

Learning Paths for Developers and Administrators

March 2024

Learning Paths by Role and Topic

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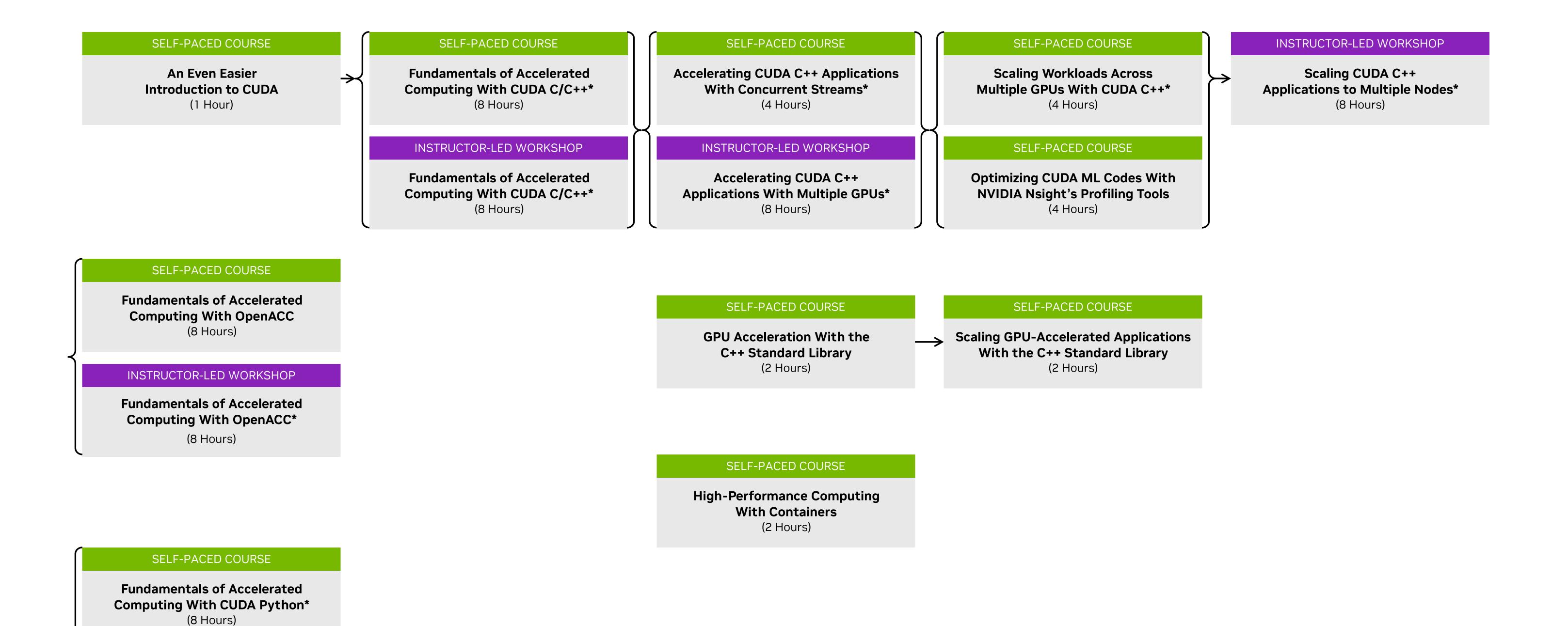
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Industry-Related Training	
Simulation, Data Modeling, and Design	

To develop a customized training plan for your organization, connect with one of our training advisors.



Accelerated Computing Training

For Developers



INSTRUCTOR-LED WORKSHOP

Fundamentals of Accelerated

Computing With CUDA Python**

(8 Hours)

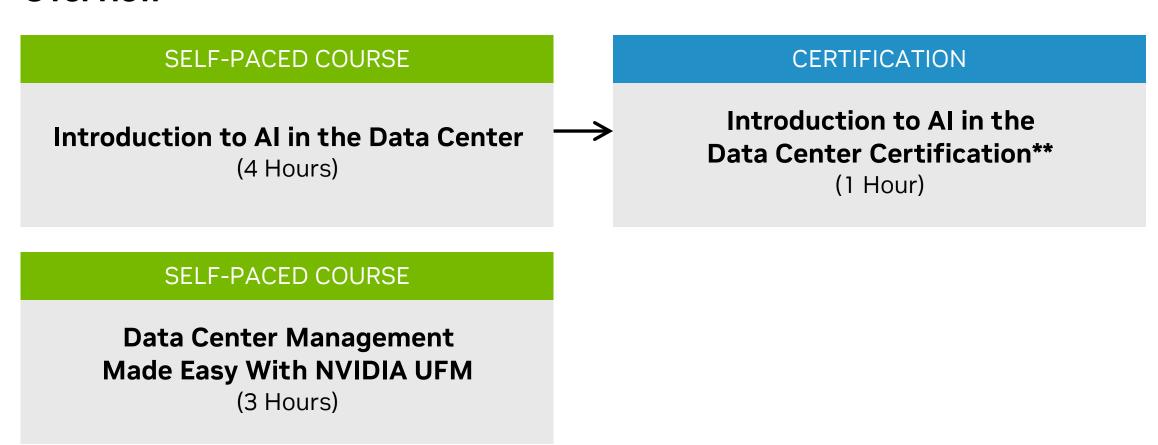
- * NVIDIA Certificate of Competency
- ** Digital Badge Available
- **{ }** Braces Indicate Alternate Paths



Accelerated Computing Training

For Administrators

Overview



NVIDIA AI Enterprise Choose the courses that best match your learning needs.

