

APPLIED ARTIFICIAL INTELLIGENCE MAJOR (M)

The Applied Artificial Intelligence program equips students with the technical, ethical, and interdisciplinary foundations needed to design, deploy, and evaluate Artificial Intelligence systems in real-world contexts. Students engage in hands-on coursework that integrates computing, data science, and ethical reasoning, with opportunities to apply their learning through applied projects and practical experiences rather than purely theoretical research. Graduates emerge as thoughtful practitioners who combine technical competence with Christian-informed values, prepared to steward Artificial Intelligence responsibly in service to industry, society, and the common good.

Program Learning Outcomes

By fulfilling all of the course requirements for the Bachelor's of Science in Applied Artificial Intelligence, students will be able to:

1. Students demonstrate knowledge of biblical teachings and explore how these information ethical AI development. They reflect on how Christian values guide ethical decisions in AI, addressing issues like privacy, transparency, and accountability. Students apply Christian beliefs to evaluate their role as stewards of AI, understanding their work in AI as part of a calling that serves humanity and aligns with God's purpose.
2. Graduates apply Christ-like compassion by creating AI that addresses global challenges, emphasizing the numerous fields that Computer Science influences. They recognize the diversity of cultures, creating AI systems that respect varied perspectives and avoid biases while adhering to a Bible based Christian foundation. Emphasis is placed on responsible AI usage, fostering equitable access to AI technologies that support community wellbeing and ethical resource management.
3. Students combine knowledge from ethics, data science, and theology to navigate complex AI challenges. They apply skills from disciplines such as philosophy, law, and communication to develop human-centered AI applications. They apply skills from disciplines such as philosophy, law, and communication to develop human-centered AI applications.
4. Graduates analyze data-driven outcomes critically and consider ethical implications in AI, including potential societal impacts. They propose and evaluate AI-driven solutions to complex issues while upholding Christian values and Biblical truth. Students are trained in self-reflection to continuously assess and improve their approach to problem-solving within a Christian faith-informed framework.
5. Graduates communicate AI concepts effectively in written and spoken formats, presenting information transparently and with integrity. They excel in teamwork, navigating diverse views to articulate AI's societal role from a Christian perspective. Students learn to translate technical AI knowledge for non-specialists, promoting informed and ethical use of AI.
6. Graduates skillfully interpret and explain AI data outcomes, fostering understanding of AI's impact across fields. They analyze AI patterns to draw meaningful conclusions, applying statistical and qualitative insights in alignment with ethical principles. Students assess AI developments for fairness and moral impact, striving for responsible AI innovation that serves humanity under God's guidance.

Curriculum

Code	Title	Hours
Core Requirements (https://catalog.cuw.edu/undergraduate/university/acad-prog/trad/core/)		45
Major Requirements		55
Electives (15 credits of electives may be used for MSBA Fast Track)		20
Total Hours		120

Major Requirements

Code	Title	Hours
Required Courses		
CSC 1070	Theory and Fundamentals of Computer Science	3
CSC 2000	Coding I - Fundamentals	3
CSC 2050	Coding II - Algorithms	3
CSC 2400	Machine Learning and Robotics	3
CSC 3010	Computational Dilemmas	3
CSC 3020	User Experience and Interactive Systems	3
CSC 3030	Database Fundamentals	3
CSC 3050	Operating Systems	3
CSC 3070	Software Engineering	3
CSC 3400	Artificial Intelligence	3
CSC 3500	Emerging Technologies in Artificial Intelligence	3
CSC 3600	Cybersecurity	3
CSC 4060	Advanced Database and Web Development	3
CSC 4410	Adv Artificial Intelligence	3
CSC 4900	Internship	1
CSC 4950	Capstone Project	3
COMM 3600	Artificial Intelligence Governance	3
PHIL 2110	Elementary Logic (met in core)	
PHIL 3700	Philosophy of Mind	3
PHIL 3100	The AI Dilemma: Ethical Issues in Artificial Intelligence	3
Total Hours		55

MSBA Fast Track for Applied Artificial Intelligence majors

Code	Title	Hours
MSBA Fast Track for Applied Artificial Intelligence majors (optional- will replace 15 elective credits)		
BUAN 4850	Business Data Analytics Programming with Visualization	
BUAN 4900	Analytics and the Digital Economy	
BUAN 5000	Introduction to Coding, Programming, and Databases for Analytics	
BUS 6300	Management Information Systems	
BUS 5130	Mastering Analytics and Decision Making	

