

# Learning Paths for Developers and Administrators

May 2024

### Learning Paths by Role and Topic

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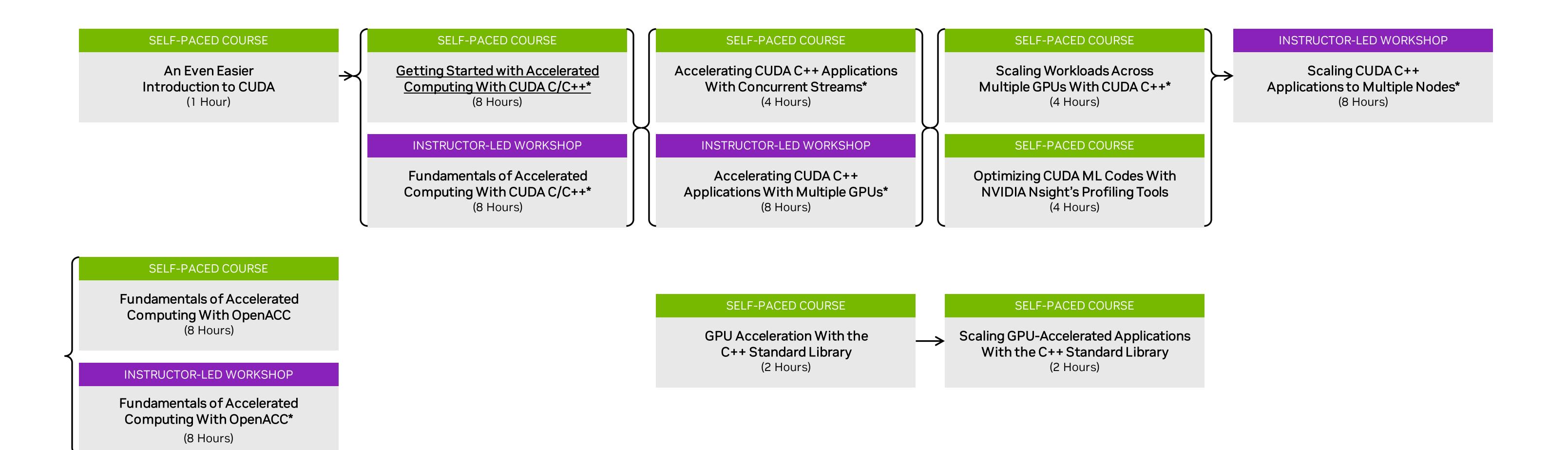
| For Developers                                 | For Administrators                        |
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| Computer Vision and Video Analytics            | <u>Data Center Overview</u>               |
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| Industry-Related 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



#### SELF-PACED COURSE

Fundamentals of Accelerated Computing With CUDA Python\* (8 Hours)

#### INSTRUCTOR-LED WORKSHOP

Fundamentals of Accelerated Computing With CUDA Python\*\* (8 Hours)

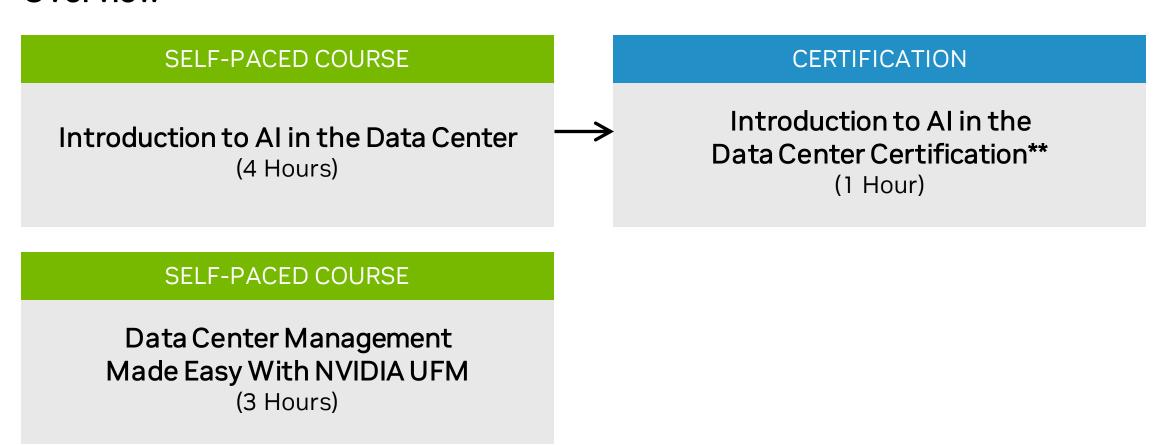
- \* NVIDIA Certificate of Competency
- \*\* Digital Badge Available
- Braces Indicate Alternate Paths



