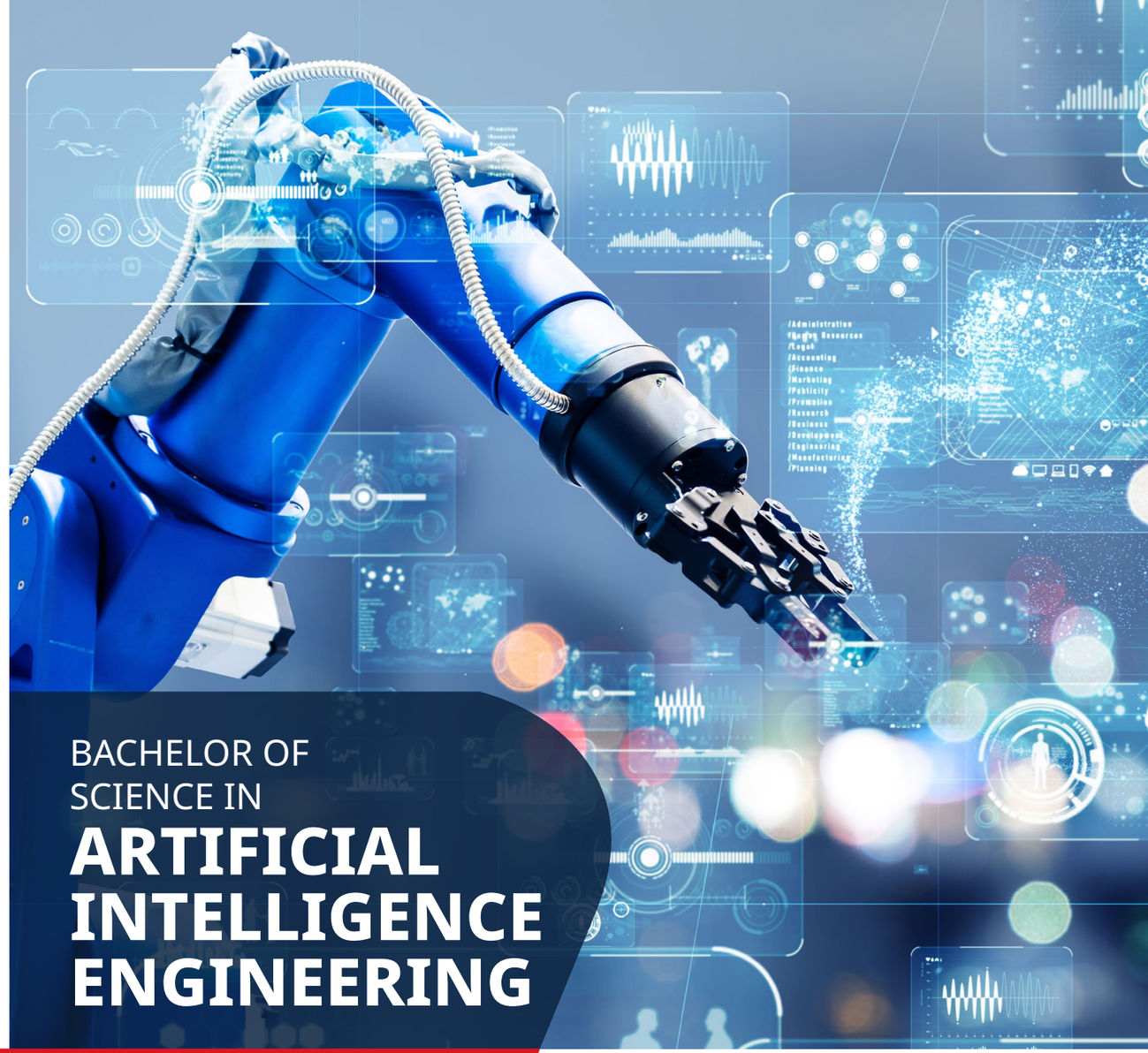
Curriculum

COURSE CODE	COURSE TITLE	COURSE CODE	COURSE TITLE	COURSE CODE	COURSE TITLE
General Education Requirements: 21 Credit Hours					
ARL 100	Communication Skills in Arabic I	ENG 200	English II	FWS 205	UAE and GCC Society
FWS 310	Fundamentals of Innovation and Entrepreneurship	ISL 100	Islamic Culture	MTT 102	Calculus I
STT 100	General Statistics				
Degree Requirements: 35 Credit Hours					
ECS 200	Introduction to Engineering and Computing	MTT 200	Calculus II	MTT202	Discrete Structures and Applications
MTT 204	Introducation to Linear Algebra	MTT 205	Differential Equations	PHY 102	Physics and Engineering Applications I
PHY 102L	Physics and Engineering Applications I Lab	PHY 201	Physics and Engineering Applications II	PHY 201L	Physics and Engineering Applications II Lab
CSC 201	Computer Programming I	CSC201	Computer Programming I	COE101	Introductory Artificial Intelligence
COE202	Engineering Ethics, Economy, and Law	GEN300	Numerical Methods		
Major Requirements: 69 Credit Hours					
CSC202	Computer Programming II	EEN210	Digital Circuits	CSC305	Data Communications and Networks
CEN330	Probability and Stochastic Processes	CEN201	Electric Circuits I	CEN320	Signals and Systems
CEN304	Electronic Devices and Circuits	EEN365	Control Systems for Robotics Engineers	CEN333	AI-powered Cross-platform Mobile App. Develop.
CEN464	Digital Signal Processing	CEN464L	Signal Processing Lab	CEN454	Computer Vision and Machine Learning
AIN325	Edge AI	AIN305	Artificial Intelligence for Engineers	AIN310	Machine Learning
AIN410	Deep Learning	AIN482	Natural Language Processing	AIN475	Self-Driving Cars
AIN333	Mobile Computer Vision and Machine Learning	AIN425	Internet of AI-powered Things	CEN401L	Embedded and IoT Lab
AIN399i	Internship in Artificial Intelligence Engineering I	AIN399ii	Internship in Artificial Intelligence Engineering II	AIN451	Artificial Intelligence Engineering Design Project I
AIN452	Artificial Intelligence Engineering Design Project II				
Major and Open Electives: 9 credit hours 6 of which must be AIN courses)					
AIN483	Audio Processing for AI Applications	AIN430	Machine Learning in Medicine	AIN442	Time Series Analysis
AIN443	Generative Deep Learning	EEN366	Introduction to Robotics		
Open Electives: 6 Credit Hours					
OE1	Open Elective 1	OE2	Open Elective 2		



BACHELOR OF SCIENCE IN

ARTIFICIAL INTELLIGENCE ENGINEERING

جامعة أبوظبي
Abu Dhabi University
College of Engineering

Program Overview

The BSc in AI Engineering program is a one-of-a-kind program that graduates AI Engineers with the full spectrum of knowledge and skills required to design, develop, and test novel intelligent systems and the future generation of their applications for the government and many industry domains, including manufacturing, business, transportation, robotics, healthcare, tourism, education, and many more. Our program perfectly balances theory and application and is designed around hands-on experiences and project-based learning, widely recognized as the best way to learn true AI and robotics. Another unique aspect of our program is how synched it is with the bleeding-edge AI tech and discoveries for years to come. Join us and learn how to futureproof your career and contribute to creating AI-powered IoT devices for cloud, mobile, desktop, and enterprise apps, be it generative or discriminative AI, right here in the UAE.

