

AI CATALYSTTM

AI / ML Data Science & Industrial Applications

Your Essential Edge.

From Foundation to Expertise!

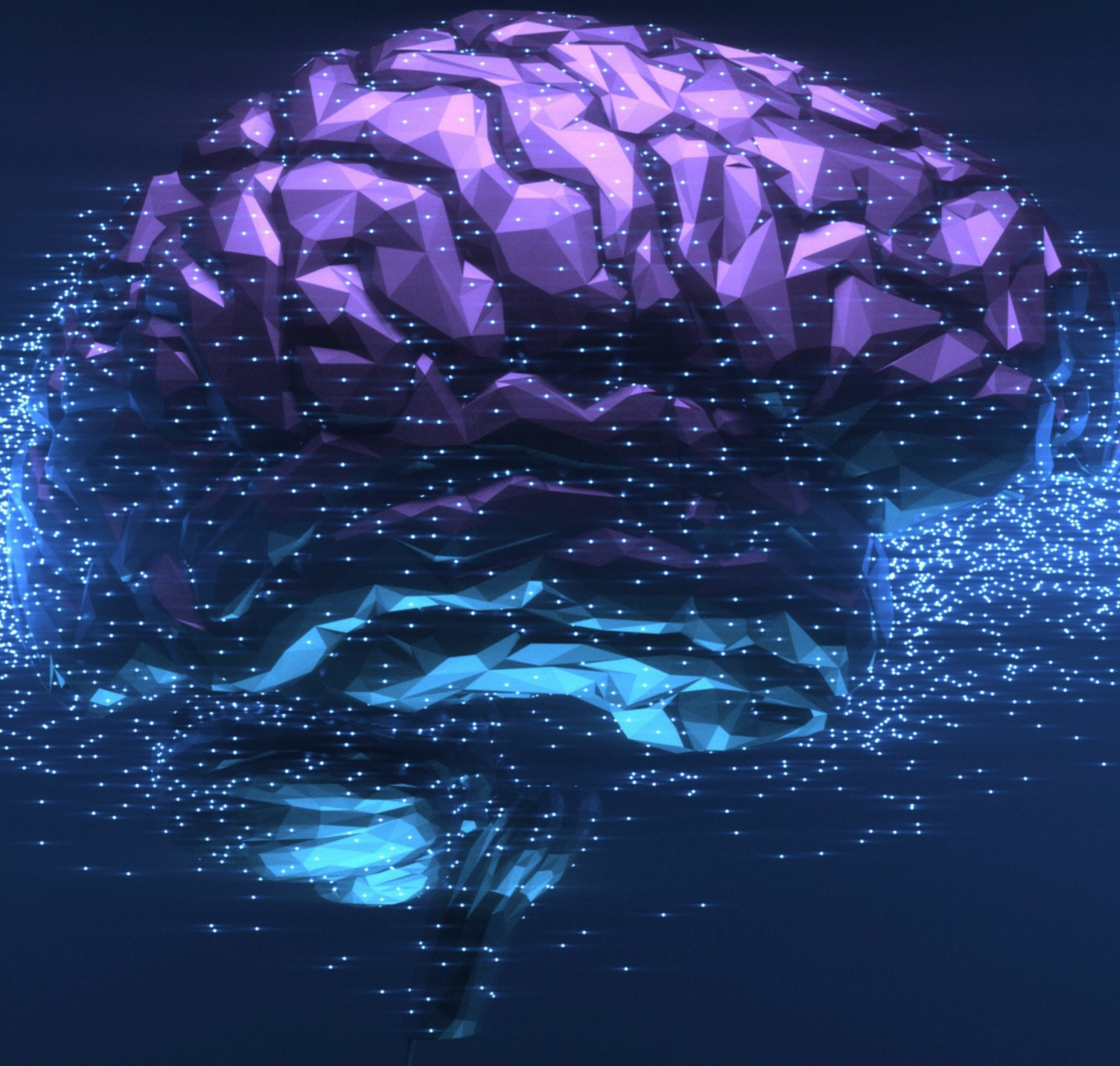


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Program Overview

We are excited to introduce the AI Catalyst™ Certification Program, a specialized skill development initiative tailored for learners passionate about AI and related Technologies. This program empowers participants to develop in-demand AI skills, boost their career prospects, and gain exclusive opportunities to work with industry leaders.

