

 FLORIDA ATLANTIC UNIVERSITY	NEW/CHANGE PROGRAM REQUEST Graduate Programs		UGPC Approval _____ UFS Approval _____ Banner _____ Catalog _____
Department Electrical Engineering and Computer Science College Engineering and Computer Science			
Program Name MS Artificial Intelligence, MS Computer Engineering, MS Computer Science, MS Electrical Engineering, MS Biomedical Engineering		☐ New Program* ☒ Change Program*	Effective Date (TERM & YEAR) Spring 2024
Please explain the requested change(s) and offer rationale below or on an attachment. The College of Engineering and Computer Science has waived the GRE as an admission requirement over the past few years due to Covid-19 pandemic. This proposal requests removing the GRE as an admission requirement for the Master Programs in the Department of Electrical Engineering and Computer Science since it does not present a conclusive factor in predicting how successful an applicant will be in completing the program.			
*All new programs and changes to existing programs must be accompanied by a catalog entry showing the new or proposed changes.			
Faculty Contact/Email/Phone Dr. Hari Kalva, hkalva@fau.edu, 561-297-0511		Consult and list departments that may be affected by the change(s) and attach documentation NA	
Approved by Department Chair <u>Hari Kalva</u> College Curriculum Chair <u>Masoud Jahandar Lashaki</u> College Dean <u>McArde</u> UGPC Chair <u>Paul R. Kalva</u> UGC Chair <u>Paul R. Kalva</u> Graduate College Dean <u>Robert W. Johnson</u> UFS President _____ Provost _____			Date <u>9/1/2023</u> <u>9/5/2023</u> <u>9/5/2023</u> <u>11/09/2023</u> <u>11/09/2023</u> <u>11/09/2023</u> _____ _____

Email this form and attachments to UGPC@fau.edu 10 days before the UGPC meeting.

ARTIFICIAL INTELLIGENCE MASTER OF SCIENCE (M.S.)

~~(For this degree program, the GRE admission requirement is waived through and including fall 2023.)~~

The Master of Science (M.S.) with Major in Artificial Intelligence provides a comprehensive curriculum, consisting of foundation and theory of artificial intelligence and elements of computer vision, data analytics and algorithms, knowledge management and reasoning, machine learning and applications. Both thesis and non-thesis options of the M.S. in Artificial Intelligence require a minimum of 30 credits. The thesis option consists of a minimum of 24 coursework credits and 6 thesis credits.

With approval of the advisor, substitution can sometimes be made among similar courses. See the Department of Electrical and Computer Science [website](#) for updates.

Admission Requirements

Applicants for admission to the master's program are approved by the University upon the recommendation of the department. All applicants must submit with their applications the official transcripts from previous institutions attended ~~and have official GRE scores forwarded to the Graduate College~~. Applications for admission are evaluated on an individual basis. At a minimum, applicants are expected to meet the following requirements.

1. Have obtained a bachelor's degree from an accredited institution. Students are expected to have taken Calculus 1 or Methods of Calculus and a statistics course, to be proficient in programming, and to be knowledgeable in data structures and algorithm analysis. Students can gain this knowledge through undergraduate classes or learn it through work experience. The admissions committee will evaluate the application holistically to determine applicant suitability using several factors, such as academic performance, GPA, ~~GRE scores~~, background and experience. The admission committee may assign remedial courses on a case-by-case basis. In some cases, prerequisite courses may be taken after admission to the graduate program.
2. At least a 3.0 (of a 4.0 maximum) GPA in the last 60 credits attempted prior to graduation; and
3. ~~Submission of the Graduate Record Examination (GRE) scores. GRE scores more than five years old are not acceptable. The GRE requirement is waived for any student who has a baccalaureate degree from FAU's Department of Electrical Engineering and Computer Science with a GPA of at least 3.25 (out of a possible 4.0) in the last 60 credits attempted prior to graduation; and~~
4. International students from non-English-speaking countries must be proficient in written and spoken English as evidenced by a score of at least 500 (paper-based test) or 213 (computer-based test) or 79 (Internet-based test) on the Test of English as a Foreign Language (TOEFL) or a score of at least 6.0 on the International English Language Testing System (IELTS).

COMPUTER ENGINEERING MASTER OF SCIENCE (M.S.)

~~(For this degree program, the GRE admission requirement is waived through and including fall 2023.)~~

The non-thesis option for this degree requires a minimum of 30 credits. The thesis option requires a minimum of 30 credits, including 6 credits of thesis.

Admission Requirements

Applications for admission to the master's program are approved by the University upon the recommendation of the department. All applicants must submit with their applications the official transcripts from previous institutions attended ~~and have official GRE scores forwarded to the University~~. Applications for admission are evaluated on an individual basis. As a minimum, applicants are expected to meet the following requirements.

1. Students are expected to have a bachelor's degree in engineering or a related field. Applicants with different backgrounds are expected to have taken Calculus 2 and a statistics course, to be proficient in programming, and to be knowledgeable in the topics of microprocessor systems, computer architecture or CAD-based computer design, electronics or VLSI, data structures and algorithm analysis. The admission committee will evaluate the application holistically to determine the applicant's suitability using several factors, such as academic performance, GPA, ~~GRE scores~~, background and experience. The admission committee may assign remedial courses on a case-by-case basis. In some cases, prerequisite courses may be taken after admission to the graduate program;
2. At least a 3.0 (of a 4.0 maximum) GPA in the last 60 credits attempted prior to graduation;
- ~~3. Submission of the Graduate Record Examination (GRE) score is required. GRE scores more than five years old are normally not acceptable. The GRE requirement is waived for any student who has a baccalaureate degree from FAU's Department of Electrical Engineering and Computer Science with a GPA of at least 3.25 (out of a possible 4.0) in the last 60 credits attempted prior to graduation;~~
- 4.3. International students from non-English-speaking countries must be proficient in written and spoken English as evidenced by a score of at least 500 (paper-based test) or 213 (computer-based test) or 79 (Internet-based test) on the Test of English as a Foreign Language (TOEFL) or a score of at least 6.0 on the International English Language Testing System (IELTS).