SELF-PACED COURSE **NVIDIA AI Enterprise Administrator** (8 Hours)

INSTRUCTOR-LED WORKSHOP

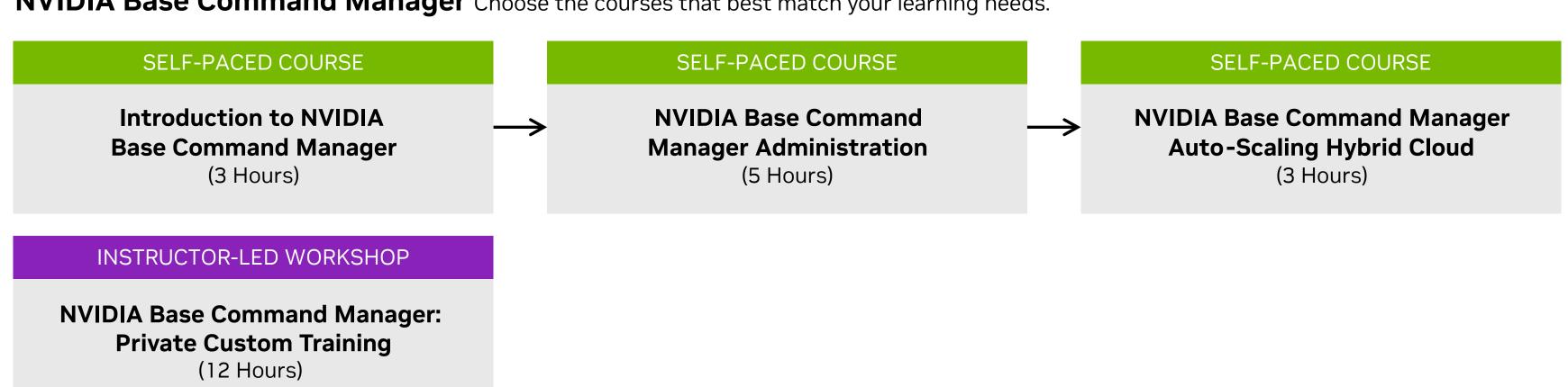
NVIDIA AI Enterprise Administrator:

NVIDIA AI Enterprise Administrator: Public Training (12 Hours)

Private Customized Training (12 Hours)

INSTRUCTOR-LED WORKSHOP

NVIDIA Base Command Manager Choose the courses that best match your learning needs.



NVIDIA DGX Choose the courses that best match your learning needs.

INSTRUCTOR-LED WORKSHOP

NVIDIA DGX H100 / A100 **Administration: Public Workshop** (12 Hours)

INSTRUCTOR-LED WORKSHOP

NVIDIA DGX H100 / A100 **Administration: Private Workshop** (12 Hours)

INSTRUCTOR-LED WORKSHOP

NVIDIA DGX BasePOD Administration: Private Workshop (12 Hours)

INSTRUCTOR-LED WORKSHOP

NVIDIA DGX SuperPOD Administration: Private Workshop (12 Hours)

SELF-PACED COURSE

NVIDIA DGX Cloud (1 Hour)

- * NVIDIA Certificate of Competency
- ** Digital Badge Available
- Braces Indicate Alternate Paths



Computer Vision and Video Analytics Training

For Developers



SELF-PACED COURSE

Building Video Al Applications at

the Edge on NVIDIA Jetson Nano

(8 Hours)

SELF-PACED COURSE

Getting Started With Al

on NVIDIA Jetson Nano*

(8 Hours)

- * NVIDIA Certificate of Competency
- ** Digital Badge Available
- **Braces Indicate Alternate Paths**



Cybersecurity and Fraud Detection Training

For Developers

Digital Fingerprinting With Morpheus
(1 Hour)

Building Al-Based
Cybersecurity Pipelines
(8 Hours)

INSTRUCTOR-LED WORKSHOP

Building Deep Learning-Based
Anti-Fraud Applications
(Chinese Only) (8 Hours)

- NVIDIA Certificate of Competency
- ** Digital Badge Available
- **{ }** Braces Indicate Alternate Paths



Data Center Overview Training

For Administrators

Platform Overview Choose the courses that best match your learning needs.