COMPREHENSIVE LEARNING EXPERIENCE



FOUNDATION COURSE :Aimed to provide a strong understanding of the fundamentals of AI.

INTERMEDIATE COURSE: Builds on the foundation, exploring into AI concepts & applications.

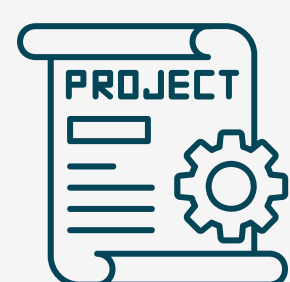
ADVANCED COURSE: Structured to advance AI concepts, tools & techniques, and drive innovation.

EXPERT LED LIVE CLASSES WITH LAB SUPPORT



- Engage in interactive live sessions with industry experts, applying theoretical knowledge to real-world problems in our lab-supported environment
- Get hands-on experience and personalized guidance

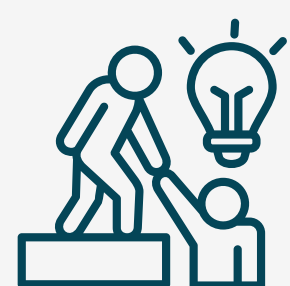
CAPSTONE PROJECTS AND APPLICATIONS



MINI PROJECT : Apply AI concepts, developing skills and problem-solving abilities

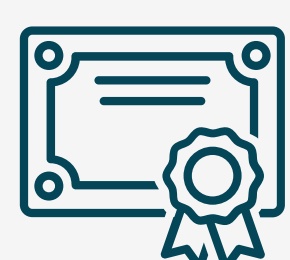
MAIN PROJECT : Develop a detailed AI project demonstrating expertise and practical application

PROFESSIONAL GUIDANCE AND MENTORSHIP*



Our seasoned specialists will help Intermediate and Advanced learners explore AI jobs & improve key skills like collaborative, problem-solving & communication for tech careers.

INDUSTRY RECOGNIZED CERTIFICATION



For completing the comprehensive enablement sessions at each level, engaging in interactive sessions with our expert teams, and successfully completing assigned projects within the stipulated tenure, participants will receive a certification.

POTENTIAL INTERNSHIP OPPORTUNITIES*



Upon advancing to Intermediate or Advanced levels, select participants may have the opportunity to collaborate with leading professionals from our partnered industry networks, gaining hands-on experience and valuable industry insights.

***Note:** Tailored for Intermediate and Advanced Learners

AI Catalyst™ Foundation Certification Program

Master the building blocks of AI innovation by unlocking the fundamentals of AI and its applications



Duration : 1 Month



Number of Projects : 4 Mini Projects



Industry Recognized Certificate



Live-in-person / Virtual Sessions



Certificate Requirements

Certificate of Participation:

- Course Attendance : 75%
- Project Completion : Optional

Certification of Course Completion:

- Course Attendance : 75%
- Project Completion : Mandatory
- Exam Pass Percentage : 75%



Important Timelines

- Project Completion :**
Within 15 Days of Course Completion
- Exam Completion :**
Within 30 Days of Course Completion

Program Highlights

PROGRAM OUTCOMES

- Analyze data and explore ML models
- Evaluate AI risks, benefits, and ethics
- Drive economic growth through AI

KEY SKILLS

- Data Analysis and Visualization
- Machine Learning and Deep Learning
- AI Model Evaluation
- Critical Thinking and Problem-Solving

ROLES SUITABLE FOR

- Date / Business Analyst
- AI Research Assistant
- Junior Data Engineer
- AI Support Specialist

