



POST GRADUATE PROGRAM IN ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

PAY
AFTER PLACEMENT
AVAILABLE



POWERED BY
NAMO SKILL CENTRE PVT LTD



+91 86008 84569 / 79954 84499



www.namocampus.com

PROGRAM OVERVIEW

The Post Graduate Program in Artificial Intelligence and Machine Learning (PGP in AIML) is an industry-oriented program designed to equip learners with the knowledge and practical skills required to build successful careers in artificial intelligence and intelligent data-driven technologies. The curriculum covers key domains such as machine learning, deep learning, natural language processing, computer vision, generative AI, and emerging agentic AI systems. Through hands-on training, real-world projects, and the use of industry-standard tools and frameworks, learners develop the ability to build intelligent models and AI-driven solutions, preparing them for professional roles such as Artificial Intelligence Engineer, Machine Learning Engineer, Generative AI and LLM Engineer, Computer Vision Engineer, Agentic AI and Autonomous Systems Developer, and AI Systems Engineer and MLOps Specialist.

PROGRAM STRUCTURE

Phase	Program Component	Duration
1	Professional Communication & Career Readiness	1 Month
2	Core Learning Phase	8 Months
3	Specialization Phase	1 Month
4	Capstone Project	1 Month

START MODULE + LAUNCH

Professional Communication, Ethics & Career Readiness

The program begins with a foundational launch phase designed to strengthen learners' communication skills, professional mindset, and career readiness before they enter the intensive technical training in artificial intelligence and machine learning. This phase focuses on developing strong English language proficiency and professional communication abilities, enabling learners to confidently participate in technical discussions, collaborate in team environments, and communicate effectively in global technology workplaces.

The initial part of the phase concentrates on improving spoken and written English with an emphasis on clarity, fluency, pronunciation, listening comprehension, and vocabulary relevant to technology and data-driven industries. Learners are trained to articulate ideas logically, participate in technical discussions, deliver structured presentations, and prepare professional emails, reports, and technical documentation. These skills form an essential foundation for effective collaboration, knowledge sharing, and communication in AI-driven organizations.

KEY FOCUS AREAS INCLUDE:

- Functional and Professional English

- Technical Communication and Documentation
- Presentation Skills and Professional Interaction
- Emotional Intelligence and Workplace Behaviour
- Ethics and Responsible AI Practices
- Corporate Etiquette and Time Management
- Career Orientation in AI, Machine Learning, and Data Science

CORE LEARNING PHASE

The Core Learning Phase builds the technical foundation of the program by developing learners' competencies in programming, machine learning, deep learning, natural language processing, computer vision, generative AI, and agentic AI through a combination of theoretical concepts and hands-on training, enabling them to design, develop, evaluate, and deploy AI models and intelligent systems using industry-relevant tools and frameworks.

TERM - I

FOUNDATIONS OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING (3 MONTHS)

The first term focuses on establishing strong foundations in programming, mathematical concepts, data preparation, and the core principles of artificial intelligence and machine learning. Learners develop the analytical, computational, and problem-solving skills required to understand how intelligent systems are designed, trained, and applied in real-world environments.

This term includes the following core modules:

- 1 Python Programming for AI and Data Science
- 2 Mathematics and Statistics for Machine Learning
- 3 Artificial Intelligence Fundamentals
- 4 Data Preprocessing, Feature Engineering and Exploratory Data Analysis
- 5 Machine Learning Algorithms and Predictive Modelling

By the end of Term I, learners develop strong computational thinking, analytical reasoning, and foundational knowledge of artificial intelligence and machine learning, enabling them to confidently progress to advanced AI techniques and intelligent system development in the subsequent term of the program.

TERM - II

ADVANCED AI SYSTEMS AND INTELLIGENT APPLICATIONS (5 MONTHS)

The second term focuses on advanced artificial intelligence technologies and the development of intelligent systems capable of solving complex real-world problems.

Building upon the foundations established in the first term, learners explore deep learning techniques, modern AI applications, and emerging paradigms that are transforming industries. The term emphasizes both conceptual understanding and hands-on implementation, enabling learners to design, train, and deploy advanced AI models for practical use.

This term includes the following core modules:

- 6** Deep Learning and Neural Network Architectures
- 7** Natural Language Processing (NLP) and Language Models
- 8** Computer Vision and Image Recognition Systems
- 9** Generative AI and Large Language Models (LLMs)
- 10** Agentic AI, Multi-Agent Systems and Autonomous AI Applications
- 11** MLOps, AI Model Deployment and Production Systems

By the end of Term II, learners develop the capability to build advanced AI systems, design intelligent applications across multiple domains, and deploy machine learning models into real-world production environments. These competencies prepare learners for industry roles in artificial intelligence, machine learning engineering, and intelligent system development.