### Accelerated Computing Training

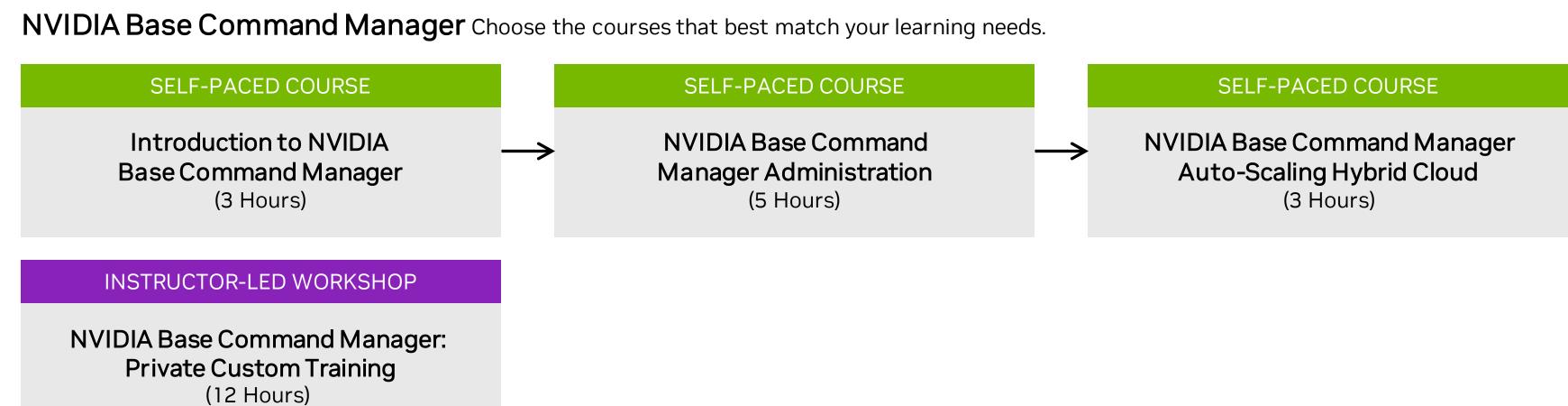
For Administrators

#### Overview



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

# SELF-PACED COURSE NVIDIA AI Enterprise Administrator (8 Hours) NVIDIA AI Enterprise Administrator: Public Training (12 Hours) NVIDIA Base Command Manager Choose the courses that best match your learning needs.



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

### NVIDIA DGX H100 / A100

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

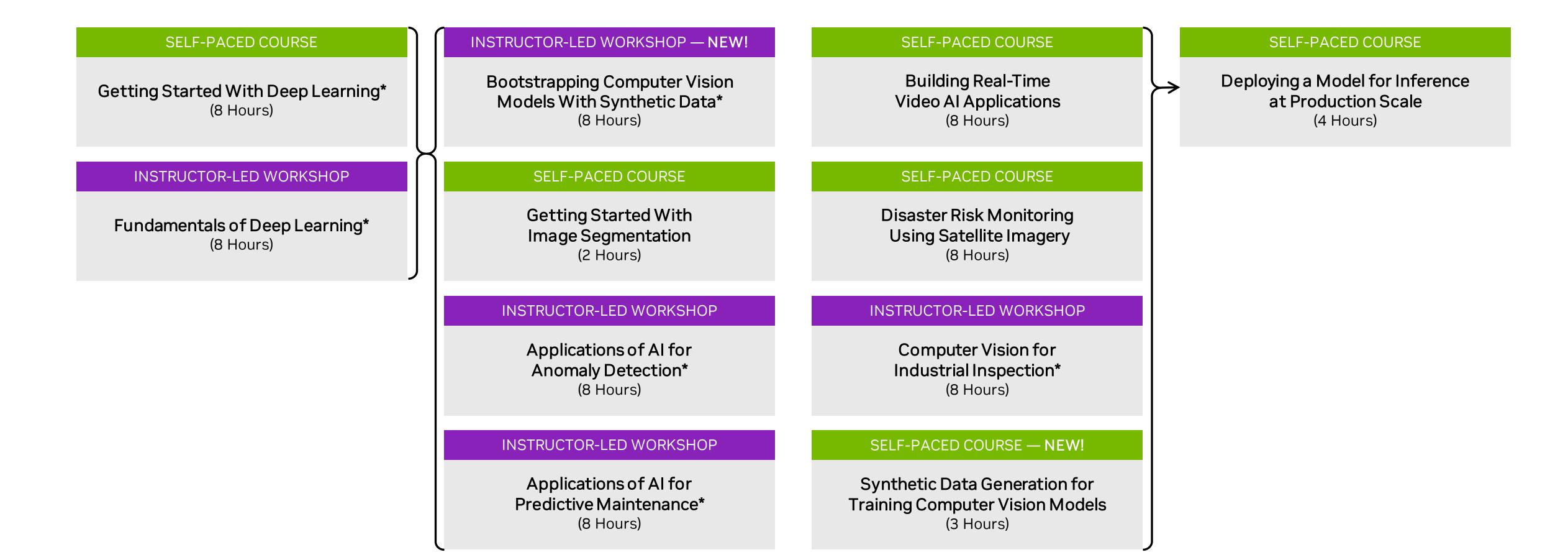
NVIDIA DGX SuperPOD Administration: Private Workshop (12 Hours)