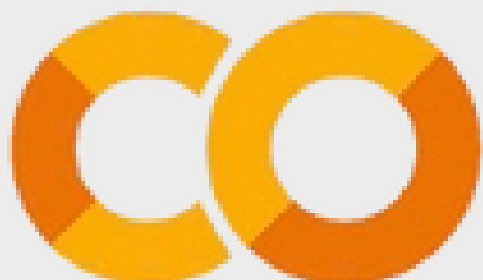
Technology Stack Covered



ORANGE DATA MINING



Brev AI



GOOGLE COLAB



TENSORFLOW



JUPYTER NOTEBOOK



PYTORCH



Starry AI



TEACHABLE MACHINES

Program Modules

Module : 01

Introduction to AI

(Duration : 4h)

- Understanding, Evolution
- Significance of Artificial Intelligence in Modern World
- Applications of Artificial Intelligence

Module : 02

Introduction to ML

(Duration : 3h)

- Basics of Machine Learning
- Types of Machine Learning
- What is Big Data?

Module : 03

Introduction to DL & NN

(Duration : 3h)

- Introduction to Neural Networks
- Introduction to Deep Learning
- Applications of Deep Learning

Module : 04

AI Tools & Platforms

(Duration : 2h)

- Introduction to AI Development Tools
- Basic Knowledge of Popular AI Frameworks
- Cloud Based AI Services

Module : 05

Orange Data Mining Tool

(Duration : 3h)

- Demonstration of Orange Data Mining Tool
- Building and connecting Analysis workflows without coding

Module : 06

AI Ethics, Biases & Social Impact

(Duration : 3h)

- AI Regulation and Governance
- India's AI Potential and Growth
- Ethical Principles, Economic and Societal Impacts of AI

AI Catalyst™ Intermediate Certification Program

Elevate your AI expertise by applying core techniques to solve real-world problems and optimize outcomes.

-  **Duration :** 2 Months
-  **Number of Projects:**
 - 4 Mini Projects
 - 2 Main Projects
-  **Industry Recognized Certificate**
-  **Live-in-person / Virtual Sessions**
-  No Extensive expertise requires, but understanding in AI concepts, Programming, and Data Analysis is added benefit.

-  **Certificate Requirements**
 - Certificate of Participation:**
 - Course Attendance : 75%
 - Project Completion : Optional
 - Certification of Course Completion:**
 - Course Attendance : 75%
 - Project Completion : Mandatory
 - Exam Pass Percentage : 75%
-  **Important Timelines**
 - **Mini Project :** 15 Days
 - **Main Project :** 30 Days
 - **Project Completion :** Within 45 Days of Course Completion
 - **Exam Completion :** Within 60 Days of Course Completion

Program Highlights

PROGRAM OUTCOMES

- Build skills in AI, data analysis, and ML
- Explore AI ethics, risks, and strategy
- Apply deep learning to real problems
- Evaluate AI models with metrics
- Strengthen critical thinking in AI/ML

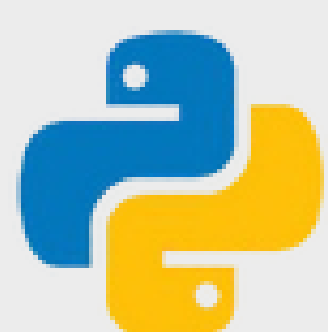
KEY SKILLS

- Programming skills in Python
- Data analysis and visualization
- ML, DL, NLP, IoT and CV
- AI model deployment and scaling
- Evaluation metrics

ROLES SUITABLE FOR

- Associate AI-ML Engineer
- Data scientist
- AI researcher
- Associate CV engineer
- Associate NLP/ IoT engineer

