Enterprise Computing Solutions - Education Services

NABÍDKA ŠKOLENÍ

Prosím kontaktujte nás zde

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AI CERTs® AI+ Engineer™

Kód:	DÉLKA:	CENA:
AIC_AT-330	40 Hours	Kč bez DPH 11,500.00

Description

Innovate Engineering: Leverage AI-Driven Smart Solutions

- Full AI Stack: Learn AI architecture, LLMs, NLP, and neural networks
- Tool Proficiency: Includes Transfer Learning with Hugging Face and GUI design
- Deployment Focus: Build real AI systems and manage communication pipelines
- Practical Mastery: Gain the skills to engineer scalable AI solutions for innovation

Online labs, projects, case studies

- Included: Self-paced course + Official exam + Digital badge
- Delivery: Online labs, projects, case studies
- Outcome: Industry-recognized credential + hands-on experience

The following tools will be explored in this course:

- TensorFlow
- Hugging Face Transformers
- Jenkins
- TensorFlow Hub

What's Included (One-Year Subscription + All Updates):

- High-Quality Videos, E-book (PDF & Audio), and Podcasts
- AI Mentor for Personalized Guidance
- Quizzes, Assessments, and Course Resources
- Online Proctored Exam with One Free Retake
- Comprehensive Exam Study Guide
- Access for Tablet & Phone

Cíle

- AI Architecture
- Neural Networks
- Large Language Models (LLMs)
- Generative AI
- Natural Language Processing (NLP)
- Transfer Learning using Hugging Face
- AI Deployment Pipelines

Určeno pro

- **AI & Software Engineers**: Enhance your development skills by mastering AI techniques and designing advanced AI systems.
- **Machine Learning Enthusiasts**: Apply deep learning, neural networks, and NLP techniques to real-world AI challenges.
- **Data Scientists:** Strengthen your AI toolkit with engineering techniques for building and deploying scalable AI solutions.
- **IT Specialists & System Architects:** Integrate AI solutions into existing infrastructures, optimizing performance and scalability.

- **Students & New Graduates**: Develop in-demand AI engineering skills and prepare for a successful career in the rapidly growing AI field.

Vstupní znalosti

- AI+ Data™ or AI+ Developer™ course should be completed
- Basic understanding of Python programming is mandatory for hands-on exercises and project work.
- Familiarity with high school-level algebra and basic statistics is required.
- Understanding basic programming concepts such as variables, functions, loops, and data structures like lists and dictionaries is essential.

Program

Course Overview
Course Introduction

Module 1: Foundations of Artificial Intelligence
1.1 Introduction to AI
1.2 Core Concepts and Techniques in AI
1.3 Ethical Considerations

Module 2: Introduction to AI Architecture
2.1 Overview of AI and its Various Applications
2.2 Introduction to AI Architecture
2.3 Understanding the AI Development Lifecycle
2.4 Hands-on: Setting up a Basic AI Environment

Module 3: Fundamentals of Neural Networks
3.1 Basics of Neural Networks
3.2 Activation Functions and Their Role
3.3 Backpropagation and Optimization Algorithms
3.4 Hands-on: Building a Simple Neural Network Using a Deep Learning Framework

Module 4: Applications of Neural Networks
4.1 Introduction to Neural Networks in Image Processing
4.2 Neural Networks for Sequential Data
4.3 Practical Implementation of Neural Networks

Module 5: Significance of Large Language Models (LLM)
5.1 Exploring Large Language Models
5.2 Popular Large Language Models
5.3 Practical Finetuning of Language Models
5.4 Hands-on: Practical Finetuning for Text Classification

Module 6: Application of Generative AI
6.1 Introduction to Generative Adversarial Networks (GANs)
6.2 Applications of Variational Autoencoders (VAEs)
6.3 Generating Realistic Data Using Generative Models
6.4 Hands-on: Implementing Generative Models for Image Synthesis

Module 7: Natural Language Processing
7.1 NLP in Real-world Scenarios
7.2 Attention Mechanisms and Practical Use of Transformers
7.3 In-depth Understanding of BERT for Practical NLP Tasks
7.4 Hands-on: Building Practical NLP Pipelines with Pretrained Models

Module 8: Transfer Learning with Hugging Face
8.1 Overview of Transfer Learning in AI
8.2 Transfer Learning Strategies and Techniques
8.3 Hands-on: Implementing Transfer Learning with Hugging Face Models for Various Tasks

Module 9: Crafting Sophisticated GUIs for AI Solutions
9.1 Overview of GUI-based AI Applications
9.2 Web-based Framework

9.3 Desktop Application Framework

Module 10: AI Communication and Deployment Pipeline
10.1 Communicating AI Results Effectively to Non-Technical Stakeholders
10.2 Building a Deployment Pipeline for AI Models
10.3 Developing Prototypes Based on Client Requirements
10.4 Hands-on: Deployment

Optional Module: AI Agents for Engineering
1. Understanding AI Agents
2. Case Studies
3. Hands-On Practice with AI Agents

Navazující kurzy

Recommended Certifications:

- AI+ Developer™
- AI+ Prompt Engineer Level 2™

Zkoušky a certifikace

Exam Details

- **Duration:** 90 minutes
- **Passing Score:** 70% (35/50)
- **Format:** 50 multiple-choice/multiple-response questions
- **Delivery Method:** Online via proctored exam platform (flexible scheduling)

Exam Blueprint:

- Foundations of Artificial Intelligence - 5%
- Introduction to AI Architecture - 10%
- Fundamentals of Neural Networks - 15%
- Applications of Neural Networks - 7%
- Significance of Large Language Models (LLM) - 8%
- Application of Generative AI - 8%
- Natural Language Processing - 15%
- Transfer Learning with Hugging Face - 15%
- Crafting Sophisticated GUIs for AI Solutions - 10%
- AI Communication and Deployment Pipeline - 7%

Termíny školení

Datum	Místo konání	Časové pásmo	Jazyk	Typ	Garance termínu	CENA
01 Jan 0001			English	Self Paced Training		Kč bez DPH 11,500.00

Dodatečné informace

Školení je možné zajistit na míru. Kontaktujte nás pro bližší informace.