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



### Computer Vision and Video Analytics Training

For Developers



SELF-PACED COURSE

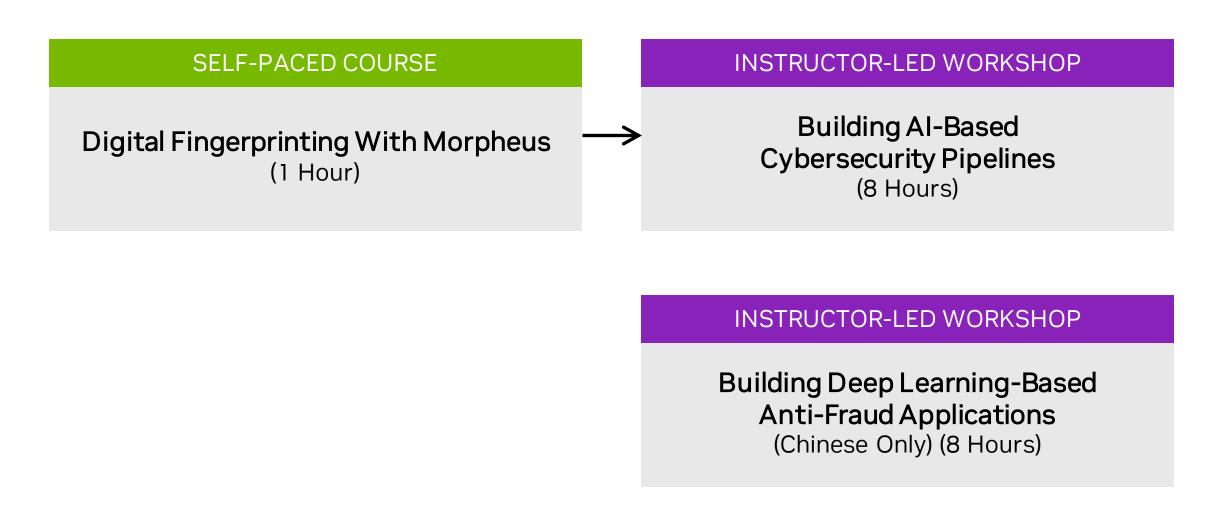
Getting Started With Al on NVIDIA Jetson Nano\* (8 Hours)

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



### Cybersecurity and Fraud Detection Training

For Developers



- 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)

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

**Networking Software** 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)

SELF-PACED COURSE

InfiniBand Essentials (1.5 Hours)

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

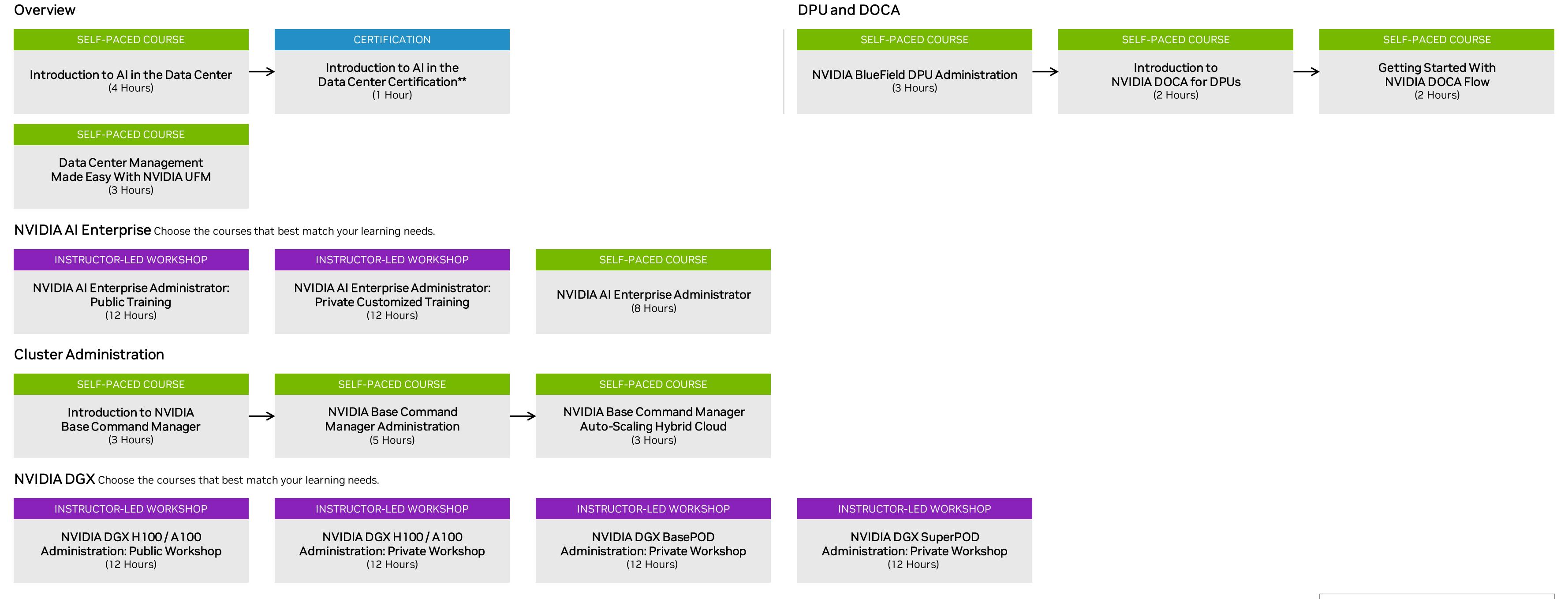
Ansible Essentials for Network Engineers (3 Hours)