SELF-PACED COURSE

Introduction to AI in the Data Center (4 Hours)

SELF-PACED COURSE

Data Center Management Made Easy With NVIDIA UFM (3 Hours)

SELF-PACED COURSE

NVIDIA AI Enterprise Administrator (8 Hours)

INSTRUCTOR-LED WORKSHOP

NVIDIA AI Enterprise Administrator: Private Customized Training (12 Hours)

INSTRUCTOR-LED WORKSHOP

NVIDIA AI Enterprise Administrator: Public Training (12 Hours)

SELF-PACED COURSE

Introduction to NVIDIA Base Command Manager (3 Hours)

SELF-PACED COURSE

NVIDIA License System (2 Hours)

Compute Choose the courses that best match your learning needs.

INSTRUCTOR-LED WORKSHOP

NVIDIA DGX BasePOD Administration: Private Workshop (12 Hours)

INSTRUCTOR-LED WORKSHOP

NVIDIA DGX SuperPOD Administration: Private Workshop (12 Hours)

INSTRUCTOR-LED WORKSHOP

NVIDIA DGX H100 / A100 **Administration: Public Workshop** (12 Hours)

INSTRUCTOR-LED WORKSHOP

NVIDIA DGX H100 / A100 **Administration: Private Workshop** (12 Hours)

SELF-PACED COURSE

NVIDIA DGX Cloud Administration (1 Hour)

Networking Choose the courses that best match your learning needs.

SELF-PACED COURSE

Introduction to Networking (1 Hour)

SELF-PACED COURSE

NVIDIA BlueField DPU Administration (3 Hours)

InfiniBand Essentials

SELF-PACED COURSE

(1.5 Hours)

Networking Software Choose the courses that best match your learning needs.

SELF-PACED COURSE

Introduction to NVIDIA DOCA for DPUs (2 Hours)

SELF-PACED COURSE

Network Administration With NVIDIA Onyx Switch System (3 Hours)

SELF-PACED COURSE

Fundamentals of RDMA Programming (4 Hours)

SELF-PACED COURSE

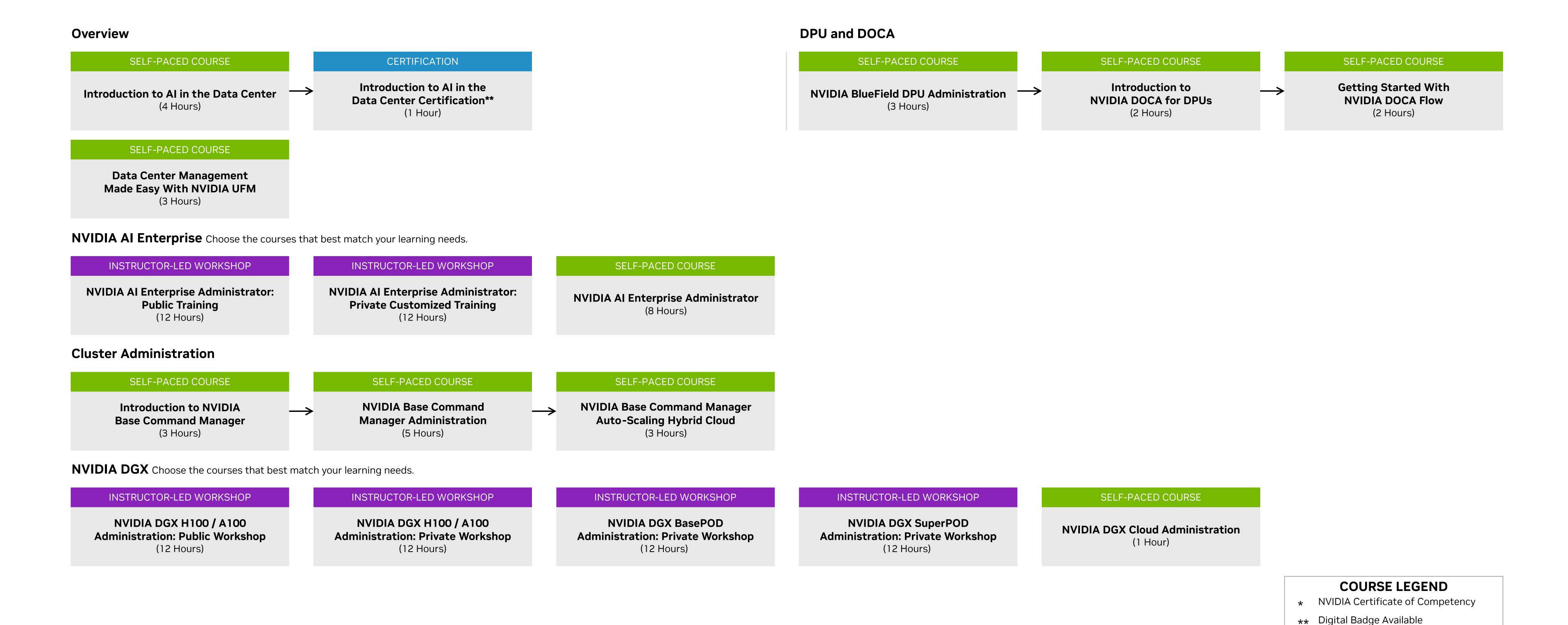
Ansible Essentials for Network Engineers (3 Hours)

- * NVIDIA Certificate of Competency
- ** Digital Badge Available
- Braces Indicate Alternate Paths



