

Course Requirements and Registration Priorities (Master), Fall 2016

#	Abbr	Title	Cr(US)	Cr(ECTS)	PreRequisite	CoRequisite	AntiRequisite	1st priority registration	2nd priority registration	3rd priority registration	4th priority registration
SST											
Computer Science											
1	CSCI 512	Information Theory	3	6							
GSB											
GSB											
2	MBA 01	Consequential Leadership	1	2							
3	MBA 02	Business Mathematics and Business Computer Application	1	2							
4	MBA 03	Financial Accounting	2	4							
5	MBA 04	Probability and Statistics	2	4							
6	MBA 05	Business Communication	2	4							
7	MBA 07	Managerial Effectiveness	2	4							
8	MBA 08	Managerial Economics	2	4							
9	MBA 09	Marketing Management	2	4							
10	MBA 18	Financial Statement Analysis	2	4							
11	MBA 19	Distinguished Speaker Series	0	1							
12	MBA 20	Practicum Project	2.5	5							
13	MBAE 1	Investments	2	4							
14	MBAE 6	International Finance	2	4							
15	MBAE 7	Supply Chain Management	2	4							
16	MBAE 8	Leadership	2	4							
17	MBAE 9	Marketing Strategy	2	4							
GSP											
Master in Public Administration											
18	MPA 602	Public Administration in Theory and Practice	4	8							
19	MPA 603	Economic Applications for Public Managers	4	8							
20	MPA 605	Research Methods for Public Managers	4	8							
21	MPA 608	Strategic Management and Leadership	4	8							
22	MPA 613	Economic and Social Policy	3	6							
23	MPA 614	Comparative Economic Development	3	6							

24	MPA 699	Master's Project with Overseas Component	0	0							
25	MPE 609	Organizational Behavior in the Public Sector	4	8							
26	MPE 611	Benefit Cost Analysis	4	8							
27	MPE 671	Game Theory and Public Policy	4	8							
28	MPE 683	Energy Systems and Climate Policy	4	8							
Master in Public Policy											
29	MPP 601	Microeconomics and Public Policy	4	8							
30	MPP 611	Statistics for Public Policy	4	8							
31	MPP 612	Public Policy Research and Evaluation	4	8							
32	MPP 621	Public Policy and Analysis	4	8							
33	MPP 625	Central Asian politics: Comparative Analysis	4	8							
34	MPP 631	Politics and Public Policy	4	8							
35	MPP 636	Weapons of Mass Destruction Nonproliferation and Disarmament	4	8							
36	MPP 639	International Financial Policy	4	8							
GSE											
MA in Multilingual Education											
37	EDML 601	Introduction to Linguistics	3	6							
38	EDML 610	Foundations of Multilingual Education	3	6							
39	EDML 613	The Multilingual School	3	6							
40	EDML 620	Language and Literacy Development	3	6							
41	EDML 621	Principles and Methods of Language Education in Multilingual Contexts	3	6							
42	EDML 623	Globalization and Language Education	3	6							
43	EDML 690	Thesis Research I	3	6							
MSc Educational Leadership HE											
44	EDHE 609	Introduction to Educational Leadership: Higher Education	3	6							

45	EDUC 500	English Language Preparation	0	0							
46	EDUC 502	English for Research	3	6							
47	EDUC 505	Academic English 1	1.5	3							
48	EDUC 510	Advanced English for Education Professionals I	3	6							
49	EDUC 512	English for Thesis Writing I	3	6							
50	EDUC 573	Academic Writing in Kazakh	3	6							
51	EDUC 600	Research Methods II	3	6							
52	EDUC 602	Educational Context and Reform in Kazakhstan	3	6							
53	EDUC 607	Research Methods 1	3	6							
54	EDUC 640	Thesis Seminar (Part II)	3	6							
55	EDUC 640	Thesis Seminar (Part I)	1.5	3							
MSc Educational Leadership IE											
56	EDIE 609	Introduction to Educational Leadership: Inclusive Education	3	6							
MSc Educational Leadership SE											
57	EDSE 609	Introduction to Educational Leadership: School Education	3	6							
58	EDSE 620	Perspectives on Inclusive Education	3	6							
59	EDSE 621	Education Policy Analysis and Development	3	6							
60	EDSE 624	Psychology of Learning (Children as Learners)	3	6							
61	EDSE 630	Professional Identity	3	6							
62	EDSE 634	Assessment: Theories, policies, practices	3	6							
63	EDSE 636	Preparing Children for the Future: Skills and Employability	3	6							
Other											
Other											
64	T-PP 5136	Applied Public Sector Economics	4	8							
65	T-PP 5147	Asian Global Cities	4	8							

