

 FLORIDA ATLANTIC UNIVERSITY	NEW/CHANGE PROGRAM REQUEST Undergraduate Programs		UUPC Approval _____ UFS Approval _____ Banner _____ Catalog _____
	Department _____ College _____		
Program Name	New Program* Change Program*	Effective Date (TERM & YEAR)	
Please explain the requested change(s) and offer rationale below or on an attachment.			
*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		Consult and list departments that may be affected by the change(s) and attach documentation	
Approved by		Date	
Department Chair <u>Hank Kalva</u>			
College Curriculum Chair _____			
College Dean _____			
UUPC Chair _____			
Undergraduate Studies Dean _____			
UFS President _____			
Provost _____			

**MEMORANDUM OF AGREEMENT
FOR A JOINT DEGREE PROGRAM
BETWEEN THE
COLLEGE OF ENGINEERING AND COMPUTER SCIENCE
AND
THE DOROTHY F. SCHMIDT COLLEGE OF ARTS & LETTERS
FOR THE
*Bachelor of Science in Artificial Intelligence with Linguistics***

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 Linguistics, and Comparative Literature department and the Electrical Engineering and Computer Science department shall be called *Bachelor of Science in Artificial Intelligence with Linguistics*.

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 linguistics. Faculty from the Electrical Engineering and Computer Science department will teach all AI and computer science courses, while faculty from the Department of Languages, Linguistics, and Comparative Literature (LLCL) will be responsible for teaching courses in linguistics.

Degree Credit: Both the Dorothy F. Schmidt College of Arts & Letters 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 Languages, Linguistics, and Comparative Literature departments. 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 Linguistics.

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



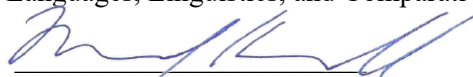
Dean of College of Engineering and Computer
Science



Provost



Interim Chair of the Department of
Languages, Linguistics, and Comparative Literature



Dean of Dorothy F. Schmidt College of Arts &
Letters

Bachelor of Science in Artificial Intelligence with Linguistics

(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 Linguistics (B.S.A.I.) is a multi-college, interdisciplinary program jointly administered by the Department of Languages, Linguistics, & Comparative Literature in the **College of Arts & Letters**, 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 Linguistics to meet growing workforce demand at the intersection of humanities 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 **Linguistics** degree is 120 credits: 36 credits in the General Education

Curriculum, 24 credits in AI core, 15 credits in AI electives, 15 credits in Linguistics core, 24 credits in **Linguistics** 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, **Linguistics** Core, **Linguistics** Electives, and AI Capstone.

Foreign Language Entry Requirement (FLENT)

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

Specific Requirements

Course Title	Course Number	Credits
General Education Courses**		36

Mathematics of Data Science	MAP 2192	3
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AI Core Courses

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
Total AI Core Credits		24

AI Electives ***

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

Total AI Elective Credits 15

Linguistics Courses

Linguistics Core Credits

Course Title	Course Code	Credits
Introduction to Linguistics	LIN 3010	3
Language, Society, and Artificial Intelligence	LIN 3603/IDS 3762	3
Phonetics & Phonology	LIN 4326	3
(RI:) Morphology & Syntax	LIN 4430	3
Semantics & Pragmatics	LIN 4802	3

Total Linguistics Core Credits

15

Linguistics Elective Credits

Select 5 courses totaling 15 credits (no more than 1 at the 3000-level)

Course Title	Course Code	Credits
Languages of the World	LIN 3006	3
Patterns of Language	LIN 3133	3
Field Methods in Linguistics	LIN 4162	3
Sociolinguistics	LIN 4600	3
AI in Foreign Language Education	LIN 4609	3
Bilingualism	LIN 4620	3
Research Methods in Linguistics	LIN 4630	3
Structure of Modern English	LIN 4680	3
Psycholinguistics	LIN 4701	3
Introduction to Semiotics	LIN 4810	3
Directed Independent Study	LIN 4905	1-3
Special Topics	LIN 4930	3
Honors Thesis in Linguistics	LIN 4972	3
Structure of Modern French	FRE 4850	3
Tessere La Lingua/Weaving Language	ITA 4730	3
Spanish Sociolinguistics	SPN 4740	3
Spanish Phonetics & Phonology	SPN 4790	3
Structure of Modern Spanish	SPN 4850	3
Applied Linguistics & TESOL	TSL 4521	3

Total Linguistics Elective Credits

15

Language and Culture Elective Credits

Select 2 courses totaling 6-8 credits from the following prefixes

ARA, FOL, FRE, FRT, FRW, GER, GET, GEW, HBR, ITA, ITT, ITW, JPN, JPT, LAT, SPN, SPT, or SPW

Or
One course from the above prefixes and LIT 3060 Introduction to Comparative Literature

Total Language Credits		6-8
Free Elective Credits		1-3
Total Linguistics Core + Linguistics Elective + Language Elective + Free Elective Credits =		39
AI Capstone	CAI 4741	3
TOTAL		120

** 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.