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



### Data Center and Cloud Training

#### For Administrators



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



### Data Science Training

For Developers

#### INSTRUCTOR-LED WORKSHOP

Accelerating Data
Engineering Pipelines\*
(8 Hours)

#### SELF-PACED COURSE

Accelerating End-to-End
Data Science Workflows\*
(6 Hours)

#### INSTRUCTOR-LED WORKSHOP — **NEW!**

Enhanced Data Science With Efficient Workflows\* (8 Hours)

#### INSTRUCTOR-LED WORKSHOP

Building Al-Based Cybersecurity Pipelines\* (8 Hours)

#### INSTRUCTOR-LED WORKSHOP

Fundamentals of Accelerated
Data Science\*
(8 Hours)

#### SELF-PACED COURSE – **NEW!**

RAPIDS Accelerator for Apache Spark (2 Hours)

#### SELF-PACED COURSE – **NEW!**

Accelerate Data Science Workflows with Zero Code Changes (1 Hour)

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



## Deep Learning Training For Developers

SELF-PACED COURSE

Building a Brain in 10 Minutes (10 Minutes)

SELF-PACED COURSE Getting Started With Deep Learning\* (8 Hours) **INSTRUCTOR-LED WORKSHOP** Fundamentals of Deep Learning\* (8 Hours)

SELF-PACED COURSE

**Building Real-Time** Video Al Applications (8 Hours)

SELF-PACED COURSE

**Getting Started With** Image Segmentation (2 Hours)

SELF-PACED COURSE

Introduction to Physics-Informed Machine Learning With NVIDIA Modulus (4 Hours)

INSTRUCTOR-LED WORKSHOP

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

SELF-PACED COURSE

Disaster Risk Monitoring Using Satellite Imagery (8 Hours)

SELF-PACED COURSE

Introduction to Graph Neural Networks (2 Hours)

INSTRUCTOR-LED WORKSHOP

Data Parallelism: How to Train Deep Learning Models on Multiple GPUs\* (8 Hours)

**INSTRUCTOR-LED WORKSHOP** 

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

SELF-PACED COURSE

Deploying a Model for Inference at Production Scale (4 Hours)

**COURSE LEGEND** 

\* NVIDIA Certificate of Competency

\*\* Digital Badge Available

Braces Indicate Alternate Paths



# Edge Computing Training For Developers

#### SELF-PACED COURSE

Getting Started With Al on NVIDIA Jetson Nano\* (8 Hours)

#### SELF-PACED COURSE

Integrating Sensors With NVIDIA DRIVE (2 Hours)

#### SELF-PACED COURSE

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

#### SELF-PACED COURSE

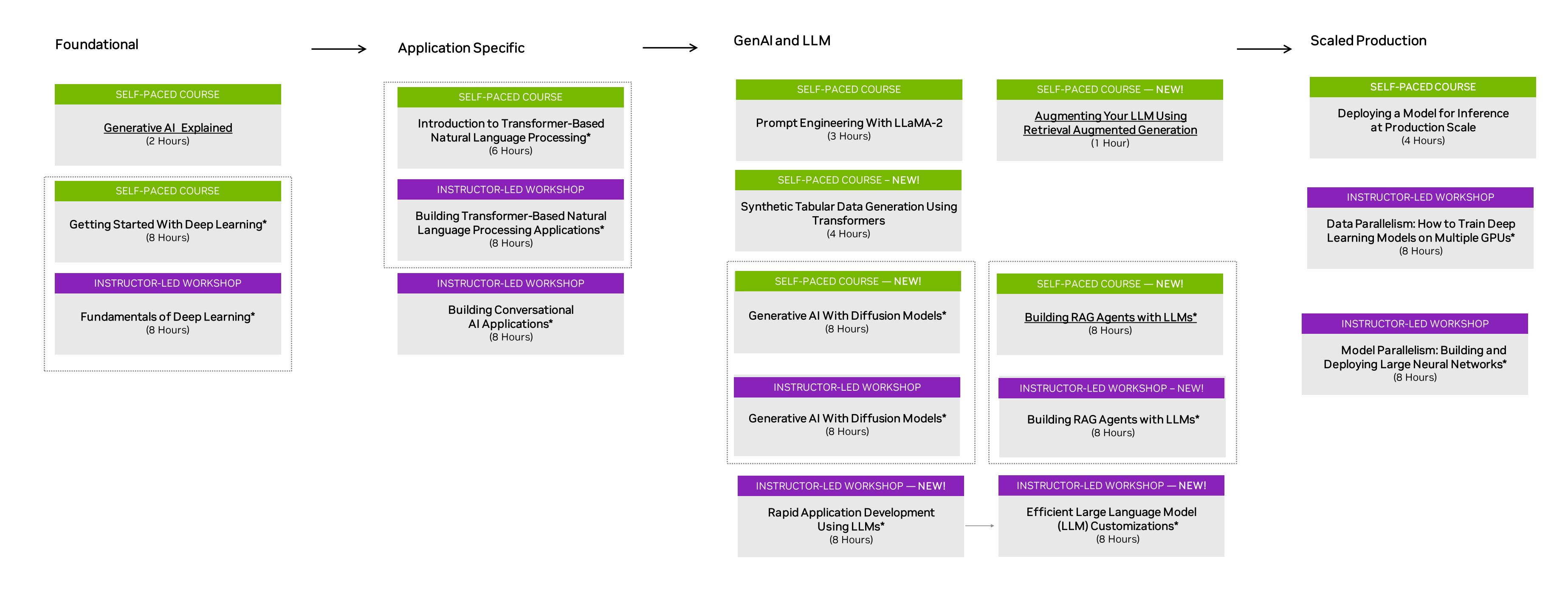
Assemble a Simple Robot in NVIDIA Issac Sim (30 Minutes)

