DEPAUL UNIVERSITY
JARVIS COLLEGE OF COMPUTING AND DIGITAL MEDIA

Computer Recommendations for School of Computing Programs

Updated on August 2, 2024

School of Computing

A laptop is highly recommended for students who are on campus or travel to campus. Battery life is important because outlets may not be reachable in classrooms. Laptops with USB-C charging are ideal because they can be recharged from portable battery packs.

We do recommend systems with:

- Memory: at least 12GB RAM; 16GB RAM is recommended.
- Storage: at least 512GB.

Display size is a personal preference. An external monitor may be useful at home to view more information on the screen.

General Computing Degrees

- BS Computer Science - Software Development concentration
- BA Computing
- BS Information Systems
- BS Information Technology
- BS Math and Computer Science
- MS Computer Science
- MS Business Information Technology
- JD/MS Computer Science Technology
- MS Human-Computer Interaction
- MS Information Systems
- MS Software Engineering -Software Development and Architecture concentration

Many courses in these degree programs do not have special requirements regarding hardware or operating systems (Windows, Linux, or Mac). However, most degree programs allow courses to be taken in areas such as artificial intelligence, cybersecurity, data science, game programming, real-time systems, and robotics. Courses in these areas have additional requirements shown below.

Artificial Intelligence and Data Science

- BS Computer Science - Artificial Intelligence concentration
- BS Data Science
- MS Artificial Intelligence
- MS Data Science
- MS Health Informatics
- MS Software Engineering - Artificial Intelligence in Software Engineering concentration

Data Science can involve significant quantities of data, so:

- A faster processor is required (Intel Core i7 is recommended, AMD Ryzen 5 or better, Apple M1 or better).
- Storage: at least 512GB.

Artificial intelligence tasks can use GPUs to accelerate certain tasks, so:

- A GPU is highly recommended. Nvidia GPUs are the most compatible. GPUs in recent Apple Macs are fast but not as compatible with as much software.
- The processor and storage requirement/recommendation for data science also applies.

Cybersecurity and Network Engineering

- BS Cybersecurity
- BS Network Engineering and Security
- MS Cybersecurity
- MS Network Engineering and Security

These degree programs require:

- Windows as the host operating system (dual booting is acceptable; running Windows in a VM will not suffice).
- A processor with 4+ cores and virtualization support (Intel VTx or AMD-V). Intel is preferred over AMD for official support with some software.
- 16GB of RAM.

In particular, Macs with Apple silicon (M1, M2, M3, etc.) cannot be used for these degree programs.

Game Programming and Real-Time Systems

- BS Computer Science - Game Systems concentration
- BS Game Programming
- MS Game Programming
- MS Software Engineering (Real-Time Software and Game Systems concentration)

These degree programs require:

- Windows as the host operating system (dual booting is acceptable; running Windows in a VM will not suffice).
- Faster processors (Intel i7 or better, AMD Ryzen 7 or better) with 8+ cores.
- 16GB of RAM.
- An Nvidia GPU is strongly recommended over ATI/Intel GPUs.

In particular, Macs cannot be used for these degree programs.

Intelligent Systems Engineering and Robotics

- BS Intelligent Systems Engineering
- BS Robotics

These degree programs require:

- Windows as the host operating system (dual booting is acceptable; running Windows in a VM will not suffice).