REQUIREMENTS FOR THE BACHELOR OF SCIENCE/ APPLIED ARTIFICIAL INTELLIGENCE, MASTER OF SCIENCE
GALLOGLY COLLEGE OF ENGINEERING
THE UNIVERSITY OF OKLAHOMA

Academic Year	General Requirements	Program
For Students Entering the Oklahoma State System for Higher Education **Summer 2026 through Spring 2027**	Minimum Total Credit Hours ..... **138** Minimum Upper-Division Hours ..... **40** **Minimum Retention/Graduation Grade Point Averages:** Overall - Combined and OU ..... **3.00** Major - Combined and OU **3.00**	**Cybersecurity** **A263/F026 Q168** Bachelor of Science/Applied Artificial Intelligence, Master of Science

OU encourages students to complete at least hours of applicable coursework each year to have the opportunity to graduate in years.

Minimum Total Credit Hours: 138
Minimum Upper-Division Hours: 40

Overall GPA - Combined and OU: 3.00
Major GPA - Combined and OU: 3.00

Program Code: A263/F026 Q168

General Education and College Requirements

Courses designated as Core I, II, III, IV, or V are part of the General Education curriculum. Students must complete a minimum of 40 hours of General Education courses, chosen from the approved list, including at least one upper-division Gen. Ed. course outside of the student's major. **Courses graded P/NP will not apply.**

A grade of C or better is required in each course in the curriculum, including all prerequisite courses.

UNIVERSITY-WIDE GENERAL EDUCATION (MINIMUM 40 HOURS)

Code	Title	Credit Hours
Core Area I: Symbolic and Oral Communication		
English Composition		
ENGL 1113	Principles of English Composition	3
ENGL 1213	Principles of English Composition	3
or EXPO 1213	Expository Writing	
Language (0-10 hours in the same language)		
This requirement can be met by two years of the same language in high school:		0-10
Beginning Course (0-5 hours)		
Beginning Course, continued (0-5 hours)		
Mathematics (minimum 3 hours)		
MATH 1503	College Algebra [1]	3
Core Area II: Natural Science (minimum 7 hours, including one laboratory)		
Choose two courses from different disciplines, one must include a laboratory		7
Core Area III: Social Science		
P SC 1113	American Federal Government	3
Choose one course		3
Core Area IV: Arts & Humanities		
Artistic Forms		
Choose one course		3
Western Culture		
HIST 1483	United States to 1865	3
or HIST 1493	United States, 1865 to the Present	
Choose one course (excluding HIST 1483 and HIST 1493)		3
World Culture		
Choose one course		3
Core Area V: First-Year Experience		
POLY 1003	Frontiers in Emerging Technologies, First-year Experience	3
Total Credit Hours		**37-47**

[1] Major support requirements that also satisfy University General Education requirements.

Open Electives

Electives to bring total applicable hours to the minimum total required for the degree including a minimum of 40 upper-division hours.

Program modification PENDING APPROVAL. The changes are not reflected here.

A grade of C or better is required in each course in the curriculum, including all prerequisite courses.

Major Requirements

Code	Title	Credit Hours
Required Courses		
CYBS 3113	Operating Systems Fundamentals	3
CYBS 3123	Introduction to Unix Systems	3
CYBS 3213	Foundations of Cybersecurity	3
CYBS 3313	Introduction to Cyber Ethics and Law	3
CYBS 3743	Cyberforensics Fundamentals	3
SDI 3203	Computer Networks	3
SDI 3213	Cloud Computing	3
CYBS 3913	Database Fundamentals	3
CYBS 4123/5123	System Administration [1]	3
CYBS 4133/5133	Ethical Hacking and Penetration Testing [1]	3
CYBS 4203/5203	Cybersecurity Risk Management and Assessment [1]	3
CYBS 4293/5293	Introduction to Cloud Computing and Security [1]	3
CYBS 4333/5333	Incidence Response Management [1]	3
CYBS 4473/5473	Network Security [1]	3
CYBS 4963	Cybersecurity Capstone	3
Major Electives		
Choose 4 approved CYBS electives from a list maintained by the department		12
Total Credit Hours		**57**

[1] Shared coursework: choose up to 12 hours of 5000 level courses to be shared with the MS degree for the accelerated BS/MS program.

Major Support Requirements

Code	Title	Credit Hours
Math and Science		
POLY 1203	Foundations of Programming for Emerging Technologies	3
POLY 2203	Applied Statistics for Modern Computing	3
POLY 2513	Applied Discrete Mathematics for Computing	3
Total Credit Hours		**9**

Graduate Requirements

Thesis Option

Code	Title	Credit Hours
Core Courses		
AAI 5103	Natural Language Processing	3
AAI 5303	Deep Learning I	3
AAI 5313	Deep Learning II	3
AAI 5323	Ethics of AI and Machine Learning	3
Electives		
Choose 12-15 hours of electives from a list of courses (maximum of 6 hours may be chosen from Open Electives list) maintained by the department and approved by the Graduate College. [1]		12-15
Thesis		
AAI 5980	Research for Master's Thesis	3-6
Total Credit Hours		**30**

[1] Shared coursework: up to 12 hours of 5000 level courses may be shared with BS degree for the accelerated BS/MS program. Shared course options include graduate electives of CYBS 5123, CYBS 5133, CYBS 5203, CYBS 5293, CYBS 5333, and CYBS 5473.

