



YEEAP

Youth Empowerment &
Economic Accelerator Platform

ANTICIPATE • ADAPT • ACCELERATE

Free Artificial Intelligence (AI) Online Courses • Open to All • Starts April 2026

FUSE-AI-101

Foundations of Artificial Intelligence

Beginner • 6 Modules • 6 Weeks •
Certificate of Completion

Starts April 6, 2026 | Free of Charge

FUSE-AI-201

AI Development and Implementation

Intermediate • 6 Modules • 6-8 Weeks •
Developer Badge

Cohort 1: June 2026 | Free | Prereq:
FUSE-AI-101

Registration Portal: <https://yeeap.org>

Powered by



FUSE-SPS
FLORIDA UNIVERSITY SOUTHEAST
SCHOOL OF PROFESSIONAL STUDIES



PLACID



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About YEEAP — Youth Empowerment and Economic Accelerator Program

The **Youth Empowerment and Economic Accelerator Program (YEEAP)** is a transformative initiative designed to bridge the gap between potential and opportunity for millions of young people across Ethiopia and Africa. More than 60% of Africa’s population is under 30 yet millions remain locked out of economic opportunity due to limited digital skills, minimal technology access, and weak job-market connections. YEEAP’s AI curriculum ensures African youth are not only participants in the AI-driven economy, but leaders who shape it.

<p>Mission: Empower youth with skills, tools, and pathways to dignified work and sustainable livelihoods</p>	<p>Vision: Every young African with access to quality education, relevant skills, and meaningful opportunity</p>
<p>Who We Serve: Youth who left school early · Secondary/TVET graduates · Educated unemployed graduates. Professionals who want to learn emerging technologies</p>	<p>Consortium: Placid Solutions & Consulting · FUSE-SPS · InnoLearn Systems ·</p>
<p>Platform: InnoLearn EduSuite360 — Fully Online, Mobile-First, Jupyter-Integrated</p>	<p>Location: Virtual Open to all learners across Africa</p>

Course Structure — FUSE-AI-101

Foundations of Artificial Intelligence

Principles, Architecture, Applications & the Future of AI

FUSE-AI-101 is YEEAP’s flagship AI training course, designed for learners with no prior technical background. It provides foundational AI literacy — the conceptual frameworks, critical thinking skills, and practical knowledge needed to be an informed, active participant in the AI era. All concepts are grounded in Ethiopian and African real-world contexts.

<p>Course Code: FUSE-AI-101</p>	<p>Duration: 6 Modules · 30 Sub-Modules · Approx. 6 Weeks</p>
<p>Level: Beginner — No AI or programming experience required</p>	<p>Schedule: April 6 – May 24, 2026</p>
<p>Delivery: Fully Online — InnoLearn EduSuite360</p>	<p>Award: Certificate of Completion — Placid Solutions & FUSE-SPS</p>

	Module	Sub-Modules Covered
M1	Introduction, History & Evolution of AI	1.1 Defining AI · 1.2 Turing & Dartmouth · 1.3 AI Winters · 1.4 Neural Network Revolution · 1.5 Modern AI Era & LLMs
M2	Current Industry-Level AI Applications	2.1 Financial Services · 2.2 Healthcare · 2.3 Education · 2.4 Agriculture · 2.5 Generative AI & Digital Public Services
M3	AI Architecture & Ecosystem	3.1 Data Foundations · 3.2 ML Fundamentals · 3.3 Neural Networks & Deep Learning · 3.4 AI Ecosystem & Tools · 3.5 The AI Lifecycle
M4	Prompt Engineering & Human-AI Collaboration	4.1 How LLMs Work · 4.2 Core Prompting Techniques · 4.3 Advanced Prompting & RAG · 4.4 Human-AI Workflows · 4.5 Evaluating Outputs
M5	Ethics, Bias & AI Governance	5.1 AI Bias & Fairness · 5.2 Privacy & Surveillance · 5.3 Accountability & XAI · 5.4 AI Governance Frameworks · 5.5 Responsible AI in Organizations
M6	Future State — AI-Enabled Emerging Technologies	6.1 Robotics · 6.2 Autonomous Systems · 6.3 Quantum Computing · 6.4 Future of Work · 6.5 Human Identity & AI

