

ARTIFICIAL INTELLIGENCE (AI) INITIATIVE

In setting the standard for an AI university, the University of Florida is preparing AI-capable students in every discipline for the 21st century workforce while fueling life-changing discoveries by research faculty in every college. This work, guided by a strong foundation in ethics, is driving the creation of a diversified, technology-driven, high-wage economy in Florida and strengthening the country's competitiveness in a global market.

More Info (<https://ai.ufl.edu/>)

The University of Florida's AI initiative will make UF a national leader in AI and have far-reaching impacts for the university and its students and faculty.

Equally important, it will play a crucial role in educating and preparing the workforce for the fourth digital revolution to benefit our nation's economy, international ties, security, and to ensure the ethical use of artificial intelligence.

For Florida | Building Future Economic Growth

From the development and training of an AI-enabled workforce to the application of AI against a wide array of pressing challenges, UF will serve a critical role in advancing and protecting the state we call home. AI will play a critical role in the transformation of Florida's economy into a diversified, technology-drive, high-wage economy. Strong AI infrastructure makes UF one of the best places in the country for researchers to conduct studies that will benefit citizens of our state and the nation.

For the University | Emerging as a National Leader

UF's AI infrastructure is one of the strongest in the country. We are home to HiPerGator, the fastest supercomputer in higher education, along with 300 faculty members who are teaching AI courses or using AI in their research. At the heart of AI research and teaching is UF's commitment to ethical AI to ensure that this technology benefits all humankind. We are providing upskilling to the existing workforce through professional development, educating K-12 students in AI fundamentals, as well as college and university students on our campus and other campuses in the application of AI in their chosen discipline.

For Our Students | Creating Opportunities

UF is committed to educating our students for the jobs of today and tomorrow. We are one of the first universities in the country to infuse AI courses across the curriculum. Here, AI is for everyone because AI is being used in all disciplines. We offer more than 200 AI courses and several undergraduate AI certificates. An AI Pathways Career Coach in our nationally ranked Career Connections Center can assist students with finding internships and jobs that will reward their AI knowledge. We also fund AI scholars annually who are working with an AI mentor in research.

AI Certificates

Artificial Intelligence and Data Analytics in Tourism, Hospitality and Event Management Certificate

This certificate trains students in the applications of artificial intelligence and data analytics in tourism, hospitality, and event management. Students have the opportunity to gain specialized knowledge and practice in areas such as artificial intelligence trends, analytic skills, machine learning concepts, technology applications, opportunities, and challenges in industries.

More Info (http://catalog.ufl.edu/UGRD/colleges-schools/UGHHU/HHU_UCT02/)

Artificial Intelligence Fundamentals and Applications Certificate

Enroll in UF's artificial intelligence certificate program where all undergraduate students, regardless of major, can learn how to apply artificial intelligence in their discipline. No background in computer programming, engineering or data science is needed. Pursuing courses in AI can put you ahead of the curve when applying for internships or jobs. Obtain the skills you need to join the AI-trained workforce of the future.

More Info (http://catalog.ufl.edu/UGRD/colleges-schools/UGENG/ENG_UCT12/)

Artificial Intelligence in Public Health and Healthcare Certificate

The Artificial Intelligence in Public Health and Healthcare certificate is for those seeking to acquire fundamental knowledge, ethical decision-making, and applied skills in artificial intelligence applications in public health practice and healthcare settings.

More Info (http://catalog.ufl.edu/UGRD/colleges-schools/UGPBH/PBH_UCT02/)

Geographic Artificial Intelligence and Big Data Certificate

GeoAI, the integration of Geography and AI, provides novel approaches for addressing a variety of geospatial challenges in the real world. This certificate develops transferable skills in GeoAI to address issues affecting the environment and societies. GeoAI training is critical given projected growth ~16% in this industry by 2050.

More Info (http://catalog.ufl.edu/UGRD/colleges-schools/UGLAS/LAS_UCT24/)

AI Courses

ADV 3001 Advertising Strategy 3 Credits

Grading Scheme: Letter Grade

Overview of the strategic planning process required to develop a successful strategic, persuasive communication plan such as an advertising, integrated marketing communications, or social marketing campaign. Case studies and projects teach the skills needed to address a variety of communications management issues and engage audiences in diverse marketplaces.

Prerequisite: MAR 3023 and ADV 3008 with minimum grades of C and ADV major.

ADV 3500 Digital Insights 3 Credits

Grading Scheme: Letter Grade

Acquiring, evaluating, and analyzing information for advertising decisions. Emphasizes understanding the scientific method, developing explicit and measurable research objectives, selecting appropriate methodologies, and analyzing data.

Prerequisite: MAR 3023 and ADV 3008 with minimum grades of C and STA 2023 and ADV major.

ADV 4300 Media Planning 3 Credits

Grading Scheme: Letter Grade

Provides an in-depth overview of the media planning process. Emphasizes the value of various media channels and evaluation methods to design innovative and integrated media strategies to reach and engage diverse audiences.

Prerequisite: 3JM ADV; minimum grades of C in ADV 3001 and ADV 3500.

AGG 4502 Nanotechnology in Food, Agriculture, and Environment 3 Credits

Grading Scheme: Letter Grade

Application of nanotechnology in crop production, food processing and preservation, and environmental remediation; behavior of engineered nanoparticles in plant, soil and the environment, and environmental toxicology and regulations of engineered nanoparticles.

Prerequisite: SWS 3022.

AOM 4434 Precision Agriculture 3 Credits

Grading Scheme: Letter Grade

Principles and applications of technologies supporting precision farming and planning for natural resource data management. Global positioning systems (GPS), geographic information systems (GIS), variable rate technologies (VRT), data layering of independent variables, automated guidance, Internet, information access and computer software for management.

Prerequisite: Junior standing or higher.

AOM 4455 Agricultural Operations and Systems 3 Credits

Grading Scheme: Letter Grade

Quantitative and managerial techniques for management and planning of technical resources in agriculture. Applications of queuing theory, project scheduling, optimization, and expert decision systems.

Prerequisite: ((MAC 1147) or (MAC 1114 & MAC 1140) or (MAC 2233)) & CGS 2531.

BSC 2891 Python Programming for Biology 3 Credits

Grading Scheme: Letter Grade

Discoveries in biology are driven as much by computer analysis as by laboratory work. Learn the theory and practice of computer programming with emphasis on the practical techniques and problem solving skills required to use computer programming in biological research. Taught completely online.

BSC 4913 Independent Research in Bioinformatics 3 Credits

Grading Scheme: Letter Grade

Mentored research experience at the interface between computational and biological sciences; preparation for competitive graduate-school and industry positions in bioinformatics.

Prerequisite: BSC 2891 or MCB 4320C or BSC 4434C or BSC 4434C with a minimum grade of C.

CAI 4104 Machine Learning Engineering 3 Credits

Grading Scheme: Letter Grade

Covers foundational machine learning concepts with an emphasis on applying these concepts to real-world data through programming exercises and assignments using the relevant tools, libraries, and frameworks such as Python, Scikit-Learn, Tensorflow, and more.

Prerequisite: COP 3530 or COP 3504C. Experience with Python is a plus but not required.

Professional Development

Leadership for the Future

Artificial Intelligence is more than just the next wave of high-tech; it is transforming nearly every sector of the economy. The applications of AI are limitless and whatever your interest level you can increase your working knowledge of AI through professional development courses offered by the University of Florida.

More Info (<https://pwd.aa.ufl.edu/ai/>)