



FLORIDA ATLANTIC UNIVERSITY

College of Engineering
and Computer Science

Professional Program

2026–2027 Course Offering

Fall 2026

- **CAP 6629 Reinforcement Learning (3 credits)**

August 15th – September 11th

On-campus lecture days: Saturday, August 15th & August 29th

Students in this course study theoretical properties and practical applications of reinforcement learning. Course topics include Markov decision process, dynamic programming, temporal difference learning, planning and learning with tabular methods, and deep reinforcement learning.

- **CAP 6776 Information Retrieval (3 credits)**

September 12th – October 09th

On-campus lecture days: Saturday, September 12th & October 03rd

This course teaches concepts, techniques and popular tools and applications in information retrieval (IR), which aims to obtain relevant information from a collection of resources. The class covers efficient text indexing, text processing, web search and text mining. New applications are also introduced.

- **CIS 5645 Introduction to Cloud Security (3 credits)**

October 10th – November 06th

On-campus lecture days: Saturday, October 10th & October 31st

This course provides a ground-up coverage of the high-level concepts of the cloud landscape, architectural principles, techniques, design patterns and real-world best practices applied to cloud service providers and consumers and delivering secure cloud-based services. The course describes the cloud security architecture and explores the guiding security design principles, design patterns, industry standards, applied technologies and addressing regulatory compliance requirements critical to

design, implement deliver and manage secure cloud-based services.

- **CNT 6167 Internet of Things (3 credits)**

November 07th - December 04th

On-campus lecture days: Saturday, November 07th & November 21st

This course introduces the concepts, technologies, and applications of the Internet of Things (IoT). Students explore how connected devices communicate, collect, and exchange data through networks and cloud-based systems. Topics may include IoT architecture, sensors and embedded systems, wireless communication, cybersecurity, data analytics, and real-world IoT applications in areas such as smart homes, transportation, and industry.

Spring 2027

- **CAP 6635 Artificial Intelligence (3 credits)**

January 09th – February 05th

On-campus lecture days: Saturday, January 09th & January 23rd

The basic concepts, techniques, and applications of artificial intelligence: representations, search strategies, control, communication, deduction, agents, evolutionary computation and machine learning.

- **COT 6930 Introduction to Large Language Models (3 credits)**

February 06th - March 05th

On-campus lecture days: Saturday, February 06th & February 27th

This course introduces the fundamental principles and practical applications of large language models (LLMs). Topics include transformer architectures, pretraining and fine-tuning methods, prompt engineering, retrieval-augmented generation, evaluation techniques, and deployment strategies. The course emphasizes hands-on implementation and real-world use cases.

- **CAP 5768 Introduction to Data Science (3 credits)**

March 06th - April 02nd

On-campus lecture days: Saturday, March 06th & March 27th

This course surveys foundational topics in data science and reinforces practical programming skills in the context of data analytics. Students learn fundamentals of computational data analysis using statistics and machine learning and gain experience working with data sets from a variety of domains. Students may not enroll in CAP 5768 if they have already taken CAP 4773.

- **CAP 6673 Data Mining & Machine Learning (3 credits)**

April 03rd - April 30th

On-campus lecture days: Saturday, April 03rd & April 24th

Course deals with the principles of data mining and machine learning. Topics to be covered include machine learning methods, knowledge discovery and representation, classification and

Summer 2027

- **Quantum Computing (3 credits)**

May 01st - May 29th

On-campus lecture days: Saturday, May 01st & May 22nd

TBA