ELECTIVE AND SPECIALIZATION PHASE

The **Elective and Specialization Phase** represents the advanced stage of the program and is designed to provide learners with the opportunity to focus on specific domains within artificial intelligence and machine learning based on their career interests and professional goals. During this phase, learners deepen their expertise in selected areas of AI, gain exposure to specialized applications, and explore emerging technologies that are shaping the future of intelligent systems.

AVAILABLE SPECIALIZATION TRACKS (ANY ONE)

1. Computer Vision and Intelligent Image Systems

This specialization focuses on developing AI systems that can interpret and analyze visual information from images and videos. Learners explore techniques used in image classification, object detection, facial recognition, and video analytics. The track emphasizes practical implementation of computer vision models used in applications such as autonomous systems, medical imaging, surveillance, and industrial automation.

2. Generative AI and Large Language Models

This specialization explores modern generative AI technologies that enable machines to create human-like text, images, code, and multimedia content. Learners study large language models (LLMs), prompt engineering, and advanced techniques such as retrieval-augmented generation (RAG). The track prepares learners to build AI-powered assistants, intelligent chatbots, and content generation systems used in modern AI-driven applications.

3. Agentic AI and Autonomous Intelligent Systems

This specialization focuses on the development of AI systems capable of autonomous decision-making and task execution. Learners explore AI agents, multi-agent systems, and intelligent workflows that allow AI systems to plan, reason, and interact with tools and environments. The track emphasizes the design of autonomous AI applications used in automation, intelligent assistants, and complex decision-support systems.

3. Agentic AI and Autonomous Intelligent Systems

This specialization focuses on the development of AI systems capable of autonomous decision-making and task execution. Learners explore AI agents, multi-agent systems, and intelligent workflows that allow AI systems to plan, reason, and interact with tools and environments. The track emphasizes the design of autonomous AI applications used in automation, intelligent assistants, and complex decision-support systems.

4. Agentic AI and Autonomous Intelligent Systems

This specialization focuses on the deployment, management, and scaling of AI models in real-world production environments. Learners study MLOps practices, model deployment pipelines, cloud-based AI infrastructure, and monitoring systems. The track prepares learners to design robust AI systems that integrate machine learning models into enterprise applications and maintain reliable performance at scale.

This phase enables learners to strategically shape their learning pathway and graduate with a distinct professional profile aligned with advanced career opportunities in artificial intelligence and intelligent systems.

CAPSTONE PROJECT

- The Capstone Project serves as the culminating academic and professional experience of the program. It enables learners to integrate and apply the knowledge, technical skills, and analytical capabilities developed throughout the curriculum to address complex real-world problems using artificial intelligence and machine learning technologies.
- Learners undertake a substantial project in one of the following formats: the development of an AI-powered application, an industry-oriented machine learning solution, or an applied research study addressing a contemporary problem in areas such as generative AI, computer vision, natural language processing, or intelligent automation systems.
- Each project is conducted under the supervision of academic mentors and, where possible, industry professionals to ensure both conceptual rigor and practical relevance. Learners are expected to define the problem, design an AI-based solution framework, build and train appropriate models, evaluate performance, and present the outcomes through a structured technical report and professional presentation.
- The Capstone Project demonstrates the learner's readiness to operate at a professional level by showcasing their ability to combine programming skills, machine learning expertise, data analysis, and system design to develop intelligent solutions. Successful completion of the Capstone signifies that the learner is prepared to contribute effectively to the development, deployment, and innovation of AI-driven systems across industries.

EXTENDED LEARNING AND PROFESSIONAL ENRICHMENT

At **NAMO Campus**, learning is designed as a comprehensive professional development experience that extends beyond formal classroom instruction. In addition to the core academic curriculum, learners are offered access to a range of optional enrichment opportunities that enhance technical capability, strengthen professional profiles, and support long-term career advancement in the field of artificial intelligence and emerging technologies. These opportunities allow learners to personalize their learning journey and align their training with specific career goals, industry demands, and areas of interest within the AI ecosystem.

1. Industry Certifications (Optional)

Learners receive structured guidance and preparation support to pursue globally recognized certifications offered by leading technology and cloud platforms such as **AWS, Google Cloud, Microsoft Azure, IBM, and other AI technology providers**. These certifications help validate technical skills in areas such as machine learning, cloud AI services, and data engineering, thereby enhancing employability and professional credibility in competitive technology environments.

2. AI Technology Mentorship Program (Optional)

Participants are connected with experienced AI practitioners, data scientists, and technology professionals who provide personalized mentorship, career guidance, and technical insights. This mentorship helps learners deepen their understanding of real-world AI applications, make informed career decisions, and gain exposure to industry practices and emerging trends in artificial intelligence.

CAREER OUTCOMES OF PGP IN BCFT

The **PGP in Artificial Intelligence and Machine Learning (PGP in AIML)** prepares learners for high-impact careers in intelligent technologies, data-driven innovation, and advanced computational systems. The program is ideal for individuals aspiring to work in the following professional roles:

1. Artificial Intelligence Engineer

Professionals who design, develop, and implement intelligent systems capable of learning, reasoning, and performing complex tasks. AI Engineers build applications such as recommendation systems, intelligent assistants, and automation platforms across a wide range of industries.

