Webfala Women in AI Fellowship – 6-Month Curriculum

Theme: *Building AI Products for Impact*
 Format: Weekly classes + hands-on projects + mentorship + product demo day

Month 1 – Foundations of AI & Product Thinking

Goal: Build core technical and product literacy.

- **Week 1:** Introduction to AI, Women in Tech, and Product Innovation.

- **Week 2:** Python for AI (NumPy, Pandas, Matplotlib).

- **Week 3:** Fundamentals of Machine Learning – Supervised vs. Unsupervised Learning.

- **Week 4:** Product Thinking – Design Thinking, Problem Framing, and User Research.

- **Project:** Identify a real-world problem to solve with AI (team-based).

Month 2 – Core AI/ML Skills

Goal: Acquire practical skills in ML.

- **Week 5:** Data Preprocessing & Feature Engineering.

- **Week 6:** Classification & Regression Models (Scikit-learn).

- **Week 7:** Model Evaluation & Validation.

- **Week 8:** Agile Methodology & MVP Development for AI Products.

- **Project:** Build a simple prediction/classification model.

Month 3 – Deep Learning & AI Tools

Goal: Learn deep learning and practical tools.

- **Week 9:** Neural Networks Fundamentals (TensorFlow/PyTorch).

- **Week 10:** Computer Vision Applications (Image Recognition, Object Detection).

- **Week 11:** Natural Language Processing (Text Classification, Sentiment Analysis).

- **Week 12:** Cloud Platforms for AI (AWS, GCP, Azure basics).

- **Project:** Prototype a CV or NLP-based AI solution.

Month 4 – Product Development & Deployment

Goal: Learn how to move from prototype to product.

- **Week 13:** APIs & AI Integration into Products.

- **Week 14:** Frontend & Backend Basics for AI Product Deployment.

- **Week 15:** Model Deployment (Flask, FastAPI, Streamlit).

- **Week 16:** Data Ethics, Responsible AI & Bias Mitigation.

- **Project:** Deploy an AI model as a working product demo.

Month 5 – Specialization Tracks (Choose One)

Goal: Fellows specialize in a track aligned with interests.

- **Track A – Healthcare AI:** Symptom analysis, diagnostics, patient management.

- **Track B – FinTech AI:** Fraud detection, credit scoring, chatbots.

- **Track C – EdTech AI:** Personalized learning, assessment grading, recommendation systems.

- **Track D – Social Impact AI:** Agriculture, climate, governance.

- **Weekly Activities:** Workshops, mentorship, product building.

- **Project:** Build a track-specific AI product MVP.

Month 6 – Productization & Demo Day

Goal: Prepare fellows to launch and scale products.

- **Week 21:** Business Models for AI Startups.

- **Week 22:** Fundraising & Pitching to Investors.

- **Week 23:** Partnerships, Go-to-Market Strategy.

- **Week 24:** Final Product Refinement & Demo Day Preparation.

- **Capstone Project:** Team-based AI product presented at Demo Day (judges, mentors, investors).

Outcomes

✅ Fellows graduate with:

- Hands-on experience in AI product development.

- A deployed AI product MVP.

- A strong foundation in both AI technical skills and product management.

- Networking with mentors, industry leaders, and investors.