



**MEMORANDUM OF AGREEMENT  
FOR A JOINT DEGREE PROGRAM  
BETWEEN THE  
COLLEGE OF ENGINEERING AND COMPUTER SCIENCE  
AND  
THE COLLEGE OF EDUCATION  
FOR THE  
*Bachelor of Science in Artificial Intelligence with Education***

**Background:** The technology landscape is evolving quickly with new fields such as AI, data science, machine learning, and cybersecurity directly impacting all walks of life and many job functions. Graduates with an interdisciplinary education that combines core AI and computer science skills with a deep discipline major specific knowledge will be better equipped to adapt to these changes and would be highly competitive in the job market.

Florida Atlantic will lead in preparing this new generation workforce to meet the need. The Florida BOG has approved FAU's pre-proposal for a new bachelor's degree in artificial intelligence with a second discipline. The program is designed so that there is equal core coursework in AI/computer science and the second discipline. This proposed bachelor's degree was positively received, with other SUS sister universities indicating interest in developing similar programs. It is critical for Florida Atlantic to act promptly to maintain this momentum and lead with our innovative ideas and not lose ground to other SUS universities. This new degree would put FAU at the forefront of producing a new generation workforce with computational thinking, problem-solving, and discipline-specific knowledge applied to solve real-world problems. The new interdisciplinary degrees will emphasize the discipline major in the context of AI and computer science skills and knowledge. It is an exciting time for FAU to lead the State of Florida in innovative degree programs.

**Student Interest:** Students are eager to gain interdisciplinary AI skills to stay competitive in the job market. AI and computing skills will enhance the marketability and job opportunities of students with core knowledge of their discipline. Increased employer demand for computing skills in many disciplines indicates an opportunity for new degree programs to meet student demand.

**Increasing Program Enrollments:** The proposed interdisciplinary programs offer the benefits of a dual major without the additional credits required in a traditional dual major degree. A second major is an indicator of greater earnings than a single major alone. Reported high earnings in relevant occupations will attract prospective students to the program. Increased student interest is expected to increase enrollment and attract a new pool of students to our departments.

**New Degree Programs:** New interdisciplinary programs created in this mold shall be named as Bachelor of Science with a **major** in Artificial Intelligence with *<discipline>*, where discipline being Linguistics, Economics, Public Administration, Biology, Education, etc. The new interdisciplinary program will use CIP code 11.0199 across all colleges. The new degree program jointly between the Department of Curriculum and Instruction and the Electrical Engineering and Computer Science department shall be called *Bachelor of Science in Artificial Intelligence with Education*.

**Enrollment Credit:** Enrollment credit from this interdisciplinary program will be reflected in respective Colleges based on the courses students take. The new degree program is expected to have approximately the same number of credits from AI/computer science and education. Faculty from the Electrical Engineering and Computer Science department will teach all AI and computer science courses, while faculty from the Department of Curriculum and Instruction will be responsible for teaching courses in education.

**Degree Credit:** Both the College of Education and the College of Engineering and Computer Science will be able to include the degrees and majors produced as a part of their respective College and Department metrics.

**Home Department for Students:** To promote belongingness and encourage participation and interdisciplinary engagement, students may express belonging to two home departments and will have access to the resources of both departments.

**Academic Advising:** Students in the program will be jointly advised by Electrical Engineering and Computer Science and the Department of Curriculum and Instruction. Advisors in both departments will receive training and coordinate student advising.

**Program Coordination:** Program coordination including accreditation and graduation audits will be supported by the Electrical Engineering and Computer Science department. Assessment of student learning outcomes will occur at the two departments.

**Career Services:** Students in the program will have access to career services resources in both departments. Students will have access to career preparation, internship opportunities, and industry mentors through the Electrical Engineering and Computer Science department.

**Interdisciplinary Engagement:** Curriculum shall include an interdisciplinary capstone course to offer students an opportunity to work with real-world problems with guidance from industry mentors. Departments are encouraged to create and offer at least one course jointly taught with faculty from EECS and Curriculum and Instruction.

**Diploma:** The diploma will adhere to the standard format for FAU baccalaureate degrees but will specify that the degree is recommended by faculty from both colleges and will feature the signatures of both deans.



Chair of Department of Electrical Engineering  
and Computer Science



Sabrina Sembiante  
Chair of Department of Curriculum and  
Instruction



Dean of College of Engineering and Computer  
Science



Dean of College of Education



Provost

## **Bachelor of Science in Artificial Intelligence with Education**

*(Minimum of 120 credits required)*

The mission of the interdisciplinary artificial intelligence programs is to prepare graduates who can build and architect AI systems informed by deep domain expertise to solve complex, real-world challenges across diverse fields. The programs provide a strong foundation in AI principles and domain-specific knowledge, cultivating interdisciplinary innovators with the technical skills to create novel AI solutions, the ability to deploy them responsibly, and the adaptability to thrive in a rapidly evolving technological landscape. Graduates will be highly competitive in the workforce and well-prepared to lead innovation across industry, research, and society.