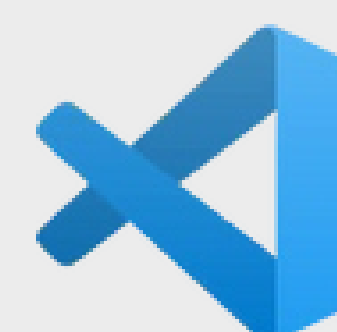
Technology Stack Covered



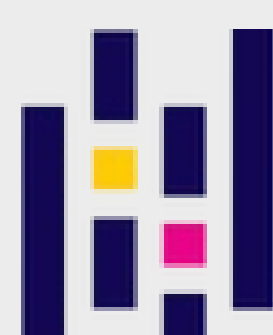
PYTHON



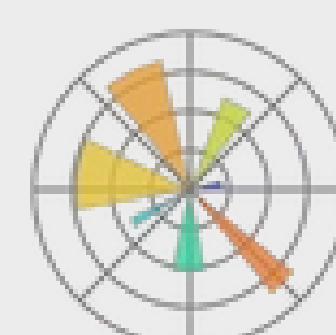
SCIKIT LEARN



VS CODE



PANDAS



MATPLOTLIB



JUPYTER NOTEBOOK

Module : 01	Orientation	(Duration : 2h)
- Introduction to the Training Journey - Expectations & Learning Outcomes	Tools, Resources & Support	
Module : 02	Introduction to Python	(Duration : 8h)
- Python Programming Basics - Syntax, Data Structures and Libraries	Real-World Applications, Search Algorithm	
Module : 03	Introduction to ML Algorithms	(Duration : 8h)
- Recap of ML - Supervised & Unsupervised Learning	Reinforcement Learning (RL)	
Module : 04	Introduction to DL Algorithms	(Duration : 6h)
- Recap of Neural Network & DL - DL Algorithms	DL vs. ML	
Module : 05	Natural Language Processing	(Duration : 8h)
- Introduction its Key Benefits - Applications and Evolution	ChatGPT in NLP: Concepts & Cases	
Module : 06	Computer Vision and AI Applications	(Duration : 6h)
- Introduction & History of CV - Human Vision vs. Computer Vision	Applications & Key Concepts in CV	
Module : 07	Internet Of Things (IOT)	(Duration : 6h)
- Introduction & its History - IoT: Working & Technologies	IoT: Uses, Challenges & Trends	
Module : 08	Ideation to Deployment	(Duration : 6h)
- Introduction to AI Model - Deployment & Deployment Models	- Cloud Deployment & Scaling - Model Monitoring, Maintenance & CI/CD	
Module : 09	Evaluation Metrics	(Duration : 4h)
Intro & Importance of Model Evaluation	Evaluation Metrics for Performance	
Module : 10	GANs & Autoencoders	(Duration : 8h)
- What are GANs & How GANs Work - Use cases & Applications of GAN	Autoencoders & Application	
Module : 11	Summary and Mentorship	(Duration : 2h)
- Recap of Key Concepts - Interactive Q&A and doubt Clearing	Project Mentoring & Career Roadmap	

AI Catalyst™ Advanced Certification Program

Unlock the highest level of AI by mastering advanced architectures and driving impactful innovations.



Duration : 1 Month



Number of Projects : 2 Main Projects



Industry Recognized Certificate



Certificate Requirements

Certificate of Participation:

- Course Attendance : 75%
- Project Completion : Optional

Certification of Course Completion:

- Course Attendance : 75%
- Project Completion : Mandatory
- Exam Pass Percentage : 75%



Live-in-person / Virtual Sessions



A strong understanding of AI principles, coupled with applied skills in programming and data analysis.



Important Timelines

- **Project Completion :**
Within 45 Days of Course Completion
- **Exam Completion :**
Within 60 Days of Course Completion

Program Highlights

PROGRAM OUTCOMES

- Master advanced AI/ML techniques
- Gain expertise in data analysis & deployment
- Design efficient AI systems
- Stay updated with industry trends

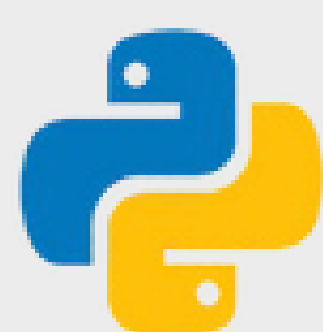
KEY SKILLS

- Advanced Python programming
- SQL and database management
- ML, DL, CV & GenAI
- MLOps and deployment

