (489) (C- and above)						
135	CSCI 398	Directed Study	3	6							
136	CSCI 399	Internship II	3	6							
137	CSCI 700-0	Thesis Research	0	0				Computer Science			
Mathematics											
138	MATH 161	Calculus I	4	8				Biological Sciences, Chemistry, Mathematics, Medical Sciences, Physics, SEDS, SMG	Undeclared SSH	SSH, SoM	
139	MATH 162	Calculus II	4	8	MATH 161 Calculus I (118) (C and above)			Chemistry, Mathematics, Physics, SEDS, SMG	SSH, SoM		
140	MATH 251	Discrete Mathematics	3	6	MATH 161 Calculus I (118) (C and above)			Computer Science, Mathematics	SEDS, SMG, SSH, SoM		

141	MATH 273	Linear Algebra with Applications	4	8	MATH 161 Calculus I (118) (C and above)	MATH 162 Calculus II (170) (C and above)		Computer Science, Mathematics, Physics, Robotics Engineering	SEDS, SMG, SSH, SoM		
142	MATH 361	Real Analysis I	3	6	MATH 263 Calculus III (81) (C and above) AND MATH 251 Discrete Mathematics (85) (C and above)						
143	MATH 497	Directed Study in Mathematics I	3	6							
144	MATH 599	Thesis Research Preparation	0	0				Applied Mathematics			
145	MATH 700	Doctoral Thesis	90	180							
146	MATH 700-0	Thesis Research	0	0				Mathematics			
Robotics and Mechatronics											
147	ROBT 399	Internship	3	6							
148	ROBT 700	Thesis Research	89	178				Robotics Engineering			
149	ROBT 700-0	Thesis Research	0	0				Robotics Engineering			