### **Admission Requirements**

All students must meet the minimum admission requirements of the University. Please refer to the [Admissions](#) section of this catalog.

The Bachelor of Science in Artificial Intelligence with Education (B.S.A.I.) is an interdisciplinary program jointly administered by the Department of Curriculum and Instruction in the College of Education and the Department of Electrical Engineering and Computer Science (EECS) in the College of Engineering and Computer Science. This program aims to prepare students with balanced training in AI/computer science and Education to meet growing workforce demand at the intersection of education and technology.

### **Prerequisite Coursework for Transfer Students**

Students transferring to Florida Atlantic University must complete both lower-division requirements (including the requirements of the General Education Curriculum) and requirements for the college and major. Lower-division requirements may be completed through an Associate in Arts (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 listed with 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.

### **Degree Requirements**

The minimum number of credits required for the Bachelor of Science in Artificial Intelligence with Education degree is 120 credits: 36 credits in the General Education Curriculum, 24 credits in AI core, 15 credits in AI electives, 24 credits in Education core, 15 credits in Education electives, 3 credits capstone course, 3 credits mathematics for

AI. This degree will be awarded to students who satisfy all admission and degree requirements.

Students must attain a minimum grade of "C" in Mathematics of Data Science, AI Core, AI Electives, Education Core, Education Electives, and AI Capstone.

### Foreign Language Requirement

All students must satisfy the foreign language requirement for admission to the University.

#### Specific Requirements

Course Title	Course Number	Credits
<b>General Education Courses**</b>		<b>36</b>
Mathematics of Data Science	MAP 2192	3
<b>AI Core Courses</b>		
Course Title	Course Number	Credits
Applications of Artificial Intelligence	CAP 2603	3
Introduction to AI	CAP 4630	3
Introduction to Data Science and Analytics	CAP 4773	3
Introduction to Software Design	CEN 3062C	3
Introduction to Programming in Python	COP 3035C	3
Data Structures and Algorithm Analysis with Python	COP 3410C	3
Analysis of Algorithms	COT 4400	3
Foundations of Computing	COT 2000C	3
<b>Total AI Core Credits</b>		<b>24</b>
<b>AI Electives ***</b>		
Select 5 courses totaling 15 credits		
Introduction to Web Programming	COP 3834	3
Introduction to Database Structures	COP 3540	3
Introduction to Natural Language Processing	CAI 4304	3
Trustworthy Artificial Intelligence	CAP 4623	3
Introduction to Deep Learning	CAP 4613	3
Python Programming	COP 4045	3
Introduction to Data Mining and Machine Learning	CAP 4770	3
Introduction to Large Language Models	CAI 4223	3
Applied Database Systems	COP 4703	3
<b>Total AI Elective Credits</b>		<b>15</b>
<b>Education Core Courses</b>		
Introduction to the Teaching Profession	EDF 2005	3

Digital Literacy	EME 2620	3
Introduction to Technology for Educators	EME 2040	3
Applied Learning Theory	EDF 3210	3
Ed. Measurement and Theory	EDF 3430	3
ESOL Strategies for Content Area Teachers	TSL 4324	3
OR		
Building Classroom Management	EDG 4419	3
Teaching Middle and Secondary School Math	MAE 4360	3
OR		
Principles and Methods: K-9 School Math	MAE 4350	3
Sec. School Effective Instruction	ESE 3940	3
<b>Total Education Core Credits</b>		<b>24</b>

### Education Electives

Select 5 courses totaling 15 credits

The Educated Citizen in a Global Context	EDF 2854	3
Educational Technology for 21st Century Teaching	EME 4312	3
Principles and Methods: K-9 School Science	SCE 4350	3
Science: Middle and Secondary School	SCE 4360	3
Introduction to Theories and Practices of TESOL	TSL 4080	3
Inclusive Education for General Educators	EEX 4070	3
<b>Total Education Elective Credits</b>		<b>15</b>

### Free Electives

**FC**

(Free electives for total of 39 credits; **(CC + EC + FC = 39)**)

AI Capstone	CAI 4741	3
<b>TOTAL</b>		<b>120</b>

\*\* students must take STA 2023 and MAC 2233 in Mathematics area

\*\*\* Certain 3000- and 4000-level courses offered by the Electrical Engineering and Computer Science Department may be used as AI electives. Certain 5000- or 6000-level courses offered by the Electrical Engineering and Computer Science Department may be taken as AI electives. Students must see an advisor for a current list of elective courses.