Data Center and Cloud Training

For Administrators

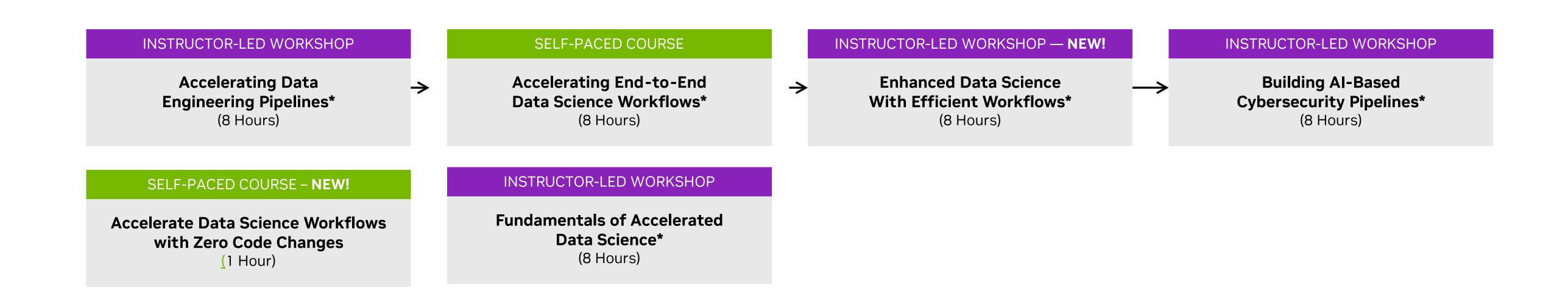


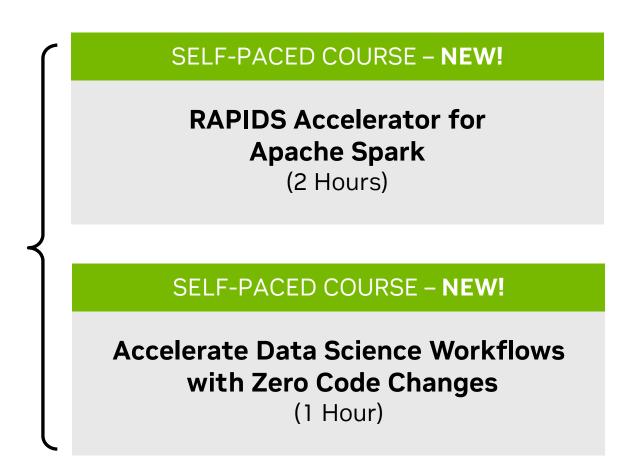


Braces Indicate Alternate Paths

Data Science Training

For Developers





- * NVIDIA Certificate of Competency
- ** Digital Badge Available
- Braces Indicate Alternate Paths

Deep Learning Training For Developers

SELF-PACED COURSE SELF-PACED COURSE **Building a Brain in 10 Minutes Optimized Vehicle Routing** (10 Minutes) (1 Hour) SELF-PACED COURSE SELF-PACED COURSE SELF-PACED COURSE INSTRUCTOR-LED WORKSHOP SELF-PACED COURSE **INSTRUCTOR-LED WORKSHOP** Data Parallelism: How to Train Deep **Building Real-Time Disaster Risk Monitoring** Model Parallelism: Building and **Deploying a Model for Inference Getting Started With Deep Learning* Learning Models on Multiple GPUs* Deploying Large Neural Networks*** at Production Scale **Video AI Applications Using Satellite Imagery** (8 Hours) (8 Hours) (8 Hours) (8 Hours) (8 Hours) (4 Hours) SELF-PACED COURSE SELF-PACED COURSE **INSTRUCTOR-LED WORKSHOP Getting Started With Introduction to Graph Fundamentals of Deep Learning* Image Segmentation Neural Networks** (8 Hours) (2 Hours) (2 Hours) SELF-PACED COURSE SELF-PACED COURSE Modeling Time-Series Data With **Introduction to Physics-Informed Recurrent Neural Networks in Keras** Machine Learning With NVIDIA Modulus (2 Hours) (4 Hours) **INSTRUCTOR-LED WORKSHOP** SELF-PACED COURSE **Building Deep Learning-Based NVIDIA NeMo Framework** Anti-Fraud Applications (Chinese Only) (8 Hours) (8 Hours)

- * NVIDIA Certificate of Competency
- ** Digital Badge Available
- Braces Indicate Alternate Paths



Edge Computing Training For Developers

SELF-PACED COURSE SELF-PACED COURSE **Getting Started With Al Building Video AI Applications at** the Edge on NVIDIA Jetson Nano* on NVIDIA Jetson Nano* (8 Hours) (8 Hours) SELF-PACED COURSE **Integrating Sensors** With NVIDIA DRIVE (2 Hours) SELF-PACED COURSE

SELF-PACED COURSE

Optimized Vehicle Routing

(1 Hour)

Introduction to Robotic Simulations in NVIDIA Isaac Sim (4 Hours)

