

## CUDA Installation Tips

### Prerequisites:

- Check whether your PC is with CUDA-Enabled NVIDIA GPU.
- Check compute capability for your NVIDIA GPU.

<https://developer.nvidia.com/cuda-gpus>

#### GeForce and TITAN Products

GPU	Compute Capability
NVIDIA TITAN RTX	7.5
Geforce RTX 2080 Ti	7.5
Geforce RTX 2080	7.5
Geforce RTX 2070	7.5
Geforce RTX 2060	7.5
NVIDIA TITAN V	7.0

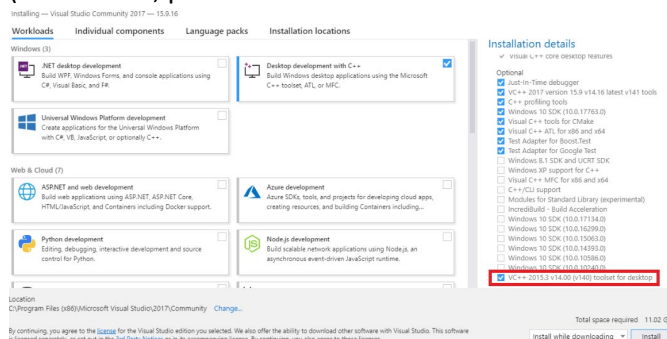
#### GeForce Notebook Products

GPU	Compute Capability
Geforce RTX 2080	7.5
Geforce RTX 2070	7.5
Geforce RTX 2060	7.5
Geforce GTX 1080	6.1
Geforce GTX 1070	6.1
Geforce GTX 1060	6.1

- Check the compute capability for supporting features.  
<https://docs.nvidia.com/cuda/cuda-c-programming-guide/index.html#compute-capabilities>
- Download appropriate version of CUDA basing on your display adapter and compute capability.  
<https://developer.nvidia.com/cuda-downloads>  
(select “Legacy Release” if latest version is not suitable for your environment)

### Windows:

- Install Visual Studio  
VS2019 supports CUDA 10.0+  
VS2017 supports CUDA 9.1+  
VS2015 supports CUDA 8.0-  
(For VS2017, please install VC++ 2015 toolkit for better support)



- Follow the installation guide to Install CUDA  
(Make sure Virtual Studio has been installed)  
<https://docs.nvidia.com/cuda/cuda-installation-guide-microsoft-windows/index.html>
- Test installation  
Open cmd, and type  
“cd C:\Program Files\NVIDIA GPU Computing Toolkit\CUDA\v9.2\extras\demo\_suite”  
(update v9.2 as the version you installed)  
Execute “deviceQuery.exe”  
If it returns “Result = Pass”, then the installation is fine.

**Mac:**

- Follow the installation guide to install CUDA.  
<https://docs.nvidia.com/cuda/cuda-installation-guide-mac-os-x/index.html>

**Linux:**

- Follow the installation guide to install CUDA.  
<https://docs.nvidia.com/cuda/cuda-installation-guide-linux/index.html>  
(Tips: Do not install CUDA in your virtual machine.)