

AUBURN UNIVERSITY AT MONTGOMERY

COLLEGE OF BUSINESS

MASTER OF SCIENCE IN ARTIFICIAL INTELLIGENCE (MSAI)

Core Curriculum (7 Courses, 21 Credit Hours)	Prerequisites
INAI 5100 AI in Business Operations	Graduate standing
INAI 6000 AI Automation	Graduate standing
INFO 5880 Data Analytics	Graduate standing
INFO 6510 Data Visualization	Graduate standing
INFO 6500 Machine Learning	Min. grade of B in INFO 5880
INAI 6520 AI Strategy and Leadership	Graduate standing
INAI 6986 Artificial Intelligence Capstone	Min. grade of C in INAI 5100, INAI 6000, INFO 6500, and INFO 6510

Program: 10 Courses, 30 Credit Hours

Grades below C are not acceptable for graduation. A 3.0 GPA is required for graduation.

Core Course Descriptions

INAI 5100: AI in Business Operations

This course explores AI adoption across business and nonprofit sectors, focusing on AI-driven decisionmaking, workflow automation, and business intelligence applications. Through case studies and readings, students will assess strategic AI integration, ethical risks, and the competitive advantages of AI-powered business strategies.

INFO 5880: Data Analytics

This course is an introduction to the use of Business Analytics and big data as a strategic resource. A focus is placed on integrating the knowledge of analytics tools with an understanding of how companies leverage data analytics to gain strategic advantage. The key areas of customer analytics and surveys of data mining techniques and applications will also be covered. Case approach is used to emphasize hands-on learning and a real-world view of Business and big data analytics.

INAI 6000: AI Automation

This course explores AI-powered automation in business, covering chatbots, workflow optimization, and decision support. Students apply low-code AI tools, prompting, and automation strategies to enhance

efficiency. Ethical and security implications are examined, preparing students to implement AI-driven solutions in evolving business environments.

INFO 6500 Machine Learning

An in-depth investigation of the theories, methods, and techniques of various machine learning models. Topics include how artificial intelligence differs from programming; supervised and unsupervised learning models and techniques; validation strategies; data preparation and imputation; organizational, ethical and leadership applications and challenges.

INFO 6510 Data Visualization

Using large-data analytics tools to develop visual representation of high-dimensionality data to communicate results, predictive, and prescriptive data to management and decision makers. Theory of various visualization techniques, identifying and correcting misleading visuals, documenting and communicating results. MS PowerBI will be used as a platform for exercises.

INAI 6520 AI Strategy and Leadership

This course explores how organizations use AI for business transformation and strategic decision-making through real-world case studies. Students examine AI adoption frameworks, leadership strategies, and ethical deployment across industries. Topics include AI scaling, automation, competitive differentiation, and ROI, with case studies preparing students to lead technological change.

INAI 6986 AI Capstone

Exploration and development of emerging AI technologies and a small team project identifying a problem for an external client organization, or a specific internal research project, to plan, execute, and complete an application of AI to address the problem or research question. Students will deliver the completed algorithm and supporting documentation to the client or researcher.