COMPUTER SCIENCE MASTER OF SCIENCE (M.S.)

~~(For this degree program, the GRE admission requirement is waived through and including fall 2023.)~~

The non-thesis option for this degree requires a minimum of 30 credits. The thesis option requires a minimum of 30 credits, including 6 credits of thesis.

Admission Requirements

Applicants for admission to the master's program are approved by the University upon the recommendation of the department. All applicants must submit with their applications the official transcripts from previous institutions attended ~~and have official GRE scores forwarded to the University.~~ Applications for admission are evaluated on an individual basis. As a minimum, applicants are expected to meet the following requirements. Students with non-engineering bachelor's degrees, click [here](#) for additional requirements.

1. Students are expected to have a bachelor's degree in computer science or a related field. Applicants with different backgrounds are encouraged to apply. Students are expected to have taken Calculus 2 and a statistics course, to be proficient in programming, and to be knowledgeable in the topics of data structures and algorithm design and analysis, operating systems and computer architecture. The admission committee will evaluate the application holistically to determine the applicant's suitability using several factors, such as academic performance, GPA, ~~GRE scores~~, background and experience. The admission committee may assign remedial courses on a case-by-case basis. In some cases, prerequisite courses may be taken after admission to the graduate program;
2. At least a 3.0 (of a 4.0 minimum) GPA in the last 60 credits attempted prior to graduation; ~~and~~
- ~~3. Submission of the Graduate Record Examination (GRE) is required. GRE scores more than five years old are normally not acceptable. The GRE requirement is waived for any student who has a baccalaureate degree from FAU's Department of Electrical Engineering and Computer Science with a GPA of at least 3.25 (out of a possible 4.0) in the last 60 credits attempted prior to graduation; and~~
- ~~4.~~3. International students from non-English-speaking countries must be proficient in written and spoken English as evidenced by a score of at least 500 (paper-based test) or 213 (computer-based test) or 79 (Internet-based test) on the Test of English as a Foreign Language (TOEFL) or a score of at least 6.0 on the International English Language Testing System (IELTS).

ELECTRICAL ENGINEERING MASTER OF SCIENCE (M.S.)

~~(For this degree program, the GRE admission requirement is waived through and including fall 2023.)~~

The department offers thesis and non-thesis options at the master's level. Students may specialize in several areas: telecommunications; digital signal processing; systems and robotics, including control systems and machine vision; electromagnetics and RF, antennas, microwave systems, EMC/EMI and HF RF circuit design; alternative energy systems, including photovoltaic and fuel cell systems; bioengineering; neural networks; and optics and photonics. The Master of Science with major in Electrical Engineering is available in person and fully online.

Admission Requirements

All applicants must submit ~~GRE scores and~~ official transcripts from all previous postsecondary institutions attended. Applicants for admission will be evaluated on an individual basis and must satisfy the following requirements. Students with non-engineering bachelor's degrees, click [here](#) for additional requirements.

1. International students from non-English-speaking countries must be proficient in written and spoken English as evidenced by a score of at least 500 (paper-based test) or 213 (computer-based test) or 79 (Internet-based test) on the Test of English as a Foreign Language (TOEFL) or a score of at least 6.0 on the International English Language Testing System (IELTS).
2. A baccalaureate degree in Engineering, Natural Science or Mathematics;*
3. A minimum GPA of 3.0 (of a possible 4.0 maximum) in the last 60 credits of undergraduate work;
4. ~~Submission of the Graduate Record Examination (GRE) score is required. GRE scores more than five years old are normally not acceptable. The GRE requirement is waived for any student who has a baccalaureate degree from FAU's Department of Electrical Engineering and Computer Science with a GPA of at least 3.25 (of a possible 4.0) in the last 60 credits attempted prior to graduation.~~

* Students whose backgrounds are not in electrical or computer engineering should expect to take additional coursework to satisfy deficiencies.

BIOMEDICAL ENGINEERING MASTER OF SCIENCE (M.S.)

~~(For this degree program, the GRE admission requirement is waived through and including fall 2023.)~~

Admission Requirements

All applicants must submit ~~GRE scores and~~ official transcripts from all previous postsecondary institutions attended. Applicants for admission will be evaluated on an individual basis and must satisfy the following requirements. Students with non-engineering bachelor's degrees, click [here](#) for additional requirements.

1. International students from non-English-speaking countries must be proficient in written and spoken English as evidenced by a score of at least 500 (paper-based test) or 213 (computer-based test) or 79 (Internet-based test) on the Test of English as a Foreign Language (TOEFL) or a score of at least 6.0 on the International English Language Testing System (IELTS);
2. A baccalaureate degree in Biology, Chemistry, Physics, Computer Science or Engineering with a mathematics background through Calculus 2 or calculus with basic differential equations;*
3. A minimum GPA of 3.0 (of a possible 4.0 maximum) in Science, Mathematics and Engineering courses;
4. ~~Submission of the Graduate Record Examination (GRE) score or the MCAT score is required. GRE scores more than five years old normally are not acceptable. The GRE requirement is waived for any student who has a baccalaureate degree from FAU's Department of Electrical Engineering and Computer Science with a GPA of at least 3.25 (out of a possible 4.0) in the last 60 credits attempted prior to graduation.~~

* Students whose backgrounds are not in the disciplines noted should expect to take additional coursework.