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



### Generative Al and Large Language Models Training

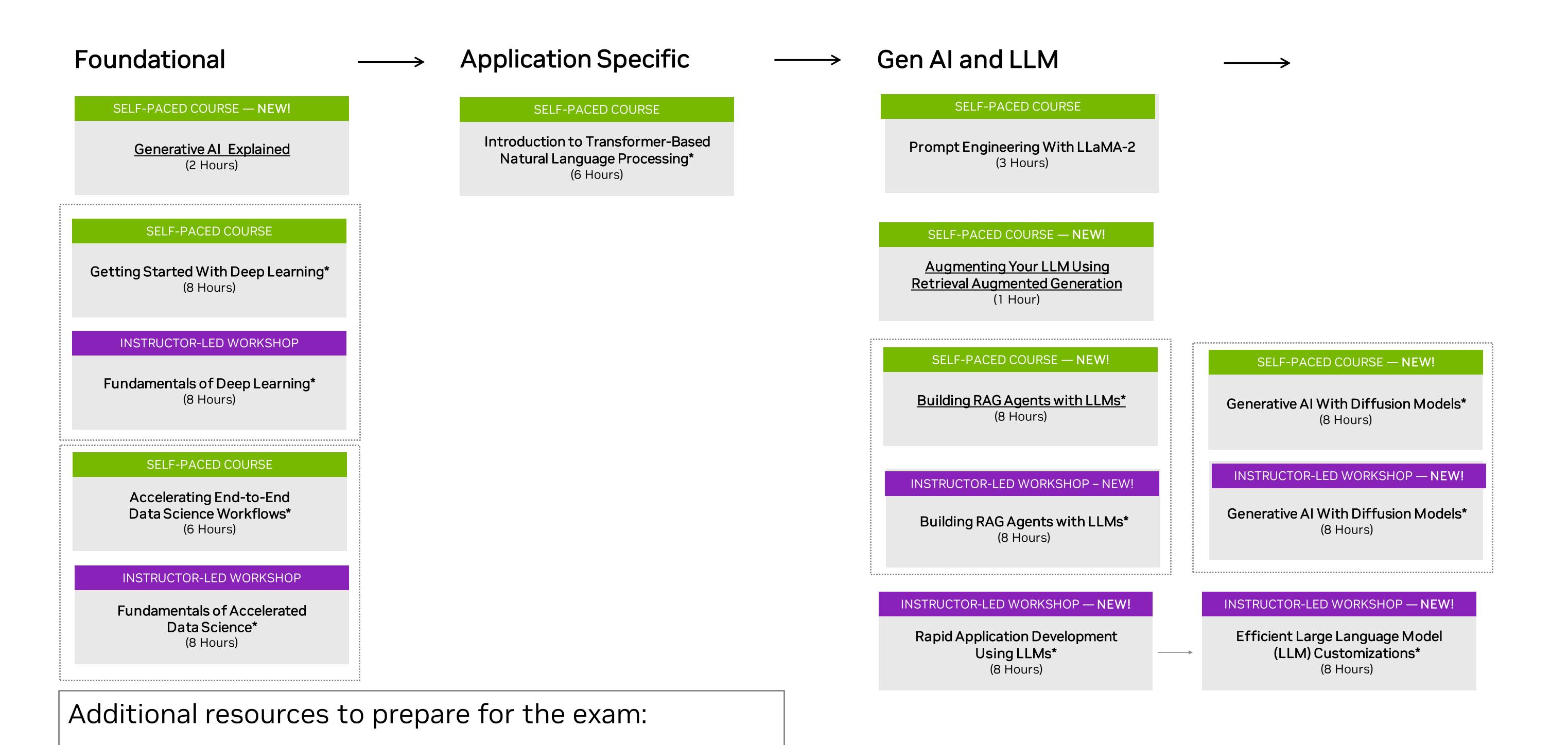
For Developers



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



### Recommended Training for Gen Al LLM Certification



Getting Started with Large Language Models for Enterprise Solutions (blog, 20 minutes)

• The Fast Path to Developing With LLMs (Video on demand, 50 minutes)

What Is Retrieval-Augmented Generation aka RAG? (Blog, 15 minutes)

Running Your Own LLM (Video on demand, 40 minutes)

<u>Trustworthy AI</u> (Webpage)