What Learners Will Be Able to Do

<ul style="list-style-type: none"> ✓ Define AI: explain core concepts, history, and the arc from Turing to LLMs 	<ul style="list-style-type: none"> ✓ Identify AI applications in financial services, healthcare, education, and agriculture — with Ethiopian/African context
<ul style="list-style-type: none"> ✓ Understand AI architecture: data pipelines, machine learning, neural networks, and the AI lifecycle 	<ul style="list-style-type: none"> ✓ Apply prompt engineering to interact with AI tools for professional, academic, and creative tasks
<ul style="list-style-type: none"> ✓ Evaluate ethical dimensions of AI: bias, privacy, accountability, and governance frameworks 	<ul style="list-style-type: none"> ✓ Analyze emerging AI technologies (robotics, quantum computing) and their implications for the future of work



COURSE TWO — FUSE-AI-201 Intermediate · June 2026 · Prerequisite: FUSE-AI-101

AI Development and Implementation: Building, Deploying, and Maintaining Real-World AI Systems

FUSE-AI-201 is the hands-on technical sequel to FUSE-AI-101. Learners write Python from session one, build ML models, train neural networks, and spend the final three modules designing and deploying their own end-to-end AI project. Graduates leave with a professional portfolio: a deployed application, model card, experiment tracking records, and a capstone presentation.

Course Code: FUSE-AI-201	Duration: 6 Modules · 30 Sub-Modules · Approx. 6-8 Weeks
Level: Intermediate — Technical & Hands-On	Prerequisite: FUSE-AI-101: Foundations of Artificial Intelligence
Delivery: Online — EduSuite360 · Jupyter Notebook Integrated	Award: AI Developer & Engineer Badge — Placid Solutions & FUSE-SPS

Course Structure — FUSE-AI-201

	Module	Sub-Modules Covered
M1	Python Fundamentals for AI	1.1 Python Basics & Data Types · 1.2 Control Flow & Functions · 1.3 NumPy: Arrays & Numerical Computing · 1.4 Pandas: Data Loading & Cleaning · 1.5 Visualization with Matplotlib & Seaborn
M2	Machine Learning Foundations and Model Evaluation	2.1 Data Preprocessing & Feature Engineering · 2.2 Supervised Learning: Regression & Classification · 2.3 Evaluation: Metrics, Confusion Matrices & ROC · 2.4 Unsupervised Learning: Clustering & Dimensionality Reduction · 2.5 Cross-Validation, Hyperparameter Tuning & ML Pipelines
M3	Neural Networks (Deep Learning) and NLP	3.1 Neural Network Architecture & Training (Keras) · 3.2 Regularization, Optimization & Hyperparameter Tuning ·

		3.3 CNNs for Image Classification · 3.4 NLP Fundamentals: Text Preprocessing & Classical NLP · 3.5 Advanced: Transformers & Large Language Models
M4	Industry-Level Problem Identification and Domain Selection	4.1 AI Problem Identification Frameworks · 4.2 Data Discovery & Requirements Analysis · 4.3 ML Task Framing: Business Problem to Model · 4.4 AI Project Planning: Scope, Resources & Risk · 4.5 Capstone: AI Project Proposal Development
M5	AI Project Implementation	5.1 Preparing Project Data · 5.2 Model Development · 5.3 Model Evaluation · 5.4 Model Improvement · 5.5 Capstone Project Implementation
M6	AI Deployment, Monitoring, Support & Maintenance (10 sub-modules — MLOps)	6.1 Experiment Tracking (MLflow) · 6.2 Model Serving (FastAPI) · 6.3 Containerization (Docker) · 6.4 Cloud Deployment · 6.5 User-Facing Demo (Streamlit) · 6.6 Production Monitoring · 6.7 Data & Model Drift Detection · 6.8 Automated Retraining Pipelines · 6.9 Model Versioning & Governance · 6.10 Capstone: End-to-End AI System Presentation

