Curriculum

Program Component	Courses	Credit Hours
Core Courses	4	12
Elective Courses	4	12
Research Dissertation	1	30
Total	**9**	**54**

Core Courses: 12 Credit Hours

Courses	Course Title	Credit Hours	Prerequisite(s)
DEN701	Advanced Probability and Stochastic Processes	3	Graduate Standing
DEN702	Advanced Research Communication	3	Graduate Standing
DEN703	Advanced Analysis and Computing	3	Graduate Standing
DEN795	Doctoral Seminar	3	DEN702

Elective Courses: 12 Credit Hours

Courses	Course Title	Credit Hours	Prerequisite(s)
DEN790	Advanced Deep Learning Applications	3	Graduate Standing
DEN775	Advanced Intelligent Robots	3	Graduate Standing
DEN733	Advanced Edge AI	3	Graduate Standing
DEN723	Advanced Intelligent Software Development	3	Graduate Standing
DEN721	Advanced Intelligent Vision Systems	3	Graduate Standing
DEN735	Special Topics in Intelligent Systems	3	Graduate Standing

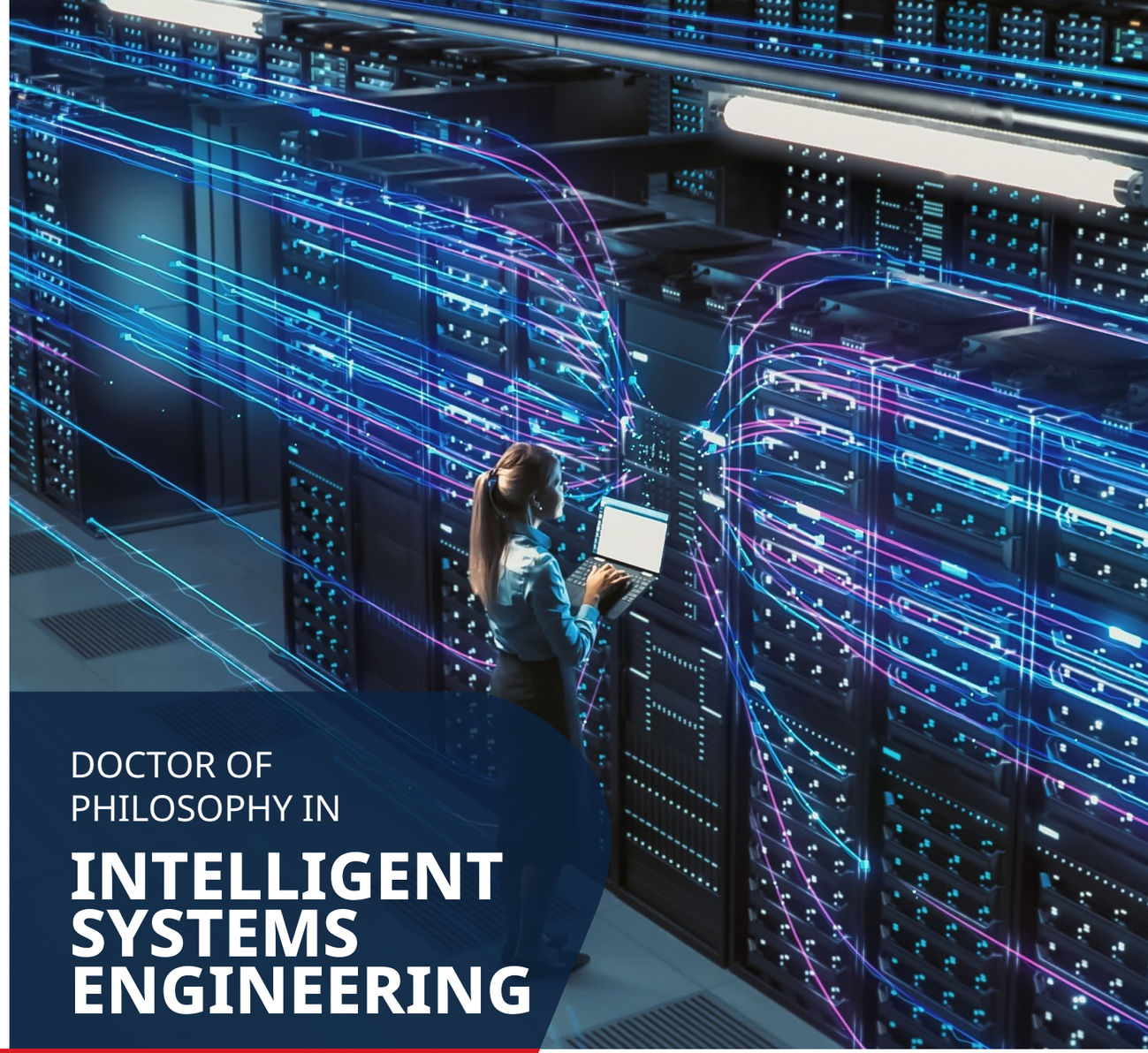
PhD Research Dissertation: 30 Credit Hours

