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# MASTER OF SCIENCE IN APPLIED ARTIFICIAL INTELLIGENCE

### **Overview**

How we think, create, and make decisions is increasingly shaped by artificial intelligence. From healthcare to business, from art to public policy, Al is transforming every sector of society. How we design and apply this technology is now a matter of global concern. Rooted in our Jesuit heritage, Regis University's Master of Science in Applied Artificial Intelligence degree program equips students to apply Al ethically, advancing innovation while honoring human dignity and promoting justice.

# **Degree Requirements**

Code	Title	SHs
MSAI 601	Foundations of Artificial Intelligence	3.00
MSAI 606	Advanced Techniques in Model Fine-Tuning	3.00
MSAI 607	Generative AI & Creative Applications	3.00
MSAI 608	Artificial Intelligence in Health Care	3.00
MSAI 609	Al in Business & Industry Applications	3.00
MSDS 640	Ethics/Prvcy/Soc Justice-Data Science	3.00
MSDS 650	Data Analytics	3.00
MSDS 680	Machine Learning	3.00
MSDS 686	Deep Learning	3.00
MSAI 692	Capstone Project in Applied Al	3.00
Total SHs		30

## **Program Outcomes**

- Graduates will master foundational AI principles, such as search algorithms, intelligent agents, and problem-solving techniques, enabling them to design and evaluate AI applications.
- Graduates will demonstrate proficiency in end-to-end AI solution development by effectively managing and analyzing large datasets, applying advanced machine learning and deep learning techniques, and deploying robust, data-driven models to solve real-world problems.
- Graduates will assess Al's societal implications, address bias, fairness, and privacy issues, and incorporate transparent and accountable practices into Al development and deployment.
- Graduates will customize Al-driven strategies and models for specific sectors, such as healthcare, finance, and creative industries, and collaborate with stakeholders to ensure successful and impactful implementations.
- Graduates will effectively communicate AI concepts and solutions to diverse audiences, demonstrating leadership and collaboration skills that encourage interdisciplinary engagement and uphold Jesuit values in professional settings.