What Learners Will Be Able to Do

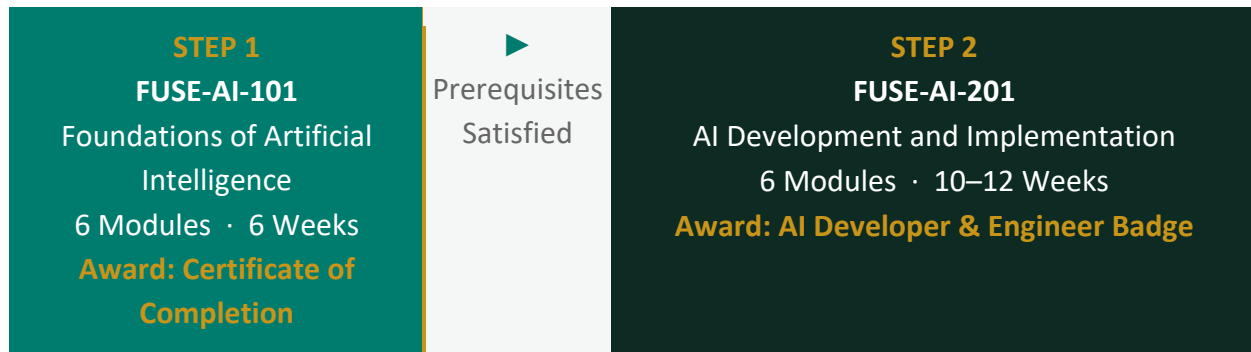
✓ Write Python and use NumPy, Pandas & visualization libraries to analyze real-world datasets	✓ Build and evaluate ML models with scikit-learn; construct reproducible pipelines with hyperparameter tuning
✓ Train neural networks (Keras/TensorFlow); apply CNNs to images and NLP to text; understand transformer & LLM architecture	✓ Identify a high-value AI problem, frame it as an ML task, and produce a complete AI Project Proposal

<p>✓ Implement an end-to-end AI project: data preparation, model development, evaluation, and improvement</p>	<p>✓ Deploy AI as a REST API (FastAPI + Docker), build a Streamlit demo, and implement monitoring & retraining (MLflow + Evidently AI)</p>
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Technical Stack — FUSE-AI-201

Python · NumPy · Pandas · Scikit-learn · TensorFlow / Keras · Hugging Face · FastAPI · Docker · MLflow · Evidently AI · Streamlit · AWS / GCP / Render / Railway · XGBoost · Plotly · Jupyter / Colab

Your Learning Pathway



Three-Module Capstone Project — FUSE-AI-201

Module	Capstone Deliverable
M4	<p>AI Project Proposal</p> <p>Learners identify a real-world AI opportunity, conduct data requirements analysis, frame the ML task precisely, and produce a written Project Proposal with defined scope, success metrics, and risk assessment.</p>
M5	<p>Working AI Model</p>

	Using the approved proposal as a blueprint, learners prepare their dataset, train and evaluate their model, and iterate to hit target performance. Deliverable: a documented AI model notebook.
M6	<p>Deployed AI System & Presentation</p> <p>The model is deployed as a FastAPI + Docker inference API, connected to a Streamlit demo app, and published to the cloud. Learners implement monitoring, drift detection, and retraining. Final deliverable: a live, publicly accessible AI system and professional retrospective.</p>

The YEEAP Consortium

Partner	Role	What They Bring
Placid Solutions & Consulting	Consortium Lead	Program coordination, curriculum design, and delivery. 15,000+ professionals trained across Ethiopia.
Florida University Southeast (FUSE-SPS)	Academic Partner	DEAC-aligned accreditation, professional certificate frameworks, and academic quality assurance.
InnoLearn Systems	Technology Provider	EduSuite360 platform — Jupyter-integrated, mobile-first, scalable digital learning across Africa.

How to Apply

Steps to Enroll

- 1. Register:** Visit <https://yeeap.org> or edutrack-yeeap.powerappsportals.com and create your learner account. Registration for FUSE-AI-101 closes **March 30, 2026**.
- 2. Select Course:** Once the registration process is completed you will receive instructions on how to enroll to the class.
- 3. Start Learning:** No payment required. Both courses are fully sponsored. All materials available from Day 1 on any device through EduSuite360.
- 4. Earn Your Credential:** Complete modules, pass quizzes ($\geq 70\%$), submit assignments, and present your capstone for your Certificate (FUSE-AI-101) or Developer Badge (FUSE-AI-201).

Register Now — Both Courses Are Free

edutrack-yeeap.powerappsportals.com or <https://yeeap.org>

Email: yeeap@myfuse1.education · Phone: +251 944 115 610 · Website: yeeap.org ·
Addis Ababa, Ethiopia

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YEEAP — Empowering youth across Ethiopia and Africa with the skills, connections, and resources needed for dignified work and lasting prosperity.