#### Certification

CERTIFICATION

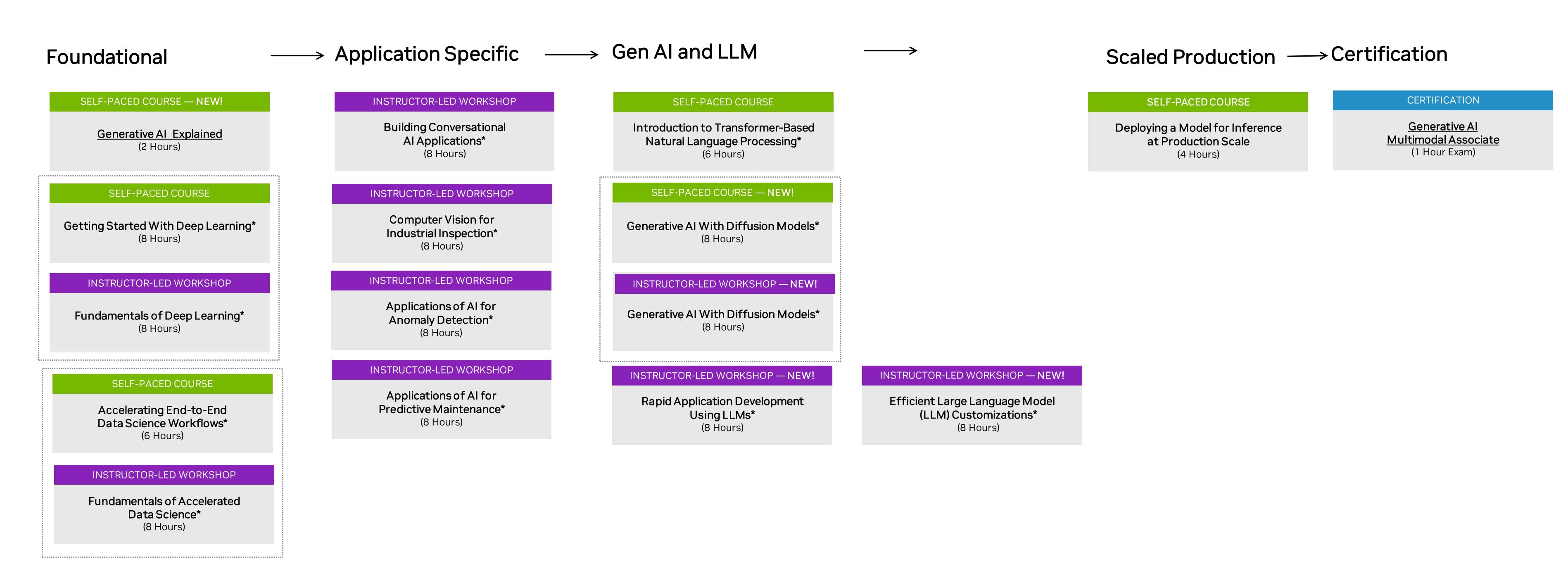
Generative AI

Large Language Models

(1 Hour Exam)

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

### Recommended Training for Gen Al Multimodal 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)
- <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 Al and Large Language Models Training

#### For Administrators

#### Overview

SELF-PACED COURSE

Introduction to AI in the Data Center (4 Hours)

#### CERTIFICATION

Introduction to AI 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

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)

#### Introduction to Networking

SELF-PACED COURSE

Introduction to Networking (1 Hour)

#### SELF-PACED COURSE

InfiniBand Essentials

(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 Al 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)

#### Manufacturing

**INSTRUCTOR-LED WORKSHOP** 

Computer Vision for Industrial Inspection\* (8 Hours)

Applications of Al for Predictive Maintenance\*

#### Transportation

SELF-PACED COURSE

**Integrating Sensors** With NVIDIA DRIVE (2 Hours)

#### Healthcare and Life Sciences

SELF-PACED COURSE Getting Started With Deep Learning\* (8 Hours) INSTRUCTOR-LED WORKSHOP

Fundamentals of Deep Learning\*

(8 Hours)