SELF-PACED COURSE

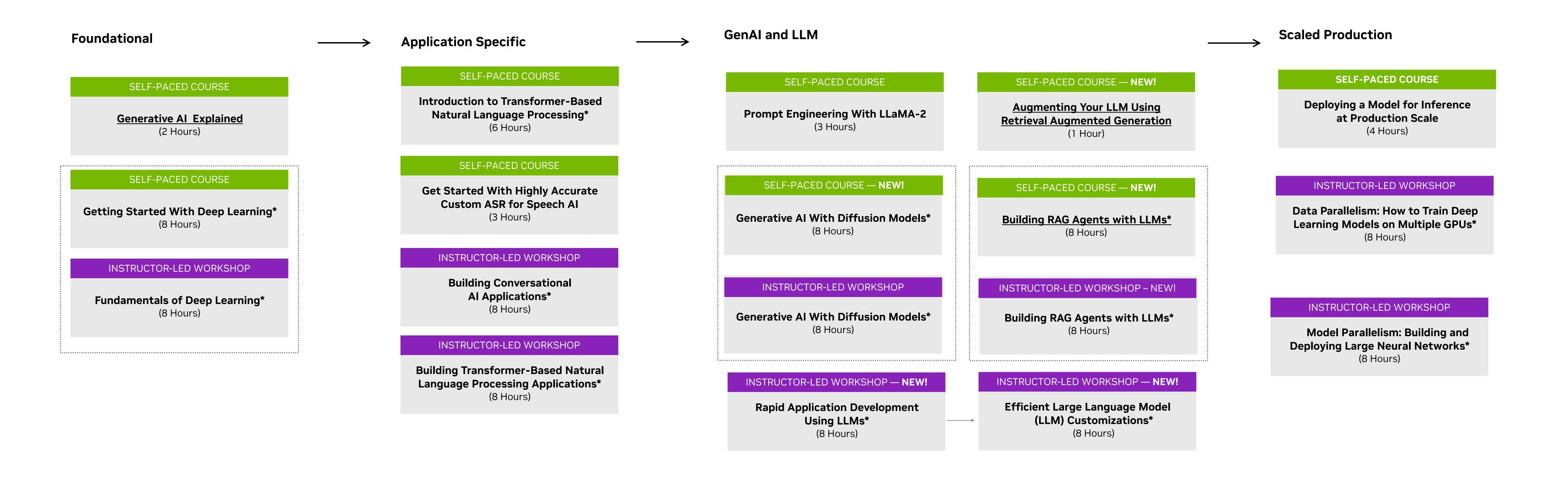
Assemble a Simple Robot in NVIDIA Issac Sim (30 Minutes)

- * NVIDIA Certificate of Competency
- ** Digital Badge Available
- Braces Indicate Alternate Paths



