



**FLORIDA
ATLANTIC
UNIVERSITY**

New Combined Degree Program Request

UUPC Approval 1/27/20
 UGPC Approval _____
 UFS Approval _____
 Banner Posted _____
 Catalog _____

New Combined Degree Program Request

Proposed Program: BS in CS,CE,EE/MS in AI CIP: _____ Effective Date (Term/Year): Fall / 2020 (e.g. Fall/2020)

| Proposed Combined Program Information | Undergraduate | Graduate |
|---|---|-----------------------------------|
| Degree Level (e.g. B.A., B.S., M.A., M.S., etc.) | B.S. | M. S. |
| Program Name (e.g. Physics, Engineering, etc.) | Comp. Sci., Comp. Eng., Electrical Eng. | Artificial Intelligence |
| College | Engineering and Computer Sci. | Engineering and Comp. Sci. |
| Department | Comp. and Elect. Eng & Comp. Sci. | Comp. and Elect. Eng & Comp. Sci. |
| Program Description (provide a brief description of the program, including thesis or non-thesis option) | This is a combined program with BS in CS, CE, or EE to MS in Artificial Intelligence. Students complete the prerequisites while pursuing the bachelor's degree. Up to 9 graduate credits can be counted in both B.S. and M.S. programs. | |

Curriculum Requirements

GPA Requirements: Departments must establish a minimum undergraduate GPA for students to be admitted to a combined program. *Note: Please attach explanation.*

Cumulative GPA of at least 3.25 at the end of junior year

List courses to be shared: Up to twelve (12) credit hours of graduate courses (5000 level or above course work) may be shared between the graduate and undergraduate degree for a combined program. *Note: Please attach explanation:*

- Academic justification for shared credits and catalog language
- List the undergraduate course that will be replaced by graduate courses.

| Faculty Submitting Request | Name | Signature | Email | Date |
|----------------------------|------------------|-----------|----------------|---------|
| | Dr. Hanqi Zhuang | | zhuang@fau.edu | 12/4/19 |

| Approved by | Date |
|---|--------------------|
| Department Chair: <u>Hanqi Zhuang</u> <small>Digitally signed by Hanqi Zhuang DN: cn=Hanqi Zhuang, ou=Florida Atlantic University, ou=CI&A, email=zhuang@fau.edu, c=US Date: 2019.12.04 16:16:30 -0500</small> | 12/04/2019 |
| College Dean: <u>Mihaela Cardei</u> <small>Digitally signed by Mihaela Cardei DN: cn=Mihaela Cardei, ou=Florida Atlantic University, ou=CI&A, email=cardei@fau.edu, c=US Date: 2019.12.04 16:16:30 -0500</small> | 12/04/2019 1/13/20 |
| College Curriculum Chair: <u>Ramesh Teegavarapu</u> <small>Digitally signed by Ramesh Teegavarapu DN: cn=Ramesh Teegavarapu, ou=FAU, ou=CEGE / COECS, email=rteegava@fau.edu, c=US Date: 2019.12.10 09:49:41 -0500</small> | 12/10/2019 |
| UUPC Chair: | 1-27-20 |
| Undergraduate Studies Dean: <u>Erin Bratt</u> <i>(Note: Forward approved form to UGPC@fau.edu)</i> | 1/30/20 |
| UGPC Chair: _____ | |
| UGC Chair: _____ | |
| Graduate College Dean: _____ | |
| UFS President: _____ | |
| Provost: _____ | |

Email this form and supporting documents to mjenning@fau.edu seven (7) business days before the UUPC meeting.

GRADUATE COLLEGE

For questions, contact the Graduate College at ugpc@fau.edu

JAN 30 2020

Created: 09/04/2018

Computer & Electrical Engineering and Computer Science

Computer Science and Computer Engineering

Combined Programs

B.S.C.E. or B.S. to M.S.A.I. Degree Programs

The department offers a combined Bachelor of Science in Computer Science (B.S.) or Bachelor of Science in Computer Engineering (B.S.C.E.) to Master of Science with major in Artificial Intelligence (M.S.A.I.) program. Students in either combined program may count up to 9 credits of approved graduate coursework (5000 level or higher) toward both their bachelor's and master's degrees as long as the combined program totals a minimum of 150 credits:

1. The student has met the minimum 120 credits for the bachelor's degree; and
2. The student has taken a minimum of 30 credits in 5000 level or higher courses for the master's program.