**INSTRUCTOR-LED WORKSHOP** Data Parallelism: How to Train Deep Learning Models on Multiple GPUs\* (8 Hours)

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

INSTRUCTOR-LED WORKSHOP

#### **INSTRUCTOR-LED WORKSHOP**

(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

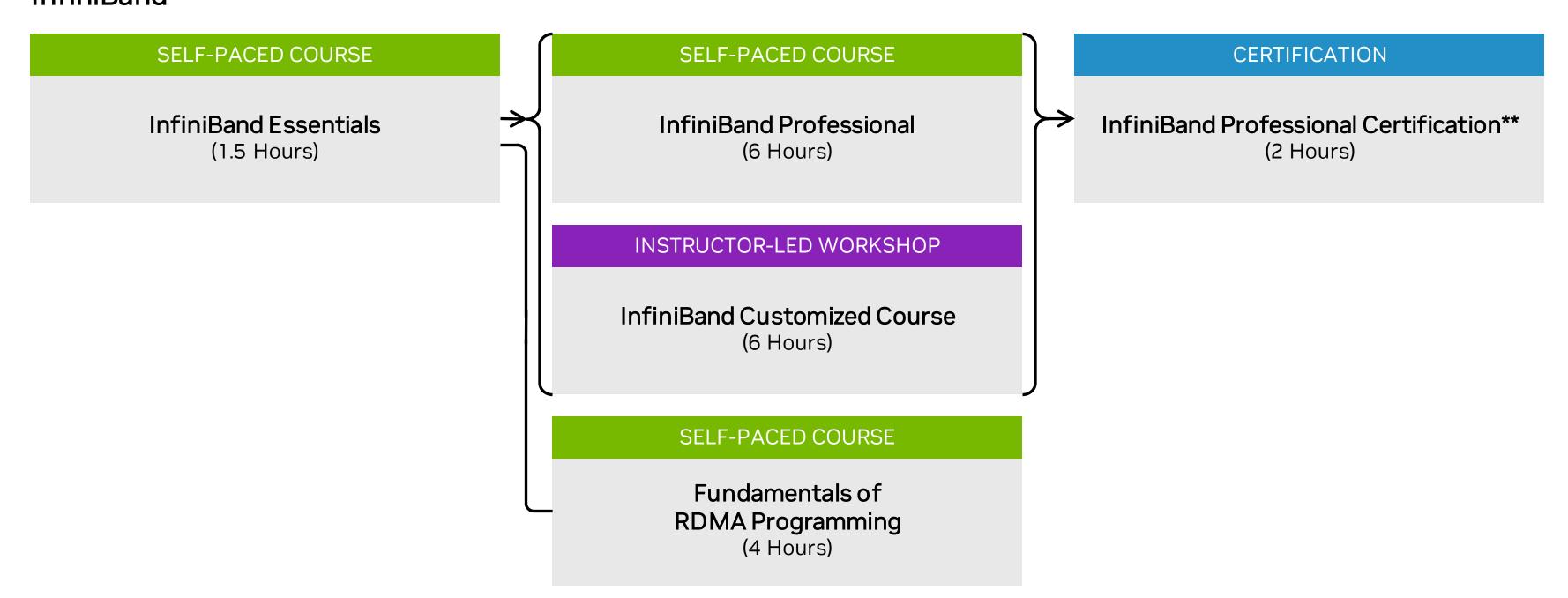
#### SELF-PACED COURSE

Network Administration With NVIDIA Onyx Switch System (3 Hours)

