FLORIDA ATLANTIC UNIVERSITY

NEW/CHANGE PROGRAM REQUEST
Undergraduate Programs

UUPC Approval 2-23-26
UFS Approval _____
Banner _____
Catalog _____

Department Dept of Economics / Dept of Electrical Engineering and Comp Science

College College of Eng and Comp Sci / College of Business

Program Name

Bachelor of Science in Artificial Intelligence with Economics

☑ **New Program***

☐ **Change Program***

Effective Date *(TERM & YEAR)*

FALL 2026

Please explain the requested change(s) and offer rationale below or on an attachment.

The new program, Bachelor of Science in Artificial Intelligence with Economics (B.S.A.I.), is part of the university's AI+X initiative, which integrates artificial intelligence with other disciplines. This specific program combines AI and computer science with economics aiming to prepare graduates who can apply machine learning, predictive analytics, and computational modeling to economic and financial systems..

It is jointly administered by the Dept of Economics in the College of Business and the Department of Electrical Engineering and Computer Science in the College of Engineering and Computer Science.

Program description attached.

*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

Hari Kalva, hkalva@fau.edu
Monica Escaleras, mescaler@fau.edu

Consult and list departments that may be affected by the change(s) and attach documentation

Approved by	***Date***
Department Chair Hari Kalva	
College Curriculum Chair Galan Liu	2/12/26
College Dean	2/14/26
UUPC Chair Korey Sorge	2-23-26
Undergraduate Studies Dean Dan Messroff	2-23-26
UFS President	
Provost	

Email this form and attachments to mjenning@fau.edu seven business days before the UUPC meeting.

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

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 Economics Department and the Electrical Engineering and Computer Science Department shall be called **Bachelor *of Science in Artificial Intelligence with Economics.***

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 economics. Faculty from the Electrical Engineering and Computer Science department will teach all AI and computer science courses, while faculty from the Economics Department will be responsible for teaching courses in economics.

Degree Credit: Both the College of Business 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 Economics Department. 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 Economics.

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.

Program Intent: This interdisciplinary program is intended to produce graduates capable of building AI and computing systems and using AI tools and frameworks to solve domain problems. The program will equip students with durable skills to adapt to the dynamically changing AI landscape.

New Program Creation: This agreement shall not prevent either department from developing and offering new degree programs with different emphasis on AI in their discipline.

Program Withdrawal: A program can be terminated by either department in accordance with FAU and Florida Board of Governors procedures for program termination.

Hai Kalva

Chair of Department of Electrical Engineering and Computer Science

Monica Escaleras

Chair of Department of Economics

Stella Batalama

Dean of College of Engineering and Computer

Dean of College of Business

Provost (for approval to form)

Bachelor of Science in Artificial Intelligence with Economics

(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 Economics (B.S.A.I.) is a multi-college, interdisciplinary program jointly administered by the Economics Department in the College of Business, 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 economics to meet growing workforce demand at the intersection of business 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 Economics degree is 120 credits: 36 credits in the General Education Curriculum, 24 credits in AI core, 15 credits in AI electives, XX credits in Economics core, YY credits in Economics electives, 3 credits capstone course, 3 credits

mathematics for AI. This degree will be awarded to students who satisfy all admission and degree requirements for the department.

Students must attain a minimum grade of "C" in Mathematics of Data Science, AI Core, AI Electives, Economics Core, Economics 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**
General Education Courses**		
Communication		6
Natural Science		6
Mathematics (STA 2023, MAC 2233 required)		6
Social Science (ECO 2013, ECO 2023 (required)		6
Humanities		6
Additional enrichment		6
Total General Education Credits		**36**
AI Foundation courses		
Mathematics of Data Science	MAP 2192	**3**
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 3 courses		
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		***9***
AI Capstone	CAI 4741	3
Economics Foundation courses		
Macroeconomics Principles	ECO 2013	3
Microeconomics Principles	ECO 2023	3
Introductory Statistics	STA 2023	3
Information Systems Fundamentals	ISM 2000	3
Total Economics Foundation Courses		**12**
Economics Core Courses		
Intermediate Microeconomics	ECO 3101	3
Intermediate Macroeconomics	ECO 3203	3
Introduction to Econometric methods	ECO 4421	3
Analysis of Economic Data	ECO 4430	3
Economic Policy Analysis	ECO 4933	3
Total Econ Core Credits		**15**
Economics Electives		
Select 3 Econ courses (3000 level or above)		
Total Econ Elective Credits		**9**
Free electives (3000 level or above)		9
TOTAL		**120**

** students must take STA 2023 and MAC 2233 in Mathematics area; students must take ECO 2013 and ECO 2023 in the Social Science 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.