Course Curriculum

Foundations of AI
Professional Certificate

Presented by
Department of AI Studies
SIN School of AI

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SIN Education and Technologies Pvt. Ltd

At SIN School of AI, a division of SIN Education and Technology Private Limited, we are dedicated to fostering innovation and equipping learners with the skills to thrive in the AI-driven world. Leveraging the expertise and excellence of SIN Technologies, our programs are designed to deliver industry-relevant education in Artificial Intelligence, Prompt Engineering, and cutting-edge technological applications.

As a certified company with ISO 9001:2015 accreditation, recognized by the Egyptian Accreditation Council and the International Accreditation Forum, we uphold the highest standards in quality and excellence. We are proud to be registered under the Startup India Program by the Government of India, a recognized MSME-registered company, and one of PedalStart's Top 25 Startups in Rajasthan.

Established with a vision to revolutionize industries, SIN Technologies is your trusted partner in harnessing the power of AI and technology to unlock new possibilities. Together, let's build the future of innovation.

Er Harshvardhan Purohit
FOUNDER & CEO

Our Certifications & Accreditions

SIN SCHOOL OF AI

The team at SIN School of AI ensures a collaborative and results-oriented approach, empowering students, professionals, and organizations with tailored programs in Artificial Intelligence, Prompt Engineering, and emerging technologies. Together, the management strives to foster innovation, build long-lasting connections, and drive transformative change in the field of AI education and application.

Organization and Management

Shiv Prakash Bohra
CFO

Er Harshvardhan
CEO

Dr Amit Khare
SENIOR ADVISOR

Prateek Vyas
DEVELOPMENT
TEAM

Aditya Purohit
GRAPHICS
TEAM

Dr Reva Mishra
SENIOR
ADVISOR

Mission and Vision

Mission

To empower individuals and organizations by delivering innovative AI education and training that enhances skills, fosters creativity, and drives growth through cutting-edge knowledge and tailored learning experiences in Artificial Intelligence and Prompt Engineering.

Vision

To be a global leader in AI education, transforming the future of learning and innovation by equipping individuals and organizations with the skills and knowledge to create sustainable growth and excellence in a rapidly evolving digital world.
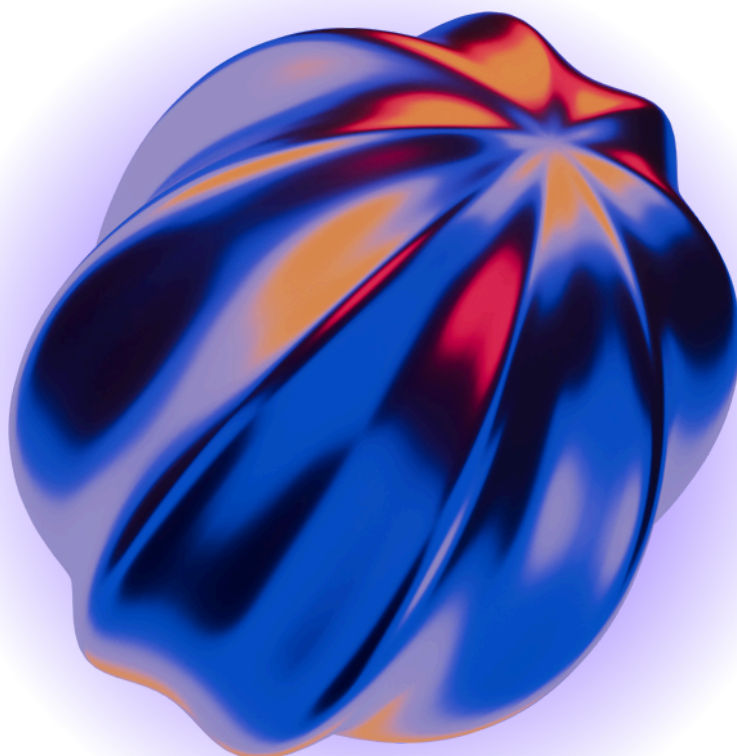
Course Details

Professional AI Foundation Certification (SOAI009)

Course Description

The Foundations of AI is a comprehensive, project-based specialization designed to introduce students, professionals, and AI enthusiasts to the core principles of Artificial Intelligence and Machine Learning. This 30-day intensive program blends theory, real-world applications, hands-on projects, and hackathons to provide a deep and practical understanding of AI systems.

Whether you are aiming to kickstart a career in AI, strengthen your data science knowledge, or leverage AI tools for business productivity, this course offers an ideal learning pathway to build a strong technical foundation.

Throughout the course, learners will explore the lifecycle of AI — from understanding fundamental concepts, algorithms, and mathematical models to deploying AI solutions on real-world datasets.