Generative Al and Large Language Models Training

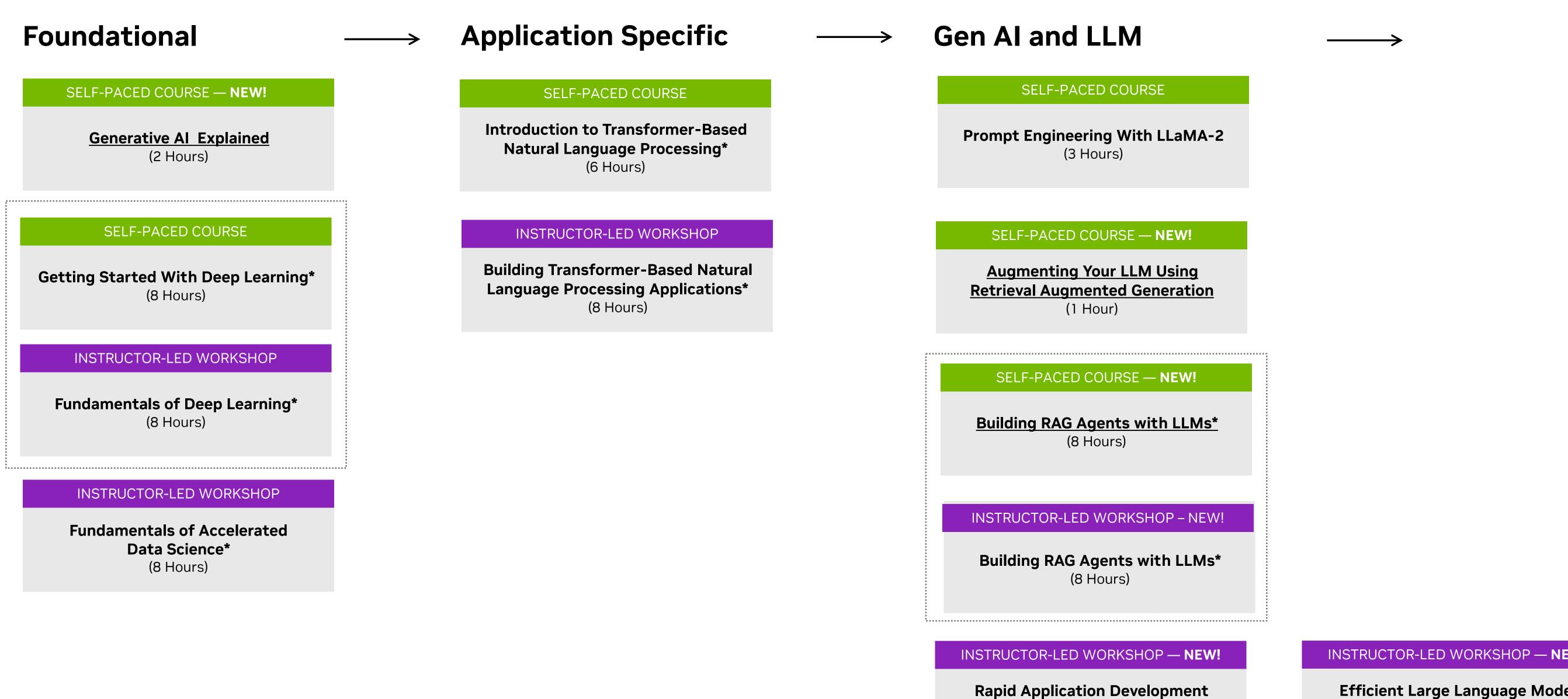
For Developers



- * NVIDIA Certificate of Competency
- ** Digital Badge Available
- { } Braces Indicate Alternate Paths



Recommended Training for Gen Al LLM Certification



Certification

CERTIFICATION

Generative Al Large Language Models (1 Hour Exam)

Link coming soon

Additional resources to prepare for the exam:

- Getting Started with Large Language Models for Enterprise Solutions (blog, 20 minutes)
- The Fast Path to Developing With LLMs (Video on demand, 50 minutes)
- Running Your Own LLM (Video on demand, 40 minutes)
- What Is Retrieval-Augmented Generation aka RAG? (Blog, 15 minutes)
- <u>Trustworthy AI</u> (Webpage)

INSTRUCTOR-LED WORKSHOP — **NEW!**

Efficient Large Language Model (LLM) Customizations* (8 Hours)

COURSE LEGEND

- * NVIDIA Certificate of Competency
- ** Digital Badge Available
- Braces Indicate Alternate Paths

Using LLMs*

(8 Hours)

Recommended Training for Gen Al Multimodal Certification

Foundational SELF-PACED COURSE — **NEW!** SELF-PACED COURSE SELF-PACED COURSE **Introduction to Transformer-Based Get Started With Highly Accurate Generative AI Explained Custom ASR for Speech Al Natural Language Processing*** (2 Hours) (3 Hours) (6 Hours) SELF-PACED COURSE — **NEW!** SELF-PACED COURSE **INSTRUCTOR-LED WORKSHOP Building Conversational Getting Started With Deep Learning* Generative AI With Diffusion Models*** Al Applications* (8 Hours) (8 Hours) (8 Hours) INSTRUCTOR-LED WORKSHOP INSTRUCTOR-LED WORKSHOP — **NEW! INSTRUCTOR-LED WORKSHOP Computer Vision for Generative AI With Diffusion Models* Fundamentals of Deep Learning* Industrial Inspection*** (8 Hours) (8 Hours) (8 Hours) **INSTRUCTOR-LED WORKSHOP** INSTRUCTOR-LED WORKSHOP — **NEW!** INSTRUCTOR-LED WORKSHOP — **NEW!** INSTRUCTOR-LED WORKSHOP **Applications of AI for Rapid Application Development Efficient Large Language Model Fundamentals of Accelerated Anomaly Detection*** Using LLMs* (LLM) Customizations* **Data Science*** (8 Hours) (8 Hours) (8 Hours) (8 Hours)

Scaled Production ——> Certification

SELF-PACED COURSE

Deploying a Model for Inference at Production Scale (4 Hours) Generative Al
Multimodal Associate
(1 Hour Exam)
Link coming soon

CERTIFICATION

Additional resources to prepare for the exam:

- <u>High-Resolution Image Synthesis via Two-Stage Generative Models</u> (Video on demand, 35 minutes)
- Accelerated Creative AI –Using NVIDIA-optimized image generation for Media and Entertainment (Webinar on demand, 1 hour)

INSTRUCTOR-LED WORKSHOP

Applications of Al for

Predictive Maintenance*

(8 Hours)

- <u>Building Lifelike Digital Avatars with NVIDIA ACE Microservices</u> (Blog, 15 minutes)
- The Future of Generative AI for Content Creation (Video on demand, 35 minutes)

- * NVIDIA Certificate of Competency
- ** Digital Badge Available
- Braces Indicate Alternate Paths

Infrastructure for Generative AI and Large Language Models Training

For Administrators

Overview

SELF-PACED COURSE

Introduction to Al in the Data Center (4 Hours)

CERTIFICATION

Introduction to Al in the Data Center Certification**
(1 Hour)

NVIDIA AI Enterprise

SELF-PACED COURSE

NVIDIA AI Enterprise Administrator (8 Hours)