ROLES SUITABLE FOR

- Principal AI engineer
- AI Solution Architect
- AI Ethics and Governance Specialist
- AI Consultant

Technology Stack Covered



PYTHON



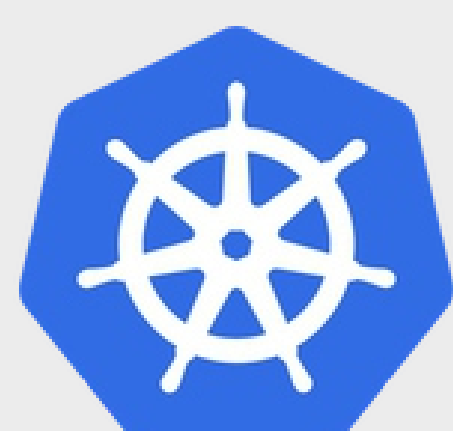
SQL



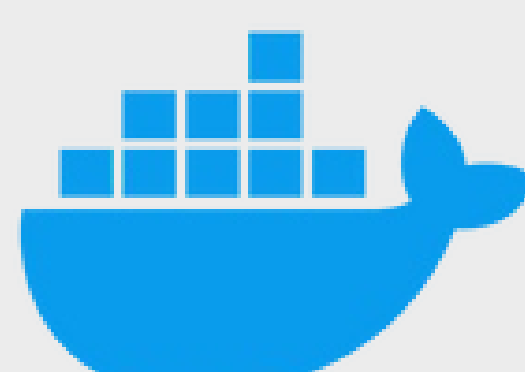
YOLO



Deep fake



Kubernetes



Docker



GitHub

Program Modules

Module : 01	Orientation	(Duration : 2h)
- Introduction the Training Journey - Expectations & Learning Outcomes	Tools, Resources & Support	
Module : 02	Advanced Python	(Duration : 8h)
- Decorators, Generators & Metaclasses - OOP & Functional Programming	- Testing, Logging & Profiling - Packaging & Version Control	
Module : 03	SQL	(Duration : 8h)
- What is SQL? - Importance of SQL in AI-ML - Understanding Database - Basic SQL queries - Filtering and sorting Queries - Basic Operators	- Aggregation - Grouping Data - Table relationship - Data Cleaning - Creating and Updating Table	
Module : 04	Advanced ML Techniques	(Duration : 6h)
- Ensemble Learning - Feature Engineering & Selection Model	Time series analysis and forecasting	
Module : 05	Advanced DL	(Duration : 6h)
- RsNet, Inception, DenseNet - Transfer learning and Fine Tuning	Model Compression and Acceleration	
Module : 06	Computer Vision	(Duration : 2h)
CV Architecture (YOLO, Vision Transformer)		
Module : 07	Gen AI	(Duration : 2h)
Deep fake, Diffusion Model		
Module : 08	MLOps and Deployment	(Duration : 4h)
- CI/CD for ML System - Containerization	Model Monitoring & Drift Detection	
Module : 09	Summary and Mentorship	(Duration : 2h)
- Recap of Key Concepts - Interactive Q&A and doubt Clearing	Project Mentoring & Career Roadmap	

Who We Are

Qbic Catalyst Partners (an ISO 27001:2022 certified company) is a game changer in the rapidly changing fields of Professional & Business development. With a proven track record in consulting and skill development, QCP excels in demystifying AI and gradually building the participants' skills and making them industry ready.



Achieving Excellence

We empower individuals to achieve excellence through strategic guidance, meticulous planning, and expertise, equipping them to lead with distinction.



Catalyst for Change

We leverage cutting-edge technology, SMEs, and creative thinking to solve complex problems, unlock new opportunities, and drive transformative change.



Cultivating Growth Mindset

Our approach instills a growth mindset within organizations, turning challenges into opportunities for learning and development.

