Course Requirements and Registration Priorities
Summer 2024

#	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)			Instructor's Permission Required. Registration through Add Course form only!			
2	ECON 400	Research Assistance in Economics 2	1	2	ECON 300 Research Assistance in Economics (3080) (P)			Instructor's Permission Required. Registration through Add Course form only!			
3	ECON 580	Research and Thesis	0	0				Economics			
GSB											
4	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, 5 year UG SEDS (pending graduation), 5 year UG SMG, 5 year UG SSH, 5 year UG SSH (pending graduation)	3 year UG SEDS, 3 year UG SMG, 3 year UG SSH	2 year UG SEDS, 2 year UG SMG, 2 year UG SSH	
5	GSBF 541	Global Finance Experience Residency (I)	.5	1				For GSB programs only! Registration by School admin.			

6	GSBF 542	Global Finance Experience Residency (II)	2.5	5				For GSB programs only! Registration by School admin.			
7	GSBPHD 04	Core Research Skills I	4	8							
8	GSBPHD 14	Thesis Research Progress	0	0							
9	MBA 10	Foundations of Strategy	2	4				For GSB programs only! Registration by School admin.			
10	MBA 15	Corporate Finance	2	4				For GSB programs only! Registration by School admin.			
11	MBA 20A	Internship	6	12				For GSB programs only! Registration by School admin.			
12	MBAE 18	Consumer Behavior	2	4							
13	MBAE 19	Global Economics for Managers	2	4	MBA 08 Managerial Economics (1722) (C and above)			For GSB programs only! Registration by School admin.			
14	MBAE 20	Marketing Research	2	4				For GSB programs only! Registration by School admin.			
15	MSF 05	Internship	3	6				For GSB programs only! Registration by School admin.			
GSPP											
Master in Public Administration											
16	MPA 607	Fiscal Management and Budgeting	4	8				1 year GSPP Public Administration			
17	MPA 699	Master’s Project with Overseas Component	0	0				1 year GSPP Public Administration			

18	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, 2 year GSPP Public Policy			
Master in Public Policy											
19	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											
20	DPP 600	Developing Dissertation Research	0	0				Public Policy			
GSE											
MA in Multilingual Education											
21	EDML 612	Multilingual Society	3	6				1 year GSE MA in Multil.Education			
22	EDML 680	Developing the Thesis Research Topic	0	0				1 year GSE MA in Multil.Education			
23	EDML 692	Thesis Research III	3	6				2 year GSE MA in Multil.Education			
MSc Educational Leadership HE											
24	EDHE 601	Thesis Seminar 1	0	0				1 year GSE Educ.Leadership			
25	EDHE 602	Thesis Seminar 2	0	0				1 year GSE Educ.Leadership			

26	EDUC 610	Management in Education	3	6				1 year GSE Educ.Leadership			
27	EDUC 729	Developing the Research Topic	0	0				1 year GSE PhD Education			
28	EDUC 730	Preparation for Proposal Defence	0	0				2 year GSE PhD Education			
29	EDUC 733	Thesis Proposal Defense	12.5	25				3 year GSE PhD Education			
30	EDUC 752	Dissertation Research: Independent Study	0	0				3 year GSE PhD Education, 4 year GSE PhD Education			
31	EDUC 753	Thesis Defense	55	110				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							
SoM											
Biological Science											
37	BIOL 392	Directed Study in Biology	3	6				Instructor's Permission Required. Registration through Add Course form only!			
38	BIOL 399	Biology Internship - 2B	3	6				Instructor's Permission Required. Registration through Add Course form only!			
39	BIOL 490	Honors Thesis Research	0	0	BIOL 355 Critical Research Reasoning (1000) (B and above)			Instructor's Permission Required. Registration through Add Course form only!			
40	BIOL 599	Master’s Thesis Research	0	0				Instructor's Permission Required. Registration through Add Course form only!			
41	BIOL 800	Doctoral Thesis	90	180							
42	BIOL 800-0	Thesis Research	0	0				Instructor's Permission Required. Registration through Add Course form only!			
MSMR											

