Game Development Laptop Requirement

All Game Development students are required to purchase a laptop to complete assignments in and out of the classroom. Failure to meet the minimum requirements will prevent students from completing coursework successfully, which is necessary for earning a diploma.

Note: The laptop is required ON THE VERY FIRST DAY OF CLASSES in every semester.

For specific program-related questions please contact gamedev@nait.ca. For all technical questions, please visit nait.ca/ITS.

Specialization-Specific Laptop Requirements

Game Development/ Animation and Game Design - Laptop Requirement	
Operating System	Windows 11 64-bit (No S Version) or newer. macOS is not supported
Processor	Intel 8th gen or newer, Core i7 or greater
RAM	32GB or more
Hard Drive	512GB or larger SSD (1TB Recommended)
Graphics	Discrete graphics card is required. GeForce RTX 4050 or AMD RX 6600 or greater.
Display	15" or larger with 1920 x 1080 or greater screen resolution
Network	Wi-Fi 5 (802.11ac) or Wi-Fi 6 (802.11ax)
Camera	720p webcam or greater with a microphone
Other Hardware Notes	External Keyboard and 3 Button Mouse Recommended, 2 x USB 3.1 port USB hub (recommended with USB-C port)

Game Development/ Games Programming - Laptop Requirement:	
Operating System	Windows 11 64-bit (No S Version) or newer. macOS is not supported
Processor	Intel 8th gen or newer, Core i7 or greater.
RAM	32GB or more
Hard Drive	1TB or larger SSD
Graphics	Discrete graphics card is required. GeForce RTX 4050 or AMD RX 6600 or greater.
Display	15" or larger with 1920 x 1080 or greater screen resolution
Network	Wi-Fi 5 (802.11ac) or Wi-Fi 6 (802.11ax)
Camera	720p webcam or greater with a microphone
Other Hardware Notes	External Keyboard and 3 Button Mouse Recommended, 2 x USB 3.1 port USB hub (recommended with USB-C port)

Additional Requirements:

- Method for Backup Storage of Files – 500GB or larger USB external hard drive or cloud storage such as OneDrive. Microsoft Office 365 and OneDrive (with 1TB of space) is free for all currently enrolled NAIT students.

Notes from our Tech Department:
- Please use only SSD or M.2 storage technology for your boot/primary device, as using a different storage technology will diminish the performance of your laptop.
- Windows Defender is the recommended anti-virus software. Installing some 3rd party anti-virus and anti-malware packages might interfere with some of the applications you use for our program.

Software Requirements:
- Software requirements will be discussed in class and will vary for each specialization.

Please be aware that:
- Students are responsible for the maintenance, service, and repair of their laptop(s).
- NAIT takes no responsibility for hardware or software compliance.

FAQ

Which brand or manufacturer of laptops would you recommend?

Over the years, students have purchased many different brands, and there seems to be no noticeable difference in reliability. Manufacturers use the same hardware, so if the brand you purchased meets the minimum specifications, it should be sufficient.

How much should I spend?

Budget $1,500 to $3,500 for the purchase of your laptop. The price will vary depending on the brand, hardware options, and program specialization.

For specific program-related questions please contact gamedev@nait.ca. For all technical questions, please visit nait.ca/ITS.

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