What Our Learners Say...

Feedback on the program and its trainers is consistently positive, with participants continuing to appreciate the depth of knowledge being demonstrated and the clarity with which concepts are presented. Our trainers have received appreciation for their ongoing efforts to simplify complex subject matter and for maintaining a high level of engagement throughout the sessions. The use of real-life examples is particularly valued, as it helps to contextualize the theoretical dimensions of AI within practical, industry-relevant scenarios.

Jerry Louis Leo Working Professional

"I really enjoyed the course. The slides were well aligned with our learning goals and the session was very informative. It was clear that a lot of thought went into organizing the material. Overall, a great learning experience!"

Aneesha Student

"The structured curriculum and hands-on exercises gave me a strong foundation in machine learning and data analysis. The instructor's engaging style and real-life examples made learning enjoyable and clear. This course boosted my problem-solving skills and confidence in real-world AI challenges"

Program Governance Team



PRAVEEN KUMAR
(Trainer)

SME | GTM solutions | Workforce
Transformation | Prev Exp: Dell, NewWave

Experienced Product Marketing & Evangelist with over 20+ years of demonstrated expertise in the information technology and services industry



KALLOL HAZRA
(Mentor)

SME | Solution Selling | Talent Transformation
Prev Exp: Dell, HP, IBM

Technology sales expert with 35+ years of experience, combining customer insight, strong sales alignment, and a passion for people and innovation.



DUSHYANT SINGH
(Trainer)

AI expert with 5+ years of product development & product management experience. Certified AI Trainer, Zoho Developer and Product Manager, passionate about practical, hands-on AI education.



SINCHANA
(Program Coordinator)

With experience in operations and strategic partnerships, leveraging industry expertise from L&T and Dell Technologies to drive innovative solutions and growth initiatives as a seasoned program coordinator.

Additional Terms & Conditions

- All fees paid herein is non-refundable.
- All Intellectual Property Rights will belong to the respective parties.
- Any Intellectual Property Rights created herein by the student will belong to the student, but QCP will be permitted to use the same without any restrictions.
- The services are provided on an “as is” basis. To the maximum extent permitted under applicable law and except as expressly provided herein, QCP, for itself and on behalf of its licensors, disclaims all warranties whether express, implied, or statutory, including any warranties of merchantability, satisfactory quality, fitness for a particular purpose, title, and/or non-infringement, and any warranty arising from course of dealing or course of performance, relating to the services. Neither QCP nor its licensors warrant that the services will operate uninterrupted, that it will be free from defects or errors, or that it or the services will meet user’s requirements.
- QCP reserves the right to modify the Program structure, content, and schedule as necessary. Participants will be notified of any significant changes.
- Notwithstanding anything stated herein, the entire liability of QCP and any of its suppliers under any provision of this Terms and the user’s exclusive remedy for all of the foregoing shall be limited to the amount actually paid by the student.
- Any and all claims, disputes, and controversies arising under, out of or in connection with these terms, shall be governed by, construed and take effect in accordance with the laws of India and the parties submit to the exclusive jurisdiction of the courts of Bangalore, India (solely for enforcement of arbitration awards or for claims not otherwise subject to arbitration hereunder).
- If any provision of these Terms is held to be unenforceable or invalid, such provision will be changed and interpreted to accomplish the objectives of such provision to the greatest extent possible under applicable law and the remaining provisions will continue in full force and effect.
- Except as provided herein, the failure to exercise a right or to require performance of an obligation under these Terms shall not effect QCP’s ability to exercise such right or require such performance at any time thereafter nor shall the waiver of a breach constitute a waiver of any subsequent breach.
- QCP reserve the right, at its sole discretion, to modify or replace these Terms at any time. If a revision is material, QCP will make reasonable efforts to provide at least 30 days' notice prior to any new terms taking effect. What constitutes a material change will be determined by QCP at its sole discretion. By continuing to access or use Our Service after those revisions become effective, the user agrees to be bound by the revised terms.