Courses	Course Title	Credit Hours	Prerequisite(s)
DEN799	PhD Research Dissertation	30	8 Credit Hours Completed

Online Delivery

The program will be delivered 80% face-to-face and 20% online. Courses that are delivered online are shown in below table:

Courses	Course Title	Credit Hours	Prerequisite(s)
DEN702	Advanced Research Communication	3	Graduate Standing
DEN703	Advanced Analysis and Computing	3	Graduate Standing



DOCTOR OF PHILOSOPHY IN

INTELLIGENT SYSTEMS ENGINEERING

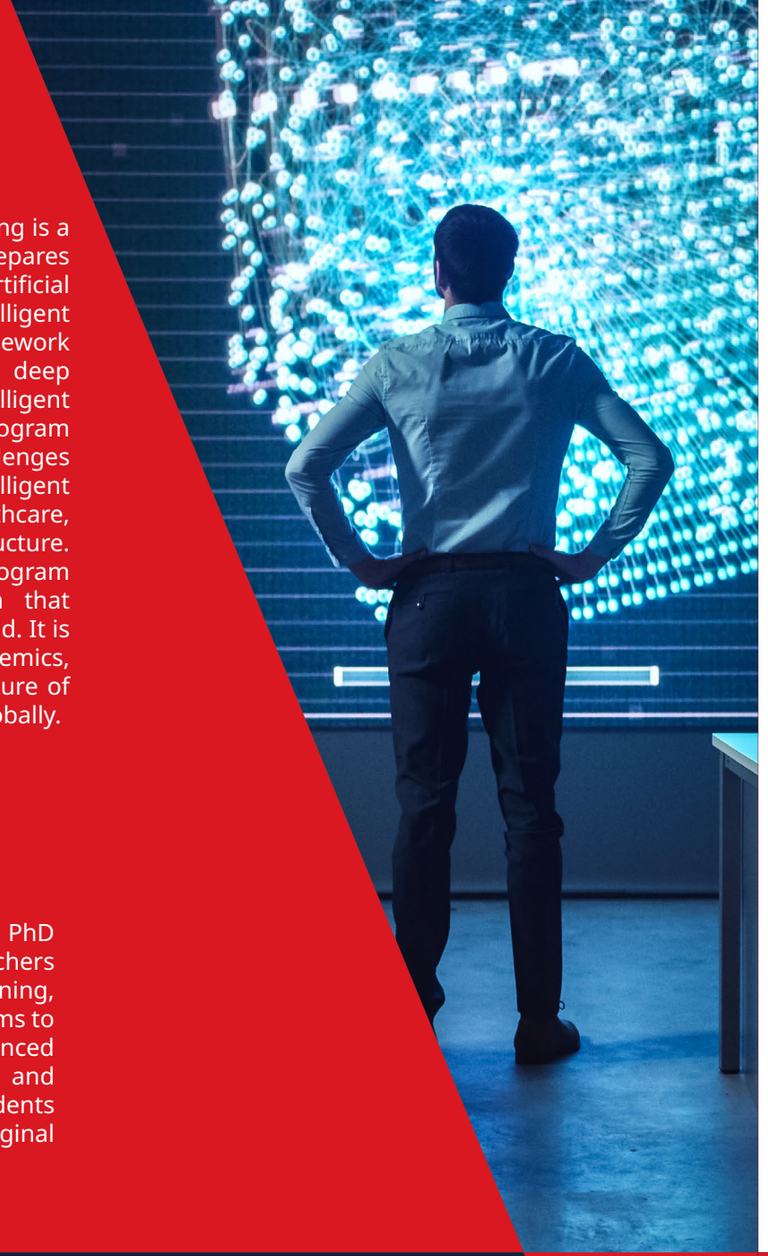
جامعة أبوظبي
Abu Dhabi University
College of Engineering