Course Content

Module	Topics / Activities	Suggested Duration
Module: Understanding AI Foundations	Introduction to Artificial Intelligence Why Study AI Correct Way to Study AI Essential Tools for Learning AI	Days 1 - 3
Module: Exploring AI Ecosystem	Applications and Use Cases of AI Data Science vs AI Tools of Artificial Intelligence How AI Can Boost Productivity	Days 4 - 6
Module: Introduction to Machine Learning	Welcome to Machine Learning Applications of Machine Learning Supervised vs Unsupervised Learning Overview	Days 7 - 9
Module: Supervised Learning Deep Dive	Supervised Learning Concepts Case Study: Netflix Recommendation System Project-Oriented Learning (Project 1)	Days 10 - 11
Module: Unsupervised Learning Deep Dive	Unsupervised Learning Concepts Case Study: Book Recommendation System Project-Oriented Learning (Project 2)	Days 12 - 13
Module: Python & AI Tools Setup	Introduction to Jupyter Notebooks Python for AI Basics Exploring Key Libraries: NumPy, Pandas, Scikit-learn	Days 14 - 15
Module: Regression Model Building	Regression Model Overview Linear Regression Implementation Project: House Price Prediction (Project 3)	Days 16 - 18
Module: Gradient Descent in Action	Understanding Gradient Descent Implementing Gradient Descent in Python Gradient Descent-Based Project (Project 4)	Days 19 - 20
Module: Multiple Linear Regression & Feature Engineering	Multiple Feature Predictions Vectorization & Feature Scaling Project: Multiple Linear Regression (Project 5)	Days 21 - 23
Module: Classification & Logistic Regression	Understanding Classification Models Logistic Regression Application Project: Heart Disease Prediction (Project 6)	Days 24 - 26
Module: Model Optimization & Overfitting	Addressing Overfitting Cost Function with Regularization Regularized Linear & Logistic Regression	Days 27 - 28
Module: Capstone, Hackathon & Assessment	Final Project Submission Hackathon Challenge Ideathon Presentation Final Assessment & Feedback Session	Days 29 - 30

Features and Benefits

Solid Foundation in AI

Gain a deep understanding of core AI concepts and applications, including natural language processing, machine learning, and deep learning.

Master Prompt Engineering

Learn the art of crafting effective prompts to optimize AI tools and enhance your ability to solve complex problems.

Hands-on Learning

Participate in practical, real-world applications with interactive sessions and project work to reinforce your skills.

Minor and Major Projects

Apply your knowledge through both minor and major projects, showcasing your ability to handle real-world scenarios.

Industry-Relevant Skills

Acquire skills that are highly sought after in industries leveraging AI to innovate and solve problems.

Expert Guidance

Receive instruction from experienced professionals with expertise in AI and prompt engineering.

Networking Opportunities

Connect with like-minded individuals and professionals in the field of AI and technology.

Certification

Earn a certificate recognizing your newly acquired skills and boosting your credentials for career advancement.

Empower Career Growth

Enhance your ability to drive innovation and efficiency in business or your personal AI projects.

Prepare for Future Technologies

Stay ahead of the curve with a comprehensive understanding of cutting-edge AI tools and applications.

Cost Breakdown

Includes access to all course materials, hands-on learning sessions, minor and major projects, and certification upon completion.

Total Project Cost in INR	
Cost per Student	3500 Rs per Student
Calendar Duration	
Course Materials	30 Days Course
LMS Access	1 Major Project
Hands on Sessions + Doubt Solving	1 Minor Project
SOAI Community Access + Networking Support	Mock Interviews

Course Certification

By the end of this Course you will be Receiving the given below prestigious certificate from Department of AI Studies SIN School of AI.

Enrollment Process

After enrolling, students will receive an email with their ID card, Student Handbook, Roll Number, and LMS access details to start the Foundations of AI Professional Certificate

- After enrolling in the Foundations of AI Professional Certificate Course, students will receive an email from SIN School of AI containing all the essential details.

- The email will include the student's ID card, Student Handbook, and their Roll Number for assignment submissions.

- Additionally, all the relevant information to help students during the course will be shared in this email.

- Shortly thereafter, students will receive access to the Learning Management System (LMS), where they can access course materials, submit assignments, and track their progress.

Terms and Conditions

This section outlines the rules, guidelines, and obligations governing the agreement. It ensures clarity and mutual understanding between all parties involved, providing a framework for compliance and dispute resolution.

Eligibility

This course is open to individuals of all backgrounds interested in Learning Basics of AI and Machine Learning.

Course Duration

The course will be conducted over30 days, with 1 hours of learning each day. The course includes both theoretical learning and hands-on projects.

Certification

Certification will be provided upon successful completion of the course, including the final project. Students must complete all projects to receive certification.

Refund Policy

Refund requests will only be considered if submitted within 24 hours of course registration. No refunds will be issued after this period.

Project Submission

Students are required to submit both minor and major projects within the specified deadlines. Late submissions may result in disqualification from receiving certification.

Attendance

Active participation is required for successful course completion. Students are expected to attend all sessions; in case of absence, prior notice must be given.

Intellectual Property

All course materials, including presentations, projects, and assignments, are the intellectual property of SIN School of AI and are for personal use only.

Code of Conduct

Students must maintain a respectful and professional attitude towards instructors and fellow participants. Any disruptive behavior will result in immediate removal from the course without a refund.

Changes to the Course

SIN School of AI reserves the right to modify course content, schedule, and instructors as needed but will be applicable from the next batch for the same.

Liability

SIN School of AI is not responsible for any personal injury, loss, or damage of belongings during the course.

For inquiries, contact us.

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