66	T-PP 5168	Public Service Leadership	4	8							
67	T-PP 5178	Leadership and Decision-Making Skills	4	8							
SoM											
Public Health											
68	PUBH 501	Principles of Public Health Problem Solving	3	6							
69	PUBH 511	Inferential Biostatistics	3	6							
70	PUBH 521	Principles of Analytical Epidemiology	3	6							
71	PUBH 528	Qualitative Research Methods	3	6							
72	PUBH 531	Emerging Infectious Diseases	3	6							
SSH											
Area Studies											
73	EAS 500	Introduction to Eurasia	4	8							
74	EAS 501	General Methodology	4	8							
75	EAS 503	Thesis I	7.5	15	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)						
Area Studies, Political Science and International Relations, Sociology and Anthropology											
76	SOC 514/PLS 514/EAS 506	Qualitative Research Methods	4	8							
Biological Science											
77	BIOL 501	Fundamentals of Biological Sciences	3	6							
78	BIOL 520	Statistical Methods in Life Sciences	3	6							
79	BIOL 600	Graduate Seminar Series	3	6							
80	BIOL 635	Hot Topics in Life Sciences	3	6							
81	BIOL 670	Gene Therapy	3	6							
82	BIOL 690	Research Thesis I	6	12							
Economics											

83	ECON 501	Microeconomics I	4	8							
84	ECON 502	Macroeconomics I	4	8							
85	ECON 503	Introduction to Contract Theory and Auctions	4	8							
86	ECON 511	Statistics	4	8							
87	ECON 512	Mathematical Economics	4	8							
88	ECON 516	Empirical Industrial Organization	4	8	ECON 501 Microeconomics I (2187) (C- and above) AND ECON 531 Econometrics (2505) (C- and above)						
89	ECON 532	Applied Econometrics	4	8							
90	ECON 543	Topics in Macroeconomic Theory	4	8	ECON 502 Macroeconomics I (2186) (C- and above)						
91	ECON 545	Public Finance	4	8	ECON 501 Microeconomics I (2187) (C- and above) OR ECON 413 Econometrics II Time Series (1037) (C- and above) OR ECON 531 Econometrics (2505) (C- and above)						
92	ECON 551	Topics in Microeconomic Theory	4	8	ECON 501 Microeconomics I (2187) (C- and above)						
History, Philosophy and Religious Studies											
93	REL 510	Buddhism in Central Asia	4	8							
Physics											
94	PHYS 505	Classical Mechanics	3	6							
95	PHYS 511	Computational Modeling and Simulation	3	6							
96	PHYS 515	Classical Electrodynamics	3	6							
97	PHYS 530	Solid State Physics	4	8							
98	PHYS 545	Advanced Instrumentation Methods	3	6							
99	PHYS 550	Advanced Mathematical Physics	3	6							
100	SST 501	Teaching and Learning	3	6							

