

# DEPARTMENT OF COMPUTER & ELECTRICAL ENGINEERING AND COMPUTER SCIENCE

College of Engineering & Computer Science Florida Atlantic University

## Professional Master's Degree Program Computer Science



### **ONLY ONE YEAR TO COMPLETE**

The Department of Computer & Electrical Engineering and Computer Science at Florida Atlantic University (FAU) offers a one-year Professional Master's degree program in Computer Science. Students will complete 10 courses for a total of 30 graduate credits. The program is tailored specifically for working professionals from the high-tech industry. Providing a cutting-edge education with an emphasis on software, Internet and medical systems, mobile app development, machine learning, data science, and security, the program offers face-to-face instruction complemented with state-of-the-art, internet-based e-learning facilities. The program can be completed fully online or with a combination of online and on-campus lectures. Students are encouraged to attend classes on the FAU campus two Saturdays per month. The Saturday classes are recorded and posted on Canvas, FAU's learning management system. The latest distance-learning technologies are used for off-campus student communication including online lectures, homework, projects, and exams, which allows participants to pursue their academic goals while remaining employed.

Note: During Covid-19 Boca Raton campus restrictions, the program is offered fully online.





## COURSE SCHEDULE 2020 - 2021

CAP 5768 Introduction to Data Science	CNT 5008 Computer Networks
COP 5675 Mobile App Development	CEN 5035 Software Engineering
COP 6819 Advanced Internet Systems	COP 6731 Theory and Implementation Database Systems
CIS 6370 Computer Data Security	CAP 6673 Data Mining and Machine Learning
COT 6930 Randomized Algorithms and Secure Designs	COT 6930 Healthcare Informatics

#### **About the College**

The FAU College of Engineering and Computer Science is internationally recognized for cutting-edge research and education in the areas of Computer Science and Artificial intelligence (AI), Computer Engineering, Electrical Engineering, Bioengineering, Civil, Environmental and Geomatics Engineering, Mechanical Engineering, and Ocean Engineering. Research conducted by our faculty and their teams expose our students to technology innovations that push the current state of the art of the disciplines. The College research efforts are supported by the National Science Foundation (NSF), the National Institutes of Health (NIH), the Department of Defense (DOD), the Department of Transportation (DOT), the Department of Education (DOE), the State of Florida, and Industry. The FAU College of Engineering and Computer Science offers degrees with a modern twist that bear specializations in areas of national priority such as artificial intelligence, cybersecurity, internet of things, transportation and supply chain management, and data science. The College newsletter (s.fau.edu/engineering-spring2020) highlights recent accomplishments. For more information about the College, please visit eng.fau.edu.

#### **About the Department**

The Department of Computer & Electrical Engineering and Computer Science is home to a vibrant community of faculty, students, staff, and alumni. The research and teaching expertise of the 45 faculty span diverse areas including artificial intelligence, data analytics, software development, machine learning, cyber security, robotics, cyber physical systems, cryptographic engineering, micro and nanotechnology in medicine, bioinformatics, sensors and Internet of Things, vehicular networks, and video communications. The research is funded by various agencies including NSF, NIH, DOE, DARPA, and industry. For the academic year 2019-2020, the faculty received over \$5.4M in funding for research grants. The Department offers three bachelor programs, seven master's programs, three PhD programs, and five certificate programs. New degree programs include the first Master of Science in Artificial Intelligence in Florida, Master of Science in Data Science and Analytics, and the new Professional Master of Science degree in Computer Science for working professionals. Some recent events that showcased our students' achievements were the industry-sponsored Hardware Hackathon, Undergraduate Senior Design Showcase, FAU 3MT and Poster competitions, and College Graduate Academic Excellence Awards. We invite you to learn more about the Department of Computer and Electrical Engineering and Computer Science at ceecs.fau.edu.



## **ADMISSION REQUIREMENTS**



A baccalaureate degree in computer science, computer engineering, electrical engineering, information systems, information technology, or comparable field, with a GPA of at least 3.0 in the last 60 credits attempted prior to graduation.



Submission of the Graduate Record Examination (GRE) scores. The GRE requirement may be waived based on industry work experience.



International students must provide Test of English as a Foreign Language (TOEFL) scores.

## **PROGRAM FEES**



#### **Total Cost**

\$800 per credit-hour; total cost for 30 credit-hours is \$24,000. Note: prices subject to change.

Tuition is the same for Florida Residents and Outof-State/International Residents.



#### **Tuition Fees**

Flexible payment plan and financial aid payment methods are available.

## **TESTIMONIALS**

The Professional MS in Computer Science degree has helped me learn a lot of new concepts and foray into some fascinating areas of technology. The practical problem-solving based approach and the fast-paced nature of the program is well suited for working professionals. The course Analysis of Algorithms was extremely well-structured because it gave me an opportunity to learn key concepts in a short span, especially considering my undergraduate degree was in a non-computer science field. I never realized how much I would learn from courses like Multimedia Systems and Sensor Networks/Smart Systems since they focus heavily on insights mainly driven by data and Al. I would like to extend my heartfelt thanks to all the professors who were extremely knowledgeable, helpful and flexible in terms of understanding the professional commitments the students have. I am sure this degree is going to make me more marketable because the program on a broader scale is tailored to keep in pace with the latest developments in technology, mainly in the IoT (Internet of Things) world.

> - Ganesh Swaminathan Software Engineer LexisNexis Risk Solutions

I had been searching for the right degree program for years, and it was hard to find a high-quality master's program that I could do while keeping my full-time job. This program was the best investment of time and money I've ever made, and the courses have exceeded my expectations. The program changed my life and has been instrumental in me making a complete career switch. I am incredibly grateful to FAU for the opportunity they've given me and could not be prouder to be an FAU student.

- **Hugh Bennett** Software Engineer Stryker

The FAU Professional MS in Computer Science program has exposed me to the latest trends and technologies in the industry and allowed me to expand my professional network. The courses had a flexible format using face-to-face and online delivery. allowing me to enroll in classes while working full time. Continuing my education with master's and PhD degrees from FAU has helped move my professional career to the next level. I got promoted to senior technical staff software engineer. then senior staff manager and chief architect for the IBM CIO Cloud Platform, and currently I am VP of Data Science and Data Engineering at rewardStyle company, a career pathway that fulfilled my lifetime professional goals.

- **Dr. David Jaramillo**VP of Data Science and Data Engineering
rewardStyle
Adjunct Professor

One of the things that I have enjoyed most about this program is that it has allowed me to expand my professional network with engineers, data analysts, managers and more from other local companies in my field. It has also allowed me to gain hands-on experience in different areas of the computer science field, such as tools used in machine learning and developing home automation with Raspberry Pis, to name a few, which I likely would not have been exposed to at my job. There has also been a good balance of theory vs. implementation which I feel is essential, especially at a Master's degree level.

> - **Delia Drumm** Senior Cloud DevOps Engineer Citrix

The administration of the FAU Professional MS in Computer Science program is exceptional. The administrators are very supportive, responsive and always provide guidance. As a full-time employee, it has been crucial to have this invaluable resource. Professionally, the program has already yielded value. I have accepted a new job supervising an Innovation team focused on Data Science and Analytics. Courses in Data Mining and Emerging Wireless Networks are directly applicable to my new role. Even the course in Multimedia Systems, a field which is new to me, was of great value in imparting knowledge on patent processes and FAU's important role in the growth of this field.

> - Terence Farmer Information Systems Supervisor Broward County Government



#### **CONTACT US**

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