43	MSMR 513	Internship in Sports Medicine and Rehabilitation	1.5	3				1 year Gr SOM Sports Medicine and Rehabilitation			
PHD											
44	PHDBS 701	Thesis Research	90	180				4 year PhD SOM BioMed Sciences			
45	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			
46	PHDGH 701-0	Thesis Research	0	0				Global Health			
SSH											
Area Studies											
47	EAS 505	Research and Fieldwork Practicum	4	8				Eurasian Studies			
48	EAS 705	Elective 2 in Social Sciences	4	8				Instructor's Permission Required. Registration through Add Course form only!			
49	EAS 800	Doctoral Thesis in Eurasian Studies	70	140				Instructor's Permission Required. Registration through Add Course form only!			
50	EAS 800-0	Dissertation Research in Eurasian Studies	0	0				Eurasian Studies			
Chemistry											
51	CHEM 101L	General Chemistry I lab	1	2		CHEM 101 General Chemistry I (113) (C and above)		Biological Sciences, Chemistry, SoM	SSH	SEDS, SMG	
52	CHEM 102	General Chemistry II	3	6	CHEM 101 General Chemistry I (113) (C and above)			Biological Sciences, Chemistry, SoM	SSH	SEDS, SMG	
53	CHEM 189c	Independent Study	3	6				Chemistry			
54	CHEM 211	Organic Chemistry I	3	6	CHEM 102 General Chemistry II (232) (C and above)			Biological Sciences, Chemistry, SoM	SSH	SEDS, SMG	
55	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	SSH	SEDS, SMG	
56	CHEM 560	Directed research in chemistry	0	0				Chemistry			
57	CHEM 798-0	Thesis Research	0	0				Chemistry			

Communication and Composition											
58	WCS 200	Introduction to Public Speaking	3	6	WCS 150/ASC 100 Advanced English for Academic Purposes (2183) (C- and above)			4 year UG SEDS, 4 year UG SMG, 4 year UG SOM, 4 year UG SSH, 5 year UG SEDS Computer Science, 6 year UG SEDS	SSH	SEDS, SMG, SoM	
History, Philosophy and Religious Studies											
59	HST 100	History of Kazakhstan	3	6				2 year UG SOM, 4 year UG SEDS, 4 year UG SMG, 4 year UG SSH, 5 year UG SEDS, 5 year UG SMG, 5 year UG SOM (pending graduation), 5 year UG SSH	3 year UG SEDS, 3 year UG SMG, 3 year UG SOM, 3 year UG SSH	SEDS, SMG, SSH, SoM	
60	HST 104	Central Asian History II (1700 - 1991)	3	6				1 year UG SSH Undeclared, History	1 year UG SSH, 2 year UG SSH	SEDS, SMG, SSH, SoM	
61	HST 399	Independent Study	3	6				Instructor's Permission Required. Registration through Add Course form only!			
62	HST 400	Research Assistance	1	2	HST 100 History of Kazakhstan (172) (B and above) AND Subject "HST" BETWEEN 100 and 499			Instructor's Permission Required. Registration through Add Course form only!			
63	HST 499	History Capstone: Undergraduate Dissertation	4	8	HST 498 Directed Reading (1365) (C- and above)			Instructor's Permission Required. Registration through Add Course form only!			
64	PHIL 210	Ethics	3	6				4 year UG SEDS, 4 year UG SMG, 4 year UG SOM, 4 year UG SSH, 5 year UG SEDS, 5 year UG SMG, 5 year UG SOM (pending graduation), 5 year UG SSH	3 year UG SEDS, 3 year UG SMG, 3 year UG SOM, 3 year UG SSH	SEDS, SMG, SSH, SoM	
Kazakh Language and Turkic Studies											
65	KAZ 150	Basic Kazakh	3	6	KLL "[A2] Basic"			SEDS, SMG, SSH, SoM			
66	KAZ 201	Academic Kazakh I	3	6	KAZ 150 Basic Kazakh (1215) (C- and above) OR KLL "[B1.2] Intermediate"			SEDS, SMG, SSH, SoM			
67	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			

