

American University of Central Asia
Liberal Arts and Sciences Department
Mathematical Modeling in Natural and Social Sciences Concentration
2025 AY Checklist

Student's Name _____ ID # _____

General Education – 97 credits (102 credits limit of 100 level courses)	Credits	Completed	Grade	Notes
Academic Orientation program	2	<input type="checkbox"/>		
FYS I: English language for Liberal Arts - 4 credits, English Composition for Liberal Arts I – 6 credits Introduction to Philosophy I (part of FYS I) – 2 credits	12	<input type="checkbox"/>		
FYS II: English language for Liberal Arts - 4 credits, English Composition for Liberal Arts II – 6 credits Introduction to Philosophy II (part of FYS II) – 2 credits	12	<input type="checkbox"/>		
Kyrgyz Language and Literature I - 4 credits Kyrgyz Language and Literature II - 4 credits (to be completed during sophomore year)	8	<input type="checkbox"/> <input type="checkbox"/>		State exam in 2 year
Russian Language I – 2 credits Russian Language II – 2 credits	4	<input type="checkbox"/> <input type="checkbox"/>		
Linear Algebra and Analytic Geometry	6	<input type="checkbox"/>		
Artificial intelligence/digital literacy and math/natural science*	3	<input type="checkbox"/>		
History of Kyrgyzstan – 4 credits Geography of Kyrgyzstan – 2 credits (to be completed during sophomore year)	6	<input type="checkbox"/> <input type="checkbox"/>		State exam in 2 year
Manas Studies	2	<input type="checkbox"/>		
Natural Science (Concepts of Modern Sciences)	6	<input type="checkbox"/>		
Arts/Second Year Seminar**	12	<input type="checkbox"/> <input type="checkbox"/>		
Humanities/Second Year Seminar**	12	<input type="checkbox"/> <input type="checkbox"/>		
Social Sciences/Second Year Seminar**	12	<input type="checkbox"/> <input type="checkbox"/>		
Sports (any 4 courses during 4 years of study)	0	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		400 hours/0 credits
Total General Education:	97			
*LAS students must take additional 3 credits: Digital Literacy/Introduction to Computing/Computer Science/AI or any math/natural science related courses.				
**All students in their 2 nd year must take one Second Year Seminar. This seminar substitutes for one required 6-credit course in either Humanities, Social Sciences, Arts or Natural Science.				
LAS Core Courses – 24 credits				
Concepts of Modern Art/Arts	6	<input type="checkbox"/>		Can be counted towards Arts requirement in the General Education program
World Literature/Humanities	6	<input type="checkbox"/>		Can be counted towards Humanities requirement in the General Education program
Concepts of Modern Sciences/Natural Sciences	6	<input type="checkbox"/>		Can be counted towards Natural Sciences requirement in the General Education program
Globalization and Social Sciences/Social Sciences	6	<input type="checkbox"/>		Can be counted towards Social Sciences requirement in the General Education program
Total LAS Core Courses	24			
Concentration Required Courses – 63 credits				
Linear Algebra and Analytic Geometry for AMI	6	<input type="checkbox"/>		1 semester. Counts towards Gen Ed Mathematics and Quantitative Reasoning
Discrete mathematics and mathematical logic I	6	<input type="checkbox"/>		2 semester

Recommended Order of Study

1st semester (30 credits)		2nd semester (30 credits)	
First Year Seminar I English Composition for Liberal Arts I Introduction to Philosophy I (part of FYS I) – 2 cr	12	First Year Seminar II English Composition for Liberal Arts II Introduction to Philosophy II (part of FYS II) – 2	12
Linear Algebra and Analytic Geometry for AMI/SFW	6	Mathematical Analysis I for AMI/SFW	6
Concepts of Modern Sciences	6	World Literature	6
Elective Course	6	Elective Course	6
Sport	0	Sport	0
3rd semester (33 credits)		4th semester (33 credits)	
Concepts of Modern Art	6	Globalization and Social Sciences	6
Elective Course	6	The Theory of Probabilities and Math. Statistics	6
Introduction to Programming	6	History and Geography of Kyrgyzstan	6
Discrete Mathematics and Mathematical Logic I	6	Computer Architecture	6
Kyrgyz language and literature – 4 cr. Russian Language – 2 cr.	6	Kyrgyz language and literature – 4 cr. Russian Language – 2 cr.	6
Sport	0	Sport	0
5th semester (33 credits)		6th semester (33 credits)	
Ordinary Differential Equations	6	Numerical Methods	6
Operating Systems	6	Research Methods in Applied Mathematics	6
General Education Course	6	General Education Course	6
General Education Course	6	General Education Course	6
Elective Course: Database	6	Elective Course	6
7th semester (36 credits)		8th semester (39 credits)	
Senior thesis seminar I	6	Senior thesis seminar II	6
Gen Edu course	6	Gen Edu course	6
Elective Course: Math Modeling in Economics	6	Elective Course: Mathematical Modeling in Geophysics	6
Internship	6	Internship	9
Elective Course	12	Elective Course	12

Graduation requirements:

1. Earn at least 257 credits
 - a. Complete all General Education requirements;
 - b. Complete all requirements for at least one major;
 - c. Earn no more than 102 credits of introductory (100-level) courses;
 - d. Complete at least 18 elective credits outside of a student's major and General Education program;
 - e. Complete the required number of internship credits (the number of credits is determined by each department);
 - f. Pass all state graduation examinations;
 - g. Successfully complete and defend a senior thesis/project;
 - h. Receive no "F" or "N/P" grades in the final semester;
 - i. To earn an overall GPA of at least 2.0.

Important Contacts:

LAS Department

Phone: +996 (312) 915000 *487

Room: 333

Email: las@auca.kg

Academic Advising Office

Phone: +996 (312) 915000 *416, 417

Room: 209

Email: advising@auca.kg

Registrar Office

Phone: +996 (312) 915000 *401,402

Room: 110

Email: registrar@auca.kg

Writing and Academic Resources Center

Phone: +996 (312) 915000 *490

Room: 224

Email: warc@auca.kg

Shared Service Center

Phone: +996 (312) 915019

Room: 244

Email: service@auca.kg

Counseling Services

Write an email to set up a meeting with counselors:

cs@auca.kg

Student's signature: _____

(I am informed and confirm that I have completed all required courses and necessary components for my department)

Advisor's name and signature: _____

(I have reviewed and confirmed that the student has completed all required courses and necessary components for their department)

Department chair's name and signature: _____

(I have double-checked and confirmed that the student has completed all required courses and necessary components for their department and eligible to graduate)