Political Science and International Relations											
101	PLS 511	Advanced Research I	4	8							
102	PLS 512	Scientific Research in International Relations	4	8	PLS 511 Advanced Research I (1631) (C- and above) AND PLS 510 Advanced Research I (1946) (C- and above) AND PLS 550 Core Seminar in IR (1372) (C- and above)						
103	PLS 515	Maximum Likelihood Models	4	8	PLS 510 Advanced Research I (1946) (C- and above)						
104	PLS 532	Comparative Democratization	4	8	PLS 540 Core Seminar in Comparative Politics (1374) (C- and above)						
105	PLS 540	Core Seminar in Comparative Politics	4	8							
106	PLS 541	Advanced Topics in Comparative Politics	4	8							
107	PLS 550	Core Seminar in IR	4	8							
108	PLS 551	Advanced Topics in International Relations	4	8							
109	PLS 565	Politics of International Finance	4	8							
110	PLS 569	International Relations of Eurasia	4	8							
111	PLS 597	Research for Thesis	6	12							
SEDS											
Chemical Engineering											
112	MCHE 613	Physical Chemistry of Oil & Gas	1.5	3							
113	MCHE 614	Applied Chemical Engineering Thermodynamics	1.5	3							
114	MCHE 615	Advanced Unit Operations	1.5	3							
115	MCHE 616	Advanced Chemical Reactor Engineering	1.5	3	ECHE 481 Chemical Reaction Engineering (1985) (D and above)						
116	MCHE 618	Plant Economics and Planning	1.5	3							
117	MCHE 619	Safety Engineering and Loss Prevention	1.5	3							
Civil Engineering											
118	MCE 601	Sustainable Development	3	6							
119	MCE 604	Advanced Project Management	3	6							
120	MCE 606	Environmental Impacts and Assessments	3	6							

121	MSC 615	Advanced Statistics and Probability	3	6						
122	MSC 616	Research Methods	3	6						
Civil and Environmental Engineering										
123	EMEM 502	Decision Models	1.5	3						
124	EMEM 505	Operations Management	1.5	3						
125	EMEM 507	Project Management	3	6						
126	EMEM 509	Systems Engineering	3	6						
127	EMEM 513	Entrepreneurship	2	4						
128	EMEM 519	Product Development	1.5	3						
129	EMEM 522	Quality Management	1.5	3						
130	EMEM 523	Supply Chain Management	3	6						
131	EMEM 528	Information Systems Mananagement	1.5	3						
132	EMEM 530	Technology Assessment	1.5	3						
133	EMEM 533	Engineering Management and Engineering Economy	3	6						
Computer Science										
134	CSCI 501	Software Principles and Practice	3	6						
135	CSCI 525	Quantum Computing	3	6						
136	CSCI 531	Distributed Systems	3	6						
137	CSCI 545	Big Data Analytics	3	6						
138	CSCI 693	Thesis Proposal	3	6	SEDS 591 Research Methods (3184) (C- and above)					
139	SEDS 503	Laboratory Practicum	3	6	SEDS 502 Teaching Practicum (2824) (P)					
140	SEDS 591	Research Methods	3	6						
Electrical and Electronic Engineering										
141	MEE 600	MSc Thesis in Electrical and Electronics Engineering	15	30						

142	MEE 607	Statistical Signal Processing	3	6							
143	MEE 608	Special Topics in Circuits Theory	3	6							
Mechanical Engineering											
144	MME 600	Master Thesis in Mechanical Engineering	15	30							
145	MME 604	Engineering Mathematics	3	6							
146	MME 605	Numerical Techniques for Engineers	3	6							
147	MME 606	Advanced Control Systems	3	6							
Robotics and Mechatronics											
148	ROBT 501	Robot Manipulation and Mobility	3	6							
149	ROBT 503	Dynamic Systems and Control	3	6							
150	ROBT 605	Robotic Motion Planning	3	6	ROBT 501 Robot Manipulation and Mobility (2263) (C- and above) AND CSCI 501 Software Principles and Practice (2408) (C- and above)						
151	ROBT 611	Industrial Robotics	3	6	ROBT 501 Robot Manipulation and Mobility (2263) (C- and above) AND CSCI 501 Software Principles and Practice (2408) (C- and above)						