Below is the natural sequence of Artificial Intelligence and Robotics Engineering program courses designed for students to register per semester. Other degree requirements and comprehensive details are to be found in the AUIS Academic Catalog.

Course Code and Description	Credits	Prerequisite(s)	✓
1st Semester			
ENGR 230 - Engineering Drawing	3	None	
R 100 - Reading	3	None	
W 100 - Writing	3	None	
MTH 232 - Calculus I	3	None	
MTH 235 - Discrete Math	3	None	
Total Credits	**15**		
2nd Semester			
ENGR 231 - Fabrication Shop (Team-based Problem Solving)	3	ENGR 230	
ITE 202 - IT Systems	3	CSC 101 or ENGR 231	
PHYS 232 + PHYSL 232 - Calculus Based Physics I + Calculus Based Physics Lab I	4	MTH 232	
ENG 101 - Argument	3	R 100, W 100	
MTH 340 - Linear Algebra	3	MTH 232	
Total Credits	**16**		
3rd Semester			
ENGR 244 - Engineering Computing	3	Co-requisite: MTH 340, Pre-requisite: MTH 232	
MTH 233 - Calculus II	3	MTH 232	
ENG 102 - Critical Reading	3	ENG 101	
PHYS 233 + PHYSL 233 - Calculus-based Physics II + Calculus-based Physics Lab II	4	PHYS 232 + PHYSL 232	
ITE 303 - Introduction to Programming	3	ITE 202	
Total Credits	**16**		
4th Semester			
ITS 350 - Introduction to Data Structures and Algorithms	3	ITE 303	
ITS 310 - Computing and Robotics	3	ITE 303	
ENGR 344 - Mechanics I: Statics	3	PHYS 232 + PHYSL 232	
ENG 203 - Research & Project - Writing	3	ENG 102	
ENGR 390 - Circuits	3	PHYS 233 + PHYSL 233	
Total Credits	**15**		
5th Semester			
ENGR 444 - Engineering Project Management	3	ENGR 231	
MTH 332 - Differential Equations	3	MTH 233	
ENGR 320 Introduction to Artificial Intelligence	3	ENGR 244	
CIV 101 - The Ancient World History	3	R 100, W 100	
STT 342 - Engineering Statistics	3	ENGR 244	
Total Credits	**15**		
6th Semester			
ENGR 348 - Mechanics II: Dynamics	3	ENGR 344	
Engineering / IT / SE Elective	3	See course description	
Engineering / IT / SE Elective	3	See course description	
ENGR 323 - Data Science and Analytics	3	ENGR 244	
ENGR 324 - Mechatronics	3	ENGR 390	
Total Credits	**15**		
Summer/Winter			
ENGR 490 - Engineering Internship	1	Senior Standing (to be taken alone)	
7th Semester			
ENGR 491 - Design I	3	ENG 203, ENGR 231	
ENGR 313 - Measurements Laboratory	3	PHYS 233 + PHYSL 233	
ENGR 483 - Robotics	3	Co-requisite: ENGR 461, Pre-requisite: ENGR 348	
ENGR 422 - Computer Vision	3	ITS 350	
ENGR 366 - Applied Electronics	3	ENGR 390	
Total Credits	**15**		
8th Semester			
ENGR 492 - Design II	3	ENGR 491	
ENGR 423 - Large Language Models	3	ITS 350	
ENGR 424 - Machine Learning	3	ITS 350	
ENGR 461 - System Dynamics and Control	3	ENGR 390	
Engineering / IT / SE Elective	3	See course description	
Total Credits	**15**		
9th Semester			
Core Elective	3	See course description	
ENGR 321 - AI Applications	3	ENGR 320	
CIV 203 - Civilization III: The Ancient World (Humanities)	3	CIV 101	
Total Credits	**9**		

Program Credits	
Core	
Major	
Engineering Electives	
Total	

General Tips and Recommendations

ENGR 488 is selected topics for Robotics.

ENGR 489 is selected topics for AI.

Varied Degree Paths:

Student degree paths may vary slightly from this form. If academic record differs from the courses listed in this form, please contact the Registration and Records Office during the advising week for clarification. Independent study, transfer credits or other unique circumstances are typically accounted for in the elective category.