# AI & MACHINE LEARNING FOR THE ENTERPRISE / BUSINESS OVERVIEW

Course Code: 7600

Explore AI & Machine Learning Basics in Business | GenAI, LLMs, NLP, Deep Learning - How they Apply in Today's Business Enterprise, New Tools, Trends & More

AI & Machine Learning Enterprise / Business Overview is an overview level, lecture and discussion style course designed to provide you with a solid 'first-look' at essential AI and machine learning technologies, related cutting-edge skills, and the innovative tools that support them, with a focus on how they are applied in business in a practical way. These transformative technologies offer paths to enhance decision-making, quickly modernize and improve operational efficiency, and drive innovation within your organization.

Throughout the course, you will gain insights into key topics such as the basics of neural networks, the nuances of natural language processing, and the strategic use of AI in business decision-making. We'll explore how AI and ML are revolutionizing areas like operations, marketing, and sales, providing you with a clear perspective on their value and impact. You'll also explore the tools and technologies that drive AI and ML, including an overview of Large Language Models like GPT, and how they are applied across various business sectors.

This course is designed to make you conversant in AI and ML, enabling you to identify and articulate how these technologies can be leveraged for strategic advantage in your organization. By the end, you'll appreciate not just the technical aspects, but also the business potential of AI and ML

## What You'll Learn

- Foundational Insight: Quickly grasp the essential concepts of AI and Machine Learning, their current trends, and relevance to your business environment, enabling you to participate in strategic discussions with confidence.
- Identifying Business Enhancements: Learn to spot opportunities where AI can improve functions like marketing, sales, and operations, and explore the practical applications of these technologies in everyday business contexts.
- Tech and Tools Overview: Gain a non-technical understanding of key tools and technologies in AI and ML, including algorithms, neural networks, NLP, GPT, and Generative AI.

- Engaged Discussions: Develop the ability to confidently discuss AI and ML topics in business settings, understanding their role in data processing and the potential influence on your organization.
- Balanced Perspective: Combine an understanding of the ethical considerations and practical challenges of AI and ML with insights on how organizations maximize these technologies for efficiency and improved processes.

## Who Needs to Attend

This overview-level course is appropriate for anyone seeking an introduction to these innovative tools and skills and how they can be practically applied in business from an enterprise perspective. Roles include technical executives, stakeholders, project managers, technical managers, data scientists, analysts, developers or cohorts new to a role or an AI / ML initiative.

Attendees might include:

- Business Executives exploring AI and ML's strategic business impacts.
- Managers and Team Leaders across departments eager to apply AI insights.
- Business Analysts keen on enhancing data analysis with AI and ML.
- Project and Product Managers aiming to integrate AI in their projects.
- Non-technical Stakeholders wanting a foundational AI and ML understanding.
- Technologist looking to kick start their future role in AI and ML
- Mid-career Professionals across industries seeking AI and ML insights.
- Decision-Makers looking to optimize operations and strategies with AI.

## Prerequisites

To gain the most from attending this course, you should have the following prerequisite skills:

- Basic Business Acumen: Familiarity with general business concepts and strategies is advantageous, as it will help in understanding how AI and Machine Learning can be applied in various business contexts.
- Basic Technological Understanding: While deep technical expertise is not required, a foundational knowledge of technology and its role in business will be beneficial for grasping the concepts discussed in the course.
- Analytical Thinking: An ability to think analytically will aid in comprehending how data-driven AI and ML solutions can solve business problems and enhance decision-making processes.

# AI & MACHINE LEARNING FOR THE ENTERPRISE / BUSINESS OVERVIEW

Course Code: 7600

| VIRTUAL CLASSROOM LIVE | $2,595 CAD | 1 Day |
|---|---|---|

Virtual Classroom Live Outline

1. **Introduction to AI & Machine Learning**
   - Understand what AI and Machine Learning are and why they're critical for modern business
   - Review definitions and types of AI
   - Discussing AI in the Modern Age and its role in business
   - Embrace Change: Learn and Build Confidence using the Tools – Don't be Replaced By Them
2. **Deeper Dive into Machine Learning**
   - What is AI vs Machine Learning vs Deep Learning
   - Explore basics of how mathematics are used in or apply to AI
   - Algorithms: What are they and how are they used in AI and ML
   - Supervised vs Unsupervised
   - Classification, Regression, Clustering, Dimensionality Reduction, and Ensemble Methods
   - Explore the role of Machine Learning in AI and business decision-making
3. **Leveraging AI in Business & Decision Making**
   - Discuss key business areas where AI adds value: Operations, Marketing, Sales, HR, content development, coding and software development
   - Explore how AI is used in business decision-making
   - Introduction to predictive analytics
   - Explore using AI for strategic decision-making
4. **Hot Trends for AI in Business: Large Language Models (LLM), Generative AI and GPT**
   - Understand the basics of Generative AI and how it differs from other AI techniques
   - Learn about to GPT and its applications in various sectors
   - Learn how GPT uses machine learning to generate human-like text based

on the input it receives.
- Explore the concept of language models and how they are trained using large amounts of text data

5. **Basics of Neural Networks**
- What are they and how are they used?
- Basic parts: Neurons, activation functions, interactions.
- Types: Feedforward, recurrent, convolutional neural networks overview.
- How they learn: Forward propagation, backpropagation explained.
- Training Neural Networks: Importance of data preprocessing in training.
- Deep Neural Networks: Advantages and practical applications overview.
- In Action: Image recognition, language processing, etc. use cases.
- Ethical Considerations: Addressing biases and ethical concerns in neural networks.

6. **Natural Language Processing (NLP) & Sentiment Analysis**
- What is NLP and how is it used?
- NLP Language and Semantic Meaning, Bigrams, Trigrams, n-Grams, Root Stemming and Branching
- Introduction to Sentiment Analysis: Sentiment indicators, Sentiment Sampling, Predicting Elections based on Sentiment Analysis

7. **Using AI for Image, Video, and Audio Processing**
- Learn about Image processing and Identification, Facial Analysis, Audio Processing
- Discuss the role of AI in analyzing streaming video and real-world AV processing

8. **AI for Business Technical Tools: Data Science, Deep Learning & The Cloud**
- Applying AI in Data Science overview
- Survey of Tools & Tech: Python, NumPy, Pandas, SciKitLearn, Hadoop, Spark
- NoSQL Databases
- Deep Learning Quick Look
- AI for Business in the Cloud overview

9. **Practical Applications and the Future of AI in Business**
- What's next in applied AI for businesses
- New AI trends shaping the future of business

## Virtual Classroom Live Labs

This course combines engaging instructor-led presentations and practical demonstrations with light, exposure level hands-on exercises. Student machines are required.

# AI & MACHINE LEARNING FOR THE ENTERPRISE / BUSINESS OVERVIEW

Course Code: 7600

| PRIVATE GROUP TRAINING | 1 Day |
|---|---|

Visit us at www.globalknowledge.com or call us at 1-866-716-6688.