#### SELF-PACED COURSE

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

#### InfiniBand



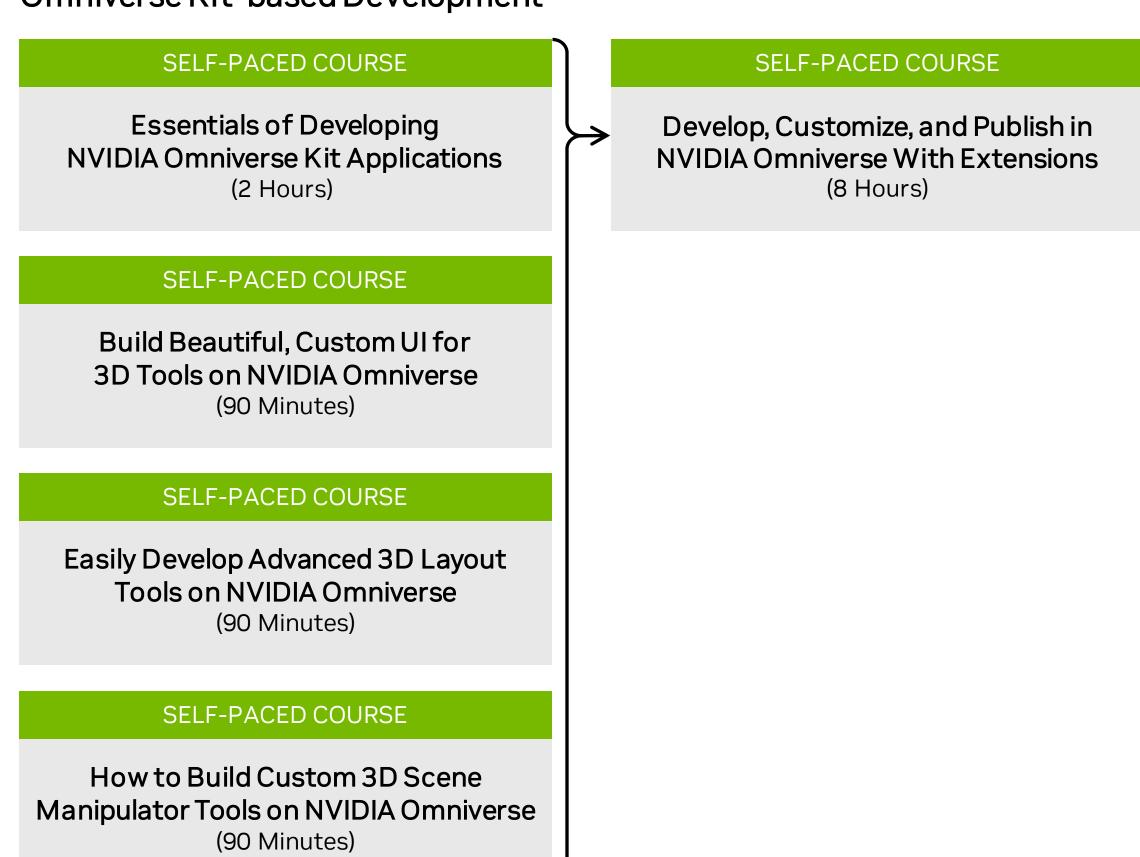
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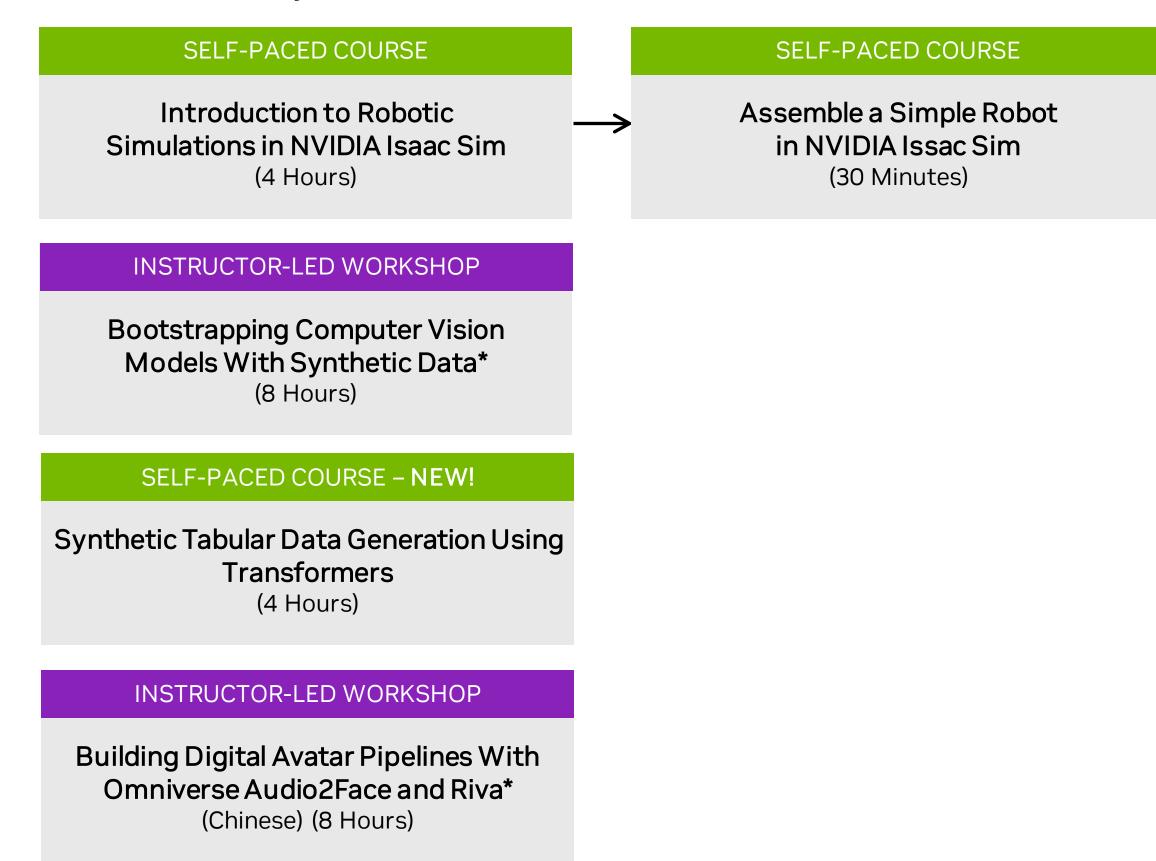
### Simulation, Data Modeling, and Design Training

For Developers and Administrators

#### Omniverse Kit-based Development





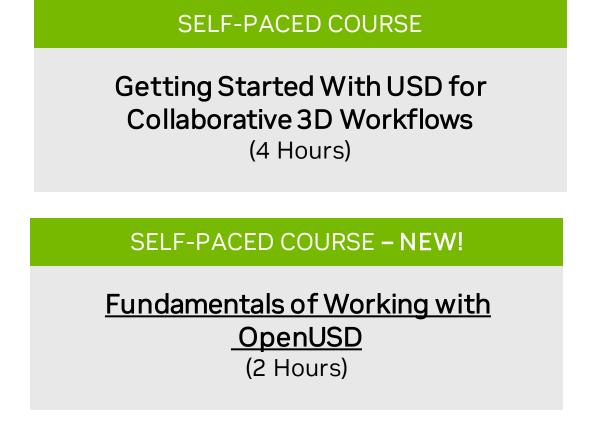


#### Generative Al

SELF-PACED COURSE — NEW!

Generative AI Explained (2 Hours)

#### OpenUSD Fundamentals and Development



SELF-PACED COURSE

Essentials of USD in NVIDIA Omniverse (2 Hours)

SELF-PACED COURSE – **NEW!** 

Building a 3D Product Configurator with OpenUSD And Omniverse (2 Hours)

SELF-PACED COURSE – **NEW!** 

How to Build Native OpenUSD

XR Applications
(2 Hours)

SELF-PACED COURSE – NEW!

How to Build OpenUSD Applications
for Industrial Digital Twins
(2 Hours)

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