INSTRUCTOR-LED WORKSHOP

NVIDIA AI Enterprise Administrator:
Public Training
(12 Hours)

INSTRUCTOR-LED WORKSHOP

NVIDIA AI Enterprise Administrator:
Private Customized Training
(12 Hours)

SELF-PACED COURSE

NVIDIA NeMo Framework (8 Hours)

SELF-PACED COURSE

RAPIDS Accelerator for Apache Spark (2 Hours)

NVIDIA DGX

INSTRUCTOR-LED WORKSHOP

NVIDIA DGX H100 / A100 Administration: Public Workshop (12 Hours)

INSTRUCTOR-LED WORKSHOP

NVIDIA DGX H100 / A100
Administration: Private Workshop
(12 Hours)

INSTRUCTOR-LED WORKSHOP

NVIDIA DGX BasePOD Administration: Private Workshop (12 Hours)

INSTRUCTOR-LED WORKSHOP

NVIDIA DGX SuperPOD Administration: Private Workshop (12 Hours)

SELF-PACED COURSE

NVIDIA DGX Cloud Administration (1 Hour)

Introduction to Networking

SELF-PACED COURSE

Introduction to Networking
(1 Hour)

SELF-PACED COURSE

InfiniBand Essentials

troduction to Networking InfiniBand Essent

(1.5 Hours)

Additional Recommended Training

SELF-PACED COURSE

Introduction to NVIDIA
Base Command Manager
(3 Hours)

SELF-PACED COURSE

Data Center Management Made Easy With NVIDIA UFM (3 Hours)

SELF-PACED COURSE

Introduction to NVIDIA DOCA for DPUs (2 Hours)

SELF-PACED COURSE

Getting Started With NVIDIA DOCA Flow (2 Hours)

- * NVIDIA Certificate of Competency
- ** Digital Badge Available
- Braces Indicate Alternate Paths



Industry-Related Training

For Developers

Energy

INSTRUCTOR-LED WORKSHOP

Computer Vision for Industrial Inspection* (8 Hours)

INSTRUCTOR-LED WORKSHOP

Applications of AI for **Predictive Maintenance*** (8 Hours)

Financial Services

SELF-PACED COURSE

Digital Fingerprinting With NVIDIA Morpheus

(1 Hour)

INSTRUCTOR-LED WORKSHOP

Building AI-Based Cybersecurity Pipelines (8 Hours)

INSTRUCTOR-LED WORKSHOP

Applications of AI for Anomaly Detection*

(8 Hours)

INSTRUCTOR-LED WORKSHOP

Building Intelligent Recommender Systems* (8 Hours)

Manufacturing

INSTRUCTOR-LED WORKSHOP

Computer Vision for Industrial Inspection*

(8 Hours)

INSTRUCTOR-LED WORKSHOP

Applications of AI for Predictive Maintenance* (8 Hours)

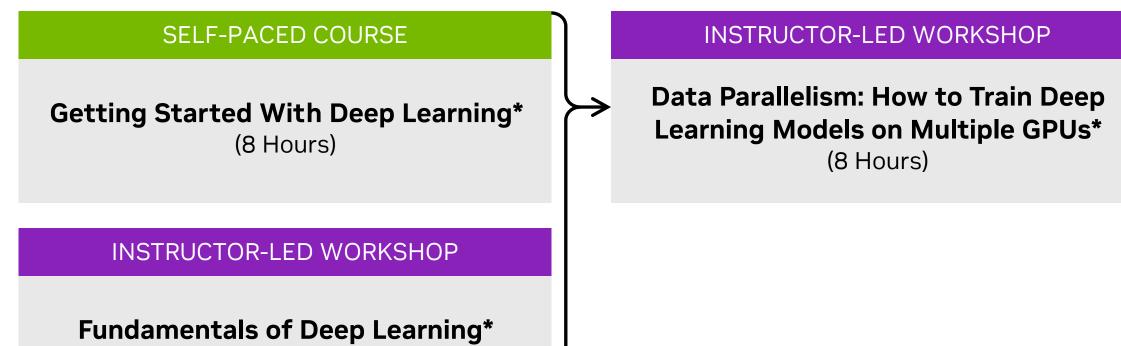
Transportation

SELF-PACED COURSE

Integrating Sensors With NVIDIA DRIVE (2 Hours)

Healthcare and Life Sciences

(8 Hours)



INSTRUCTOR-LED WORKSHOP

Model Parallelism: Building and Deploying Large Neural Networks* (8 Hours)

- * NVIDIA Certificate of Competency
- ** Digital Badge Available
- Braces Indicate Alternate Paths



Networking Training

For Administrators

Overview

SELF-PACED COURSE

Introduction to Networking
(1 Hour)

NVIDIA Cumulus

INSTRUCTOR-LED WORKSHOP

NVIDIA Cumulus Linux: Public Boot Camp (12 Hours)

INSTRUCTOR-LED WORKSHOP

NVIDIA Cumulus Linux: Private Customized Workshop (20 Hours)