Plan - Applied Artificial Intelligence

Course	Title	Hours
Semester 1		
CSC 1070	Theory and Fundamentals of Computer Science	3
CSC 2000	Coding I - Fundamentals	3
CCE 1010	Christian Citizen	3
ENG 1040	Introduction to Writing	3

NATURAL WORLD MATHEMATICS	3
Hours	15
Semester 2	
CSC 2050 Coding II - Algorithms	3
CSC 2400 Machine Learning and Robotics	3
CCE 1030 Western Thought & Worldview	3
REL 1000 The Bible	3
HHP 1100 Stewardship of the Body	1
Hours	13
Semester 3	
CSC 3010 Computational Dilemmas	3
CSC 3030 Database Fundamentals	3
CSC 3400 Artificial Intelligence	3
CCE 1020 Western Culture & Worldview	3
NATURAL WORLD SCIENCE	4
Hours	16
Semester 4	
CSC 4410 Adv Artificial Intelligence	3
HUMAN BEINGS & BEING HUMAN (PHIL 2110 Elementary Logic)	3
CSC 3070 Software Engineering	3
CCE 1040 Science & Humanity	3
REL 1100 Christian Faith	3
HHP ACTIVITY	1
Hours	16
Semester 5	
CSC 3020 User Experience and Interactive Systems	3
CSC 3500 Emerging Technologies in Artificial Intelligence	3
CSC 3050 Operating Systems	3
FAITH & LIFE	3
COMMUNICATION & LANGUAGE	3
Hours	15
Semester 6	
COMM 3600 Artificial Intelligence Governance	3
CSC 4060 Advanced Database and Web Development	3
CSC 3600 Cybersecurity	3
SOCIETY & CULTURE	3
ELECTIVE	3
Hours	15
Semester 7	
CSC 4950 Capstone Project	3
PHIL 3700 Philosophy of Mind	3
HUMAN CREATIVITY & EXPRESSION	3
ELECTIVE	3
ELECTIVE	3
Hours	15
Semester 8	
PHIL 3100 The AI Dilemma: Ethical Issues in Artificial Intelligence	3
CSC 4900 Internship	1
ELECTIVE	3-5
ELECTIVE	3
ELECTIVE	3
ELECTIVE	2
Hours	15
Total Hours	120

Plan - MSBA Fast Track for Applied Artificial Intelligence majors

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Semester 1		
CSC 1070	Theory and Fundamentals of Computer Science	3
CSC 2000	Coding I - Fundamentals	3
CCE 1010	Christian Citizen	3
ENG 1040	Introduction to Writing	3
NATURAL WORLD MATHEMATICS		3
Hours		15
Semester 2		
CSC 2050	Coding II - Algorithms	3
CSC 2400	Machine Learning and Robotics	3
CCE 1030	Western Thought & Worldview	3
REL 1000	The Bible	3
HHP 1100	Stewardship of the Body	1
Hours		13
Semester 3		
CSC 3010	Computational Dilemmas	3
CSC 3030	Database Fundamentals	3
CSC 3400	Artificial Intelligence	3
CCE 1020	Western Culture & Worldview	3
NATURAL WORLD SCIENCE		4
Hours		16
Semester 4		
CSC 4410	Adv Artificial Intelligence	3
HUMAN BEINGS & BEING HUMAN (PHIL 2110 Elementary Logic)		3
CSC 3070	Software Engineering	3
CCE 1040	Science & Humanity	3
REL 1100	Christian Faith	3
HHP ACTIVITY		1
Hours		16
Semester 5		
CSC 3020	User Experience and Interactive Systems	3
CSC 3500	Emerging Technologies in Artificial Intelligence	3
CSC 3050	Operating Systems	3
FAITH & LIFE		3
COMMUNICATION & LANGUAGE		3
Hours		15
Semester 6		
COMM 3600	Artificial Intelligence Governance	3
CSC 4060	Advanced Database and Web Development	3
CSC 3600	Cybersecurity	3
SOCIETY & CULTURE		3
BUAN 4850	Business Data Analytics Programming with Visualization	3
Hours		15
Semester 7		
CSC 4950	Capstone Project	3
PHIL 3700	Philosophy of Mind	3
HUMAN CREATIVITY & EXPRESSION		3
BUAN 5000	Introduction to Coding, Programming, and Databases for Analytics	3
BUAN 4900	Analytics and the Digital Economy	3
Hours		15
Semester 8		
PHIL 3100	The AI Dilemma: Ethical Issues in Artificial Intelligence	3
CSC 4900	Internship	1
ELECTIVE		3-5
ELECTIVE		3
ELECTIVE		3

Course options and schedule are subject to change.

ELECTIVE	2
Hours	15
Total Hours	120

Course options and schedule are subject to change.