68	KAZ 313	Kazakh for Business	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	4 year UG SEDS, 4 year UG SMG, 4 year UG SOM, 4 year UG SSH, 5 year UG SEDS, 5 year UG SMG, 5 year UG SOM (pending graduation), 5 year UG SSH, 6 year UG SEDS, 6 year UG SMG (pending graduation), 6 year UG SOM (pending graduation), 6 year UG SSH	SEDS, SMG, SSH, SoM	
69	KAZ 363	Language and Globalization	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	4 year UG SEDS, 4 year UG SMG, 4 year UG SOM, 4 year UG SSH, 5 year UG SEDS, 5 year UG SMG, 5 year UG SOM (pending graduation), 5 year UG SSH, 6 year UG SEDS, 6 year UG SMG (pending graduation), 6 year UG SOM (pending graduation), 6 year UG SSH	SEDS, SMG, SSH, SoM	
70	KAZ 373	Kazakh Terminology	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	4 year UG SEDS, 4 year UG SMG, 4 year UG SOM, 4 year UG SSH, 5 year UG SEDS, 5 year UG SMG, 5 year UG SOM (pending graduation), 5 year UG SSH, 6 year UG SEDS, 6 year UG SMG (pending graduation), 6 year UG SOM (pending graduation), 6 year UG SSH	SEDS, SMG, SSH, SoM	

71	KAZ 376	Language and Culture	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	4 year UG SEDS, 4 year UG SMG, 4 year UG SOM, 4 year UG SSH, 5 year UG SEDS, 5 year UG SMG, 5 year UG SOM (pending graduation), 5 year UG SSH, 6 year UG SEDS, 6 year UG SMG (pending graduation), 6 year UG SOM (pending graduation), 6 year UG SSH	SEDS, SMG, SSH, SoM	
72	KFL 101	Elementary Kazakh as a Foreign Language I	4	8				Instructor's Permission Required. Registration through Add Course form only!			
73	KFL 102	Elementary Kazakh as a Foreign Language II	4	8	KFL 101 Elementary Kazakh as a Foreign Language I (4889) (C- and above)			Instructor's Permission Required. Registration through Add Course form only!			
74	TUR 100	Languages, Cultures, and Communities of the Turkic World	3	6				SEDS, SMG, SSH, SoM			
75	TUR 230	Literatures of Central Asia	3	6				SEDS, SMG, SSH, SoM			
Languages, Literature and Linguistics											
76	LING 240	Introduction to Sociolinguistics	3	6	LING 130 Introduction to Language and Communication (4014) (C- and above) OR LING 131 Introduction to Linguistics (1394) (C- and above)			2 year UG SSH World Languages, Literatures and Cultures	World Languages, Literature and Culture	SSH	
77	LING 491	Advanced Independent Study	3	6				Instructor's Permission Required. Registration through Add Course form only!			
78	WLL 399	Independent Study	3	6				Instructor's Permission Required. Registration through Add Course form only!			
79	WLL 400	Research Assistance in Linguistics and Literature	1	2				Instructor's Permission Required. Registration through Add Course form only!			
Physics											