Program Overview

The PhD in Intelligent Systems Engineering is a research-driven doctoral program that prepares students to lead in the fields of artificial intelligence (AI), robotics, and intelligent technologies. Through advanced coursework and focused research, students gain deep expertise in deep learning, edge AI, intelligent vision, and autonomous systems. The program emphasizes solving real-world challenges by designing and implementing intelligent solutions across sectors, including healthcare, transportation, and smart infrastructure. Structured over three years, the program culminates in a doctoral dissertation that contributes original knowledge to the field. It is well-suited to aspiring researchers, academics, and innovators seeking to shape the future of AI-driven technologies in the UAE and globally.

Program Mission

The Intelligent Systems Engineering PhD program develops highly skilled researchers and innovators capable of designing, improving, and applying intelligent systems to solve complex problems. Through advanced coursework, rigorous qualifying exams, and a significant doctoral dissertation, students will build the expertise to make original contributions.



Student's Testimonial

Maha Yaghi - Currently enrolled in the PhD in Intelligent Systems Engineering

Being part of the PhD in Intelligent Systems Engineering at Abu Dhabi University is a truly transformative experience. The program combines advanced coursework in deep learning, robotics, and edge AI with comprehensive research aimed at publishing in high-quality journals. From exploring intelligent vision systems to autonomous systems, I continually build knowledge and contribute to innovative applications. With dedicated faculty mentorship and access to cutting-edge technologies, the program is equipping me with the expertise and confidence to grow as a researcher and future leader in AI-driven innovation.

What Makes This Program Unique

The PhD in Intelligent Systems Engineering is a research-driven doctoral program that empowers you to lead innovation in AI, robotics, and intelligent technologies.

- **Cutting-Edge Expertise:** Specializing in deep learning, edge AI, intelligent vision systems, and autonomous systems to address real-world challenges.
- **Flexible Learning**: Complete up to 20% of the program online, providing the flexibility needed for working professionals.
- **High-Impact Research:** Contribute to the advancement of knowledge by publishing in leading Q1 and Q2 journals under the mentorship of experienced faculty.
- **Career-Ready Leadership:** Build the advanced research, innovation, and problem-solving skills needed to excel as a professor, principal investigator, or R&D leader.
- **Direct-to-PhD Pathway**: Outstanding bachelor's graduates can bypass a master's degree and enroll directly in a comprehensive 72-credit PhD track.

This program is designed for ambitious researchers who aspire to make original contributions, drive technological breakthroughs, and shape the future of intelligent systems in the UAE and globally.

Career Prospects

Graduates are well-positioned for advanced careers in academia, industry, and government sectors. They can pursue roles such as university professors, principal researchers, and R&D leaders in AI, robotics, smart infrastructure, autonomous systems, and data-driven decision-making.

With the UAE's strategic focus on AI and digital transformation, graduates are in high demand for positions in technology-driven organizations, innovation centers, and public sector initiatives. Their deep expertise enables them to lead interdisciplinary teams, contribute to national innovation goals, and shape the future of intelligent systems.