

NVIDIA Certified Data Center Associate Blueprint

1	AI	26% of exam
1.01	Describe the NVIDIA software stack. For example: Explain what CUDA is and how it helps accelerate NVIDIA solutions, NGC - purpose, use case, value, etc.	
1.02	Compare and contrast training and inference architecture requirements and considerations.	
1.03	Differentiate between AI, Machine Learning and Deep Learning. For example: Explain the AI-related challenges to ML/DL, NLP	
1.04	Explain the factors contributing to recent rapid improvements and adoption of AI. For example: data, algorithms, compute advancements, massive scale required for best results	
1.05	Explain the key AI use cases and industries. For example: healthcare services, self-driving vehicles, manufacturing, etc.	
2	GPU	24% of exam
2.01	Compare and contrast GPU and CPU architectures.	
2.02	Explain the purpose and use case for various NVIDIA solutions. For example: use of GPU to Accelerate AI (ML/DL, NLP)	
2.03	Identify hardware requirements for specific AI training task use cases. For example: storage as it pertains to AI hardware	
2.04	Scale a GPU infrastructure for different use cases.	
3	Networking	22% of exam
3.01	Determine networking requirements for AI workloads. For example: Network topologies (for modern DCs), storage requirements	
3.02	Identify and describe DC networking protocols and key concepts. For example: RDMA/RoCE	
3.03	Identify high speed DC network options (InfiniBand & Eth) and their use cases.	
3.04	Explain the purpose and benefits of a DPU in a datacenter. For example: Explain what DOCA is and how it applies to DPU, describe security considerations	
4	Infrastructure	28% of exam
4.01	Identify key concepts, and high-level specifications related to power and cooling requirements within a data center. For example: Number of systems that can be used in a rack based on the number of KWs available	
4.02	Articulate the key advantages, challenges, and considerations related to on-prem vs. cloud infrastructures.	
4.03	Identify key components and considerations of a cluster of an accelerated infrastructure. For example: storage, networking, GPU servers, base command management (BCM)	
4.04	Articulate the various software components related to the lifecycle of AI development and deployment. For example: Articulate the pros and cons of different orchestration options/scheduling tools	
4.05	Identify facility requirements. For example: installing requirements (weight), lift, access, loading/delivery	
4.06	Identify the key considerations for virtualizing accelerated infrastructure.	
4.07	Articulate the key measures and criteria related to monitoring GPUs (utilization, health, etc.)	