80	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	SEDS, SMG, SSH, SoM		
81	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		
82	PHYS 299	Research project and internship	3	6				Instructor's Permission Required. Registration through Add Course form only!			
83	PHYS 399	Physics Research Project	3	6				Instructor's Permission Required. Registration through Add Course form only!			
84	PHYS 452	Quantum Mechanics II	3	6	PHYS 451 Quantum Mechanics I (1415) (C- and above)			Instructor's Permission Required. Registration through Add Course form only!			
85	PHYS 600	Thesis Research	0	0				Physics			
86	PHYS 700	Doctoral Thesis	90	180							
87	PHYS 700-0	Thesis Research	0	0				Physics			
Political Science and International Relations											
88	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)			Instructor's Permission Required. Registration through Add Course form only!			
89	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)			Instructor's Permission Required. Registration through Add Course form only!			
90	PLS 597	Research for Thesis	6	12				Instructor's Permission Required. Registration through Add Course form only!			
SSH											
91	SSH 300	School of Sciences and Humanities Internship	3	6				Instructor's Permission Required. Registration through Add Course form only!			
92	SSH 301	School of Sciences and Humanities Internship: Second Experience	3	6				Instructor's Permission Required. Registration through Add Course form only!			

93	SSH 398	Independent Study	1	2				Instructor's Permission Required. Registration through Add Course form only!			
Sociology and Anthropology											
94	ANT 400	Research Assistance in Anthropology	1	2				Instructor's Permission Required. Registration through Add Course form only!			
95	ANT 401	Research Assistance in Anthropology	1	2				Instructor's Permission Required. Registration through Add Course form only!			
96	ANT 404	Research Assistance in Anthropology	3	6				Instructor's Permission Required. Registration through Add Course form only!			
97	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)			Instructor's Permission Required. Registration through Add Course form only!			
98	SOC 180	Introducing Kazakhstan: from the Past to the Future	1	2							
99	SOC 400	Research Assistance in Sociology	1	2				Instructor's Permission Required. Registration through Add Course form only!			
100	SOC 401	Research Assistance in Sociology	1	2				Instructor's Permission Required. Registration through Add Course form only!			
SEDS											
Civil and Environmental Engineering											
101	DCEE 700	Thesis Research	89	178							
SoE											
Chemical and Materials Engineering											

102	CHME 403	Chemical Process Control and Safety	3	6				4 year UG SEDS Chemical Engineering, 4 year UG SEDS Chemical and Materials Engineering	5 year UG SEDS Chemical Engineering, 5 year UG SEDS Chemical and Materials Engineering		
103	DCHME 700-0	Thesis Research	0	0				Chemical Engineering			
104	MBME 602	Master Thesis II	12	24	MBME 601 Master Thesis I (5953) (P)			Biomedical Engineering			
105	MBME 700	Strategies for Controlled Topical Delivery of Drugs	3	6				Instructor's Permission Required. Registration through Add Course form only!			
Civil and Environmental Engineering											
106	DCEE 700-0	Thesis Research	0	0				Civil Engineering			
Electrical and Computer Engineering											
107	DELCE 700-0	Thesis Research	0	0				Electrical Engineering			
108	ELCE 201	Circuits Theory II	3	6	ELCE 200 Introduction to Electrical Circuits (4991) (C- and above)			Instructor's Permission Required. Registration through Add Course form only!			
109	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)			Instructor's Permission Required. Registration through Add Course form only!			
110	ELCE 301	Electronic Circuits	3	6	ELCE 201 Circuit Theory (5507) (C- and above)			Instructor's Permission Required. Registration through Add Course form only!			
111	ELCE 308	Communication Systems	3	6	ELCE 203 Signals and Systems (4993) (C- and above)			Instructor's Permission Required. Registration through Add Course form only!			
112	ELCE 399	Internship	3	6				Instructor's Permission Required. Registration through Add Course form only!			
Geosciences											
113	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			
114	GEOL 610	Carbonate Systems, Processes and Deposits	3	6	PETE 502 Petroleum Geology (4478) (C- and above)			1 year Gr SMG Petroleum Engineering			
Mechanical and Aerospace Engineering											
115	DMAE 700	Thesis Research	89	178				Mechanical Engineering			