With an approximate duration of five years, these combined programs provide attractive ways for students to continue their graduate work. Students complete the undergraduate program first.

Prerequisite Coursework for Transfer Students

Students transferring to Florida Atlantic University must complete both lower-division requirements (including the requirements of the Intellectual Foundations Program) and requirements for the college and major. Lower-division requirements may be completed through the A.A. degree from any Florida public college, university or community college or through equivalent coursework at another regionally accredited institution. Before transferring and to ensure timely progress toward the baccalaureate degree, students must also complete the prerequisite courses for their major as outlined in the [Transition Guides](#).

All courses not approved by the Florida Statewide Course Numbering System that will be used to satisfy requirements will be evaluated individually on the basis of content and will require a catalog course description and a copy of the syllabus for assessment.

Admission Requirements

To be eligible for the joint programs, computer science and computer engineering students should:

1. Have a cumulative GPA of 3.25 or better at the end of their junior year; and
2. Formally apply to one of the joint programs, completing the admissions process at least one semester prior to the beginning of the M.S. portion of their program.

Once admitted to the program of their choice, students begin taking graduate courses (5000 level or higher) in their senior year that would apply to both the bachelor's and master's degree programs. Students in the joint programs must maintain continuous enrollment to remain in good standing. Students must also meet all the degree requirements of the graduate program they have chosen, including core courses and prerequisites. Those students who complete the M.S. degree program within one year after completing their B.S.C.E. or B.S. degree program will be presented with a certificate of recognition.

Degree Requirements

The following specific technical elective course must be taken as part of the requirements for the B.S.C.E. degree.:

| Technical Elective (3 credits required) | | |
|---|----------|---|
| Design and Analysis of Algorithms | COT 4400 | 3 |

Electrical Engineering

Combined Programs

B.S.E.E. to M.S.A.I. Degree Program

The department offers a combined Bachelor of Science in Electrical Engineering (B.S.E.E) to Master of Science with major in Artificial Intelligence (M.S.A.I.) program. Students may count up to 9 credits of approved graduate coursework (5000 level or higher) toward both their bachelor's and master's degrees as long as the combined program totals a minimum of 150 credits:

1. The student has met the minimum 120 credits for the bachelor's degree; and
2. The student has taken a minimum of 30 credits in 5000 level or higher courses for the master's program.

With an approximate duration of five years, these combined programs provide attractive ways for students to continue their graduate work. Students complete the undergraduate program first.

Prerequisite Coursework for Transfer Students

Students transferring to Florida Atlantic University must complete both lower-division requirements (including the requirements of the Intellectual Foundations Program) and requirements for the college and major. Lower-division requirements may be completed through the A.A. degree from any Florida public college, university or community college or through equivalent coursework at another regionally accredited institution. Before transferring and to ensure timely progress toward the baccalaureate degree, students must also complete the prerequisite courses for their major as outlined in the [Transition Guides](#).

All courses not approved by the Florida Statewide Course Numbering System that will be used to satisfy requirements will be evaluated individually on the basis of content and will require a catalog course description and a copy of the syllabus for assessment.

Admission Requirements

To be eligible for the joint programs, computer science and computer engineering students should:

1. Have a cumulative GPA of 3.25 or better at the end of their junior year; and
2. Formally apply to one of the joint programs, completing the admissions process at least one semester prior to the beginning of the M.S. portion of their program.

Once admitted to the program of their choice, students begin taking graduate courses (5000 level or higher) in their senior year that would apply to both the bachelor's and master's degree programs. Students in the joint programs must maintain continuous enrollment to remain in good standing. Students must also meet all the degree requirements of the graduate program they have chosen, including core courses and prerequisites. Those students who complete the M.S. degree program within one year after completing their B.S.E.E. degree program will be presented with a certificate of recognition.

Degree Requirements

The following specific technical elective courses must be taken as part of the requirements for the B.S.E.E. degree.:

| Technical Electives (9 credits required) | | |
|--|----------|---|
| Foundations of Computer Science | COP 3014 | 3 |
| Data Structures and Algorithm Analysis | COP 3530 | 3 |
| Design and Analysis of Algorithms | COT 4400 | 3 |