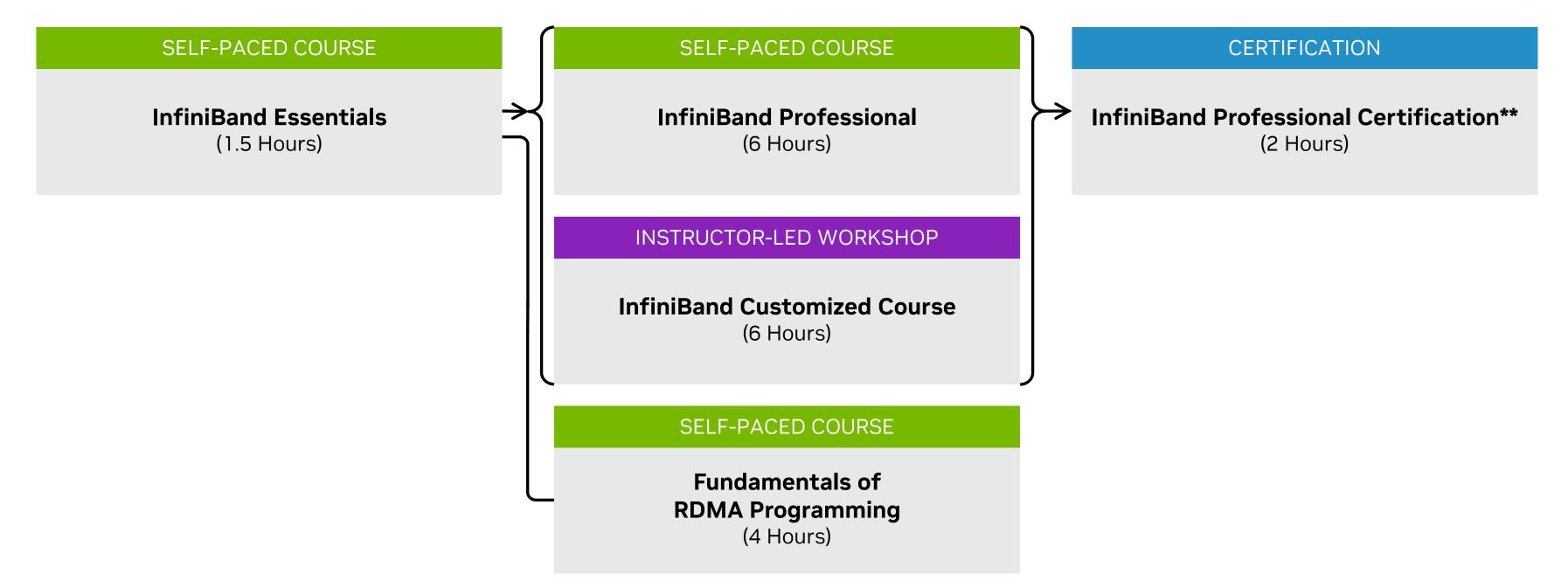
Other

SELF-PACED COURSE

Network Administration With NVIDIA Onyx Switch System (3 Hours) SELF-PACED COURSE

RDMA Over Converged Ethernet from A to Z (10 Hours)

InfiniBand



- * NVIDIA Certificate of Competency
- ** Digital Badge Available
- **{ }** Braces Indicate Alternate Paths



Simulation, Data Modeling, and Design Training

For Developers and Administrators

Extensions

SELF-PACED COURSE — **NEW!**

Essentials of Developing NVIDIA Omniverse Kit Applications

(2 Hours)

SELF-PACED COURSE

Build Beautiful, Custom UI for 3D Tools on NVIDIA Omniverse (90 Minutes)

SELF-PACED COURSE

Easily Develop Advanced 3D Layout Tools on NVIDIA Omniverse

(90 Minutes)

SELF-PACED COURSE

How to Build Custom 3D Scene Manipulator Tools on NVIDIA Omniverse (90 Minutes)

Generative Al

SELF-PACED COURSE — **NEW!**

Generative AI Explained (2 Hours)

SELF-PACED COURSE

Develop, Customize, and Publish in **NVIDIA Omniverse With Extensions** (8 Hours)

Simulation and Synthetic Data

SELF-PACED COURSE

Introduction to Robotic Simulations in NVIDIA Isaac Sim

(4 Hours)

INSTRUCTOR-LED WORKSHOP — **NEW!**

Bootstrapping Computer Vision Models With Synthetic Data* (8 Hours)

SELF-PACED COURSE - **NEW!**

Synthetic Tabular Data Generation Using Transformers (4 Hours)

INSTRUCTOR-LED WORKSHOP

Building Digital Avatar Pipelines With Omniverse Audio2Face and Riva* (Chinese) (8 Hours)

SELF-PACED COURSE

Assemble a Simple Robot in NVIDIA Issac Sim (30 Minutes)

OpenUSD

SELF-PACED COURSE

Getting Started With USD for Collaborative 3D Workflows (4 Hours)

SELF-PACED COURSE

Essentials of USD in NVIDIA Omniverse (2 Hours)

- * NVIDIA Certificate of Competency
- ** Digital Badge Available
- Braces Indicate Alternate Paths



