



Enterprise Computing Solutions - Education Services

## TRAINING OFFERING

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**Sie erreichen uns unter**

Arrow ECS GmbH, Elsenheimerstraße 1, 80687 München

Email: [training.ecs.de@arrow.com](mailto:training.ecs.de@arrow.com)

Phone: +49 (0)89 930 99 168



<b>CODE:</b>	<b>LÄNGE:</b>	<b>PREIS:</b>
AIC_AT-320	40 Hours	€430.00

## Description

### Visualize Tomorrow: Neural Networks in Vision

**Deep AI Expertise:** Covers neural networks, NLP, and computer vision frameworks

**Enterprise AI:** Learn to design scalable AI systems for real-world impact

**Capstone Integration:** Build, test, and deploy advanced AI architectures

**Industry Preparedness:** Equips you for roles in high-demand AI design domains

**Included:** Instructor-led OR 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:**

- AutoGluon
- ChatGPT
- SonarCube
- Vertex AI

### 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

## Lernziel

- Advanced Neural Network Design
- AI Model Evaluation & Performance Metrics
- Generative AI for Architecture
- AI Deployment & Infrastructure
- Machine Learning Optimization Shape

## Zielgruppe

- **Architecture Professionals:** Enhance your architectural design skills by integrating AI to create scalable, efficient, and intelligent systems for modern solutions.
- **Systems Architects & Engineers:** Learn to leverage AI to design and build sophisticated, scalable infrastructures while automating key processes.
- **IT Infrastructure Managers:** Use AI to optimize architecture planning, streamline infrastructure deployment, and ensure seamless system integration.
- **Business Leaders:** Drive transformation within your organization by adopting AI-driven architectural solutions to enhance scalability, reduce costs.
- **Students & New Graduates:** Gain a competitive edge in the tech industry by mastering AI architectural techniques and tools.

## Voraussetzungen

- A foundational knowledge on neural networks, including their optimization and architecture for applications.
- Ability to evaluate models using various performance metrics to ensure accuracy and reliability.
- Willingness to know about AI infrastructure and deployment processes to implement and maintain AI systems effectively.

## Inhalt

### Certification Overview

Course Introduction

### Module 1: Fundamentals of Neural Networks

- 1.1 Introduction to Neural Networks
- 1.2 Neural Network Architecture
- 1.3 Hands-on: Implement a Basic Neural Network

### Module 2: Neural Network Optimization

- 2.1 Hyperparameter Tuning
- 2.2 Optimization Algorithms
- 2.3 Regularization Techniques
- 2.4 Hands-on: Hyperparameter Tuning and Optimization

### Module 3: Neural Network Architectures for NLP

- 3.1 Key NLP Concepts
- 3.2 NLP-Specific Architectures
- 3.3 Hands-on: Implementing an NLP Model

### Module 4: Neural Network Architectures for Computer Vision

- 4.1 Key Computer Vision Concepts
- 4.2 Computer Vision-Specific Architectures
- 4.3 Hands-on: Building a Computer Vision Model

### Module 5: Model Evaluation and Performance Metrics

- 5.1 Model Evaluation Techniques
- 5.2 Improving Model Performance
- 5.3 Hands-on: Evaluating and Optimizing AI Models

### Module 6: AI Infrastructure and Deployment

- 6.1 Infrastructure for AI Development
- 6.2 Deployment Strategies
- 6.3 Hands-on: Deploying an AI Model

### Module 7: AI Ethics and Responsible AI Design

- 7.1 Ethical Considerations in AI
- 7.2 Best Practices for Responsible AI Design
- 7.3 Hands-on: Analyzing Ethical Considerations in AI

### Module 8: Generative AI Models

- 8.1 Overview of Generative AI Models
- 8.2 Generative AI Applications in Various Domains
- 8.3 Hands-on: Exploring Generative AI Models

### Module 9: Research-Based AI Design

- 9.1 AI Research Techniques
- 9.2 Cutting-Edge AI Design
- 9.3 Hands-on: Analyzing AI Research Papers

### Module 10: Capstone Project and Course Review

- 10.1 Capstone Project Presentation
- 10.2 Course Review and Future Directions
- 10.3 Hands-on: Capstone Project Development

### Optional Module: AI Agents for Architect

1. Understanding AI Agents
2. Case Studies

### 3. Hands-On Practice with AI Agents

#### Weiterführende Kurse

- AI+ Cloud™

#### Test und Zertifizierung

##### 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

- Fundamentals of Neural Networks – 10%
- Neural Network Optimization – 10%
- Neural Network Architectures for NLP – 10%
- Neural Network Architectures for Computer Vision – 10%
- Model Evaluation and Performance Metrics – 10%
- AI Infrastructure and Deployment – 10%
- AI Ethics and Responsible AI Design – 10%
- Generative AI Models – 10%
- Research-Based AI Design – 10%
- Capstone Project and Course Review – 10%

#### Kurstermine

Datum	Lokation	Time Zone	Sprache	Type	Durchführungsgarantie	PREIS
01 Jan 0001			English	Self Paced Training		€430.00

#### Zusätzliche Information

[Diese Schulung ist auch als Vor-Ort-Schulung verfügbar. Bitte kontaktieren Sie uns, um mehr zu erfahren.](#)