116	DMAE 700-0	Thesis Research	0	0				Mechanical Engineering			
117	MAE 306	Computer Aided Engineering	3	6	ENG 202 Numerical Methods in Engineering (5506) (D and above) AND MAE 201 Computer Aided Design (5011) (D and above)			Instructor's Permission Required. Registration through Add Course form only!			
118	MAE 353	Summer Internship	1.5	3				3 year UG SEDS Mechanical Engineering, 3 year UG SEDS Mechanical and Aerospace Engineering	2 year UG SEDS Mechanical Engineering, 2 year UG SEDS Mechanical and Aerospace Engineering		
119	MAE 455	Flight Performance and Mechanics	3	6	MAE 340 Aerodynamics (6576) (D and above) OR MAE 305 Fluid Mechanics II (6173) (D and above)			Instructor's Permission Required. Registration through Add Course form only!			
Mining Engineering											
120	MINE 890	Doctoral Thesis	90	180				4 year PhD SMG Mining Engineering			
121	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 Gr SMG (pending graduation), 4 year PhD SMG Mining Engineering, 5 year Gr SMG (pending graduation)			
Petroleum Engineering											
122	PETE 890	Doctoral Thesis	90	180				4 year PhD SMG Petroleum Engineering			
123	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			
School of Engineering											
124	DENG 700-0	Thesis Research	0	0				Science, Engineering and Technology			
125	DENG 794	Dissertation Research	12	24	DENG 785 PhD Proposal Oral Defence (2604) (P)			Science, Engineering and Technology			
SCAI											
Computer Science											
126	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		

127	CSCI 299	Internship I	3	6				Computer Science	Undeclared SEDS		
128	CSCI 398	Directed Study	3	6				Instructor's Permission Required. Registration through Add Course form only!			
129	CSCI 399	Internship II	3	6				Computer Science	Undeclared SEDS		
130	CSCI 700-0	Thesis Research	0	0				Computer Science			
131	SEDS 503	Laboratory Practicum	3	6	SEDS 502 Teaching Practicum (2824) (P)			Instructor's Permission Required. Registration through Add Course form only!			
Mathematics											
132	MATH 161	Calculus I	4	8				Biological Sciences, Chemistry, Mathematics, Medical Sciences, Physics, SEDS, SMG	(ND-CC) Undeclared SSH, Undeclared SSH	SSH, SoM	
133	MATH 162	Calculus II	4	8	MATH 161 Calculus I (118) (C and above)			Chemistry, Mathematics, Physics, SEDS, SMG	SSH, SoM		
134	MATH 251	Discrete Mathematics	3	6	MATH 161 Calculus I (118) (C and above)			Computer Science, Mathematics	SEDS, SMG, SSH, SoM		
135	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, Physics	Computer Science, Robotics Engineering, Robotics and Mechatronics	SEDS, SMG, SSH, SoM	
136	MATH 361	Real Analysis I	3	6	MATH 263 Calculus III (81) (C and above) AND MATH 251 Discrete Mathematics (85) (C and above)			Instructor's Permission Required. Registration through Add Course form only!			
137	MATH 440	Regression Analysis	3	6	MATH 322 Mathematical Statistics (1165) (C and above)		SOC 203 Quantitative Methods in Sociology (1377) (C and above) OR PLS 211 Quantitative Methods (221) (C and above)	4 year UG SSH Mathematics	3 year UG SSH Mathematics	SEDS, SMG, SSH, SoM	
138	MATH 497	Directed Study in Mathematics I	3	6				Instructor's Permission Required. Registration through Add Course form only!			
139	MATH 599	Thesis Research Preparation	0	0				Applied Mathematics			
140	MATH 700	Doctoral Thesis	90	180							
141	MATH 700-0	Thesis Research	0	0				Mathematics			

Robotics and Mechatronics											
142	ROBT 399	Internship	3	6				3 year UG SEDS Robotics Engineering, 3 year UG SEDS Robotics and Mechatronics	4 year UG SEDS Robotics Engineering, 4 year UG SEDS Robotics and Mechatronics		
143	ROBT 700	Thesis Research	89	178							
144	ROBT 700-0	Thesis Research	0	0				Robotics Engineering			