2. Machine Learning Engineer

Specialists who develop, train, and optimize machine learning models for predictive analytics and intelligent decision-making. They work with large datasets, build algorithms, and deploy scalable models used in real-world AI applications.

3. Generative AI and LLM Engineer

Experts who design and implement systems based on generative AI technologies and large language models. These professionals develop AI-powered chatbots, intelligent assistants, automated content generation systems, and AI-driven productivity tools.

4. Computer Vision Engineer

Specialists who develop AI systems capable of interpreting and analyzing visual data such as images and videos. Applications include facial recognition, object detection, medical image analysis, autonomous systems, and industrial vision automation.

5. Agentic AI and Autonomous Systems Developer

Professionals who design intelligent AI agents capable of autonomous reasoning, planning, and task execution. These systems integrate large language models, tools, and multi-agent architectures to automate complex workflows and build advanced AI-driven applications.

6. AI Systems Engineer and MLOps Specialist

Engineers responsible for deploying, managing, and scaling machine learning models in production environments. They design AI infrastructure, automate model pipelines, monitor performance, and ensure reliable operation of AI systems in enterprise technology environments.

WHAT MAKES THIS COURSE DIFFERENT

1. Industry-Aligned AI Curriculum

The program is designed in alignment with current industry requirements in artificial intelligence and intelligent systems. The curriculum reflects the latest developments in areas such as machine learning, deep learning, generative AI, computer vision, and agentic AI. This ensures that learners acquire skills that are relevant to modern technology environments and future industry needs.

2. Hands-on and Project-Based Learning

The program emphasizes experiential learning through technical labs, applied assignments, real-world datasets, and the Capstone Project. Learners actively build AI models, develop intelligent applications, and experiment with modern AI frameworks, ensuring they graduate with practical expertise and confidence in implementing AI solutions.

3. Exposure to Emerging AI Technologies

Learners gain exposure to cutting-edge developments in artificial intelligence, including generative AI, large language models, autonomous AI agents, and modern deep learning architectures. This forward-looking approach prepares learners to work with next-generation AI technologies that are shaping the future of digital innovation.

4. Specialization in Advanced AI Domains

Through the specialization phase, learners can deepen their expertise in selected high-growth AI areas such as Generative AI, Computer Vision, Agentic AI, and AI Systems Engineering. This structure enables participants to develop domain-specific competence aligned with targeted professional roles in the AI ecosystem.

5. Specialization in Advanced AI Domains

Beyond learning algorithms, the program trains learners to design, build, and deploy intelligent systems. Topics such as model optimization, AI pipelines, and MLOps practices help learners understand how AI solutions move from experimentation to real-world production environments.

6. Innovation and Intelligent Solution Development

The program encourages learners to apply artificial intelligence to solve real-world problems across industries. Through project-based learning and the Capstone Project, learners develop innovative AI-driven solutions that demonstrate their ability to translate technical knowledge into meaningful technological impact.

CAREER ZONE — INTEGRATED PROFESSIONAL READINESS AND IN-HOUSE CAREER ADVANCEMENT

- 1** The **Career Zone at NAMO Campus (NC)** is a fully integrated professional development and career deployment framework designed to transform learners into job-ready AI professionals and enable their transition into NC's in-house artificial intelligence and technology projects upon successful completion of the program.
- 2** Career preparation is embedded throughout the **11-month program** through continuous skill-to-role mapping, applied learning on real NC projects, structured portfolio development, professional mentoring, and performance-based evaluations. This integrated approach ensures that learners steadily develop the technical expertise and practical competencies required for emerging roles in artificial intelligence, machine learning, and intelligent system development.
- 3** Throughout the program, learners are guided in identifying suitable professional pathways aligned with their interests and strengths. These include roles such as **Artificial Intelligence Engineer, Machine Learning Engineer, Generative AI and LLM Engineer, Computer Vision Engineer, Agentic AI and Autonomous Systems Developer, and AI Systems Engineer and MLOps Specialist.**
- 4** As learners progress, they are gradually integrated into NC's internal project teams through applied training and apprenticeship-style engagement, enabling them to gain real operational exposure before transitioning into formal professional roles. Students actively contribute to NC's in-house initiatives such as **Edmato, Call4all, IFIT, and NAMO Chat**, gaining hands-on experience in areas including AI-powered applications, conversational AI systems, intelligent automation platforms, and generative AI solutions.
- 5** At program completion, learners are assessed holistically and formally deployed into full-time professional roles within NC's in-house AI ecosystem, based on specialization, performance, and project requirements. This structured pathway ensures a seamless transition from learner to professional while simultaneously building a sustainable internal talent pipeline for NC and providing learners with stable, growth-oriented career opportunities in artificial intelligence and intelligent systems development.