Non-Thesis Option

Code	Title	Credit Hours
Core Courses		
AAI 5103	Natural Language Processing	3
AAI 5303	Deep Learning I	3
AAI 5313	Deep Learning II	3
AAI 5323	Ethics of AI and Machine Learning	3
Electives		
Choose 15 hours of electives from a list of courses (maximum of 6 hours may be chosen from Open Electives list) maintained by the department and approved by the Graduate College, or additional hours from the Core Courses. [1]		15
Practicum		
AAI 5903	Master's Practicum	3
Total Credit Hours		**30**

[1] Shared coursework: up to 12 hours of 5000 level courses may be shared with BS degree for the accelerated BS/MS program. Shared course options include graduate electives of CYBS 5123, CYBS 5133, CYBS 5203, CYBS 5293, CYBS 5333, and CYBS 5473.

More information in the catalog: (http://ou-public.courseleaf.com/gallogly-engineering/polytechnic-institute/cybersecurity-bachelor-science-applied-artificial-intelligence-master-science/).

Suggested Semester Plan of Study

Please refer to the front of the degree checksheet for official requirements. Students must consult with OU Polytechnic Institute academic advisers to verify that courses selected each semester fulfill the recommended plan and satisfy university, Polytechnic Institute, and major requirements.

Courses designated as Core I, II, III, IV or V are part of the General Education curriculum. Students must complete a minimum of 40 hours of General Education courses, chosen from the approved list. Two college-level courses in a single world language are required; this may be satisfied by successful completion of 2 years in a single world language in high school. Students who must take language at the University will have an additional 6-10 hours of coursework.

Year	FIRST SEMESTER		Hours	SECOND SEMESTER		Hours
FRESHMAN	ENGL 1113	Principles of English Composition (Core I)	3	ENGL 1213 or EXPO 1213	Principles of English Composition (Core I) or Expository Writing	3
	MATH 1503	College Algebra	3		Approved Elective, Natural Science (Core II) [3]	3
	P SC 1113	American Federal Government	3	POLY 1203	Foundations of Programming for Emerging Technologies	3
	POLY 1003	Frontiers in Emerging Technologies, First-year Experience (Core V)	3		Approved Elective, Social Science (Core III) [2]	3
		Open Elective, lower-division [2]	3		Open Elective, lower-division [2]	3
		CREDIT HOURS	**15**		**CREDIT HOURS**	**15**
SOPHOMORE	HIST 1483 or HIST 1493	United States to 1865 or United States, 1865 to the Present	3		Approved Elective, World Culture (Core IV) [1]	3
		Approved Elective, Western Culture (Core IV) [1]	3		Open Elective, lower-division [2]	3
	POLY 2203	Applied Statistics for Modern Computing	3		Open Elective, lower-division [2]	3
		Open Elective, lower-division [2]	2		Open Elective, lower-division [2]	3
		Approved Elective, Natural Science with Lab (Core II-Lab) [3]	4	POLY 2513	Applied Discrete Mathematics for Computing	3
		CREDIT HOURS	**15**		**CREDIT HOURS**	**15**
JUNIOR	CYBS 3123	Introduction to Unix Systems	3	CYBS 3313	Introduction to Cyber Ethics and Law	3
	CYBS 3213	Foundations of Cybersecurity	3	CYBS 3743	Cyberforensics Fundamentals	3
	CYBS 3913	Database Fundamentals	3	CYBS 3113	Operating Systems Fundamentals	3
	SDI 3203	Computer Networks	3	SDI 3213	Cloud Computing (CYBS Major Elective)	3
		Upper-Division Elective (3000-4000), Artistic Forms (Core IV) [1]	3		CYBS Major Elective	3
		CREDIT HOURS	**15**		**CREDIT HOURS**	**15**
SENIOR	CYBS 4123 or CYBS 5123	System Administration 4 or System Administration[4]	3	CYBS 4333 or CYBS 5333	Incidence Response Management 4 or Incidence Response Management[4]	3
	CYBS 4473 or CYBS 5473	Network Security 4 or Network Security[4]	3	CYBS 4203 or CYBS 5203	Cybersecurity Risk Management and Assessment 4 or Cybersecurity Risk Management and Assessment[4]	3
	CYBS 4293 or CYBS 5293	Introduction to Cloud Computing and Security 4 or Introduction to Cloud Computing and Security[4]	3	CYBS 4133 or CYBS 5133	Ethical Hacking and Penetration Testing 4 or Ethical Hacking and Penetration Testing[4]	3
		CYBS Major Elective	3		CYBS Major Elective	3
		CYBS Major Elective	3	CYBS 4963	Cybersecurity Capstone	3
		CREDIT HOURS	**15**		**CREDIT HOURS**	**15**
FIFTH YEAR	AAI 5303	Deep Learning I [5]	3	AAI 5103	Natural Language Processing [5]	3
	AAI 5323	Ethics of AI and Machine Learning [5]	3	AAI 5313	Deep Learning II [5]	3
		Choose one of the following:	3		Choose one of the following:	3
	AAI 5980	Research for Master's Thesis		AAI 5980	Research for Master's Thesis	
		5000 Level Approved Elective		AAI 5903	Master's Practicum	
		CREDIT HOURS	**9**		**CREDIT HOURS**	**9**

1 To be chosen from the University-Wide General Education Approved Course List. Three of these hours must be upper-division (3000-4000). See list in the Class Schedule.

2 Open electives are not required to be General Education approved.

3 Courses taken to fulfill the Natural Science requirement must be chosen from the University-Wide General Education Approved Course List (Core II). At least one of the natural science courses must have a laboratory component.

4 Choose up to 12 hours of 5000 level MS courses to be shared between the BS and MS degrees.

5 12 hours of MS Core Courses.