Program Mission

The Artificial Intelligence Engineering program equips students with essential knowledge and skills to design, develop, and implement AI-driven solutions to address complex challenges

Students will gain advanced training in key areas of artificial intelligence, including machine learning, data analytics, and intelligent systems, fostering innovation to meet the evolving needs of local and global communities.

Student's Testimonial

Abdel Rahman Alhendi - Current Student

Studying Artificial Intelligence at Abu Dhabi University has been an exciting and rewarding experience. The AI programs provide a solid foundation in key areas like machine learning, deep learning, and generative AI. With a focus on hands-on, project-based learning, we can apply these technologies to real-world challenges, from self-driving cars, robotics, and autonomous systems to AI-powered applications. These AI programs provide the skills and mindset needed to make a real impact in today's rapidly evolving tech landscape.

Why is this Program Unique?

1. Project-Based & Experiential Learning - Students engage in hands-on projects, working with edge AI devices, IoT devices, AI-powered mobile applications, robotic platforms, enterprise AI solutions, and cloud AI services. Students have two major year-long design experiences and many industrial course projects.
2. Emerging AI Technologies - Learn and apply generative AI, natural language processing (NLP), deep learning, and deep reinforcement learning to real-world problems. We teach AI in Python, Matlab, C++, and TypeScript. Become an expert in TensorFlow, PyTorch, Keras, Scikit-Learn, and many more AI implementations.
3. Autonomous & Intelligent Systems and Robots - Dive into the world of self-driving cars, drones, robots, and industrial AI applications.
4. AI for Impact - Explore how AI transforms healthcare, governance, industry, and business.

Career Prospects

1. AI Engineers in high-tech companies, research labs, or government agencies developing intelligent systems and solutions
2. Machine Learning Engineers designing and deploying models for tasks such as prediction, recommendation, and automation
3. Data Scientists and Analysts who extract insights from large datasets to support decision-making in sectors like finance, healthcare, and marketing
4. AI Application Developers creating intelligent mobile, desktop, and web applications powered by natural language processing, computer vision, and generative AI
5. Robotics and Autonomous Systems Engineers working on drones, industrial robots, and self-driving technologies
6. AI Consultants who guide organizations on how to adopt, integrate, and scale AI technologies
7. Research Assistants in universities or R&D centers contributing to cutting-edge developments in AI and machine learning
8. Edge AI and IoT System Developers who integrate AI models into smart devices, embedded systems, and real-time applications
9. AI Product Managers coordinating the development of AI-powered products and aligning them with business goals
10. Cloud AI Solutions Architects designing scalable AI services using platforms such as AWS, Azure, or Google Cloud
11. Technical specialists or account managers in AI and data-driven solutions for companies like Amazon, Google, Microsoft, and IBM