Required Equipment

The equipment requirements below include several choices. If you have questions, please feel free to contact Instructor <u>Travis Calvin</u> at the DMI with questions related to the choices below BEFORE you make your final purchases.

DMI Required Equipment Checklist for all BS-EIS majors, BSIS majors with an EIS concentration, and BA-Music majors with an EIS concentration:

- Intel-Based Macbook Pro Computer (As a DSU student, you will be eligible for Apple's educational pricing). See below for suggested specifications.
- External Hard Drive (minimum of 300 GB)
- Stereo Headphones (Required for 200 level and above audio courses)

Suggested Additional Equipment:

- Audio interface (for AET students; a limited number of interfaces available for checkout to EIE and MMT students)
 - PreSonus AudioBox USB 96
 - Focusrite Scarlett 2i2
 - Behring U-Phoria UMC202HD
- Keyboard Controller (DMI has MIDI keyboards available for student use in the DMI building) Depending upon your particular needs and keyboard skills, you may wish to review the following models which may be purchased at various music retailers or online sources:
 - M-Audio Oxygen 8v2
 - M-Audio Axiom 25-, 49- or 61-keys
 - Novation Launchkey Controller 25-, 49-, or 61- keys

I. Laptop Computer (<u>Required</u>)

Select from one of the following models:

Apple MacBook Pro (Recommended Computer Technical Specifications):

- Display: 13-inch retina display or greater
- Processor: Dual-core Intel Core i5 or greater
- Memory: 8 GB or greater (if AET, select 16 GB or greater)
- Storage: 256 GB or greater (if AET, select 512 GB or greater)

The current standard connection on new MacBook Pro laptops include two (2) Thunderbolt 3 connections and one (1) 3.5 mm headphone jack.

Although it is strongly recommended that students purchase a newer model MacBook Pro laptop, below are earlier computer models that currently meet the technology requirement, beginning with late 2012. Please note that in order to optimize performance, an upgrade to a fastest processor and additional RAM may be necessary for these older models to operate current versions of software.

- Macbook Pro Retina, 13-inch, early 2015 Retina, 15-inch, mid-2015
- MacBook Pro (13-inch, 2016, Two Thunderbolt 3 ports)
- MacBook Pro (13-inch or 15-inch, 2016, Four Thunderbolt 3 ports)
- MacBook Pro (13-inch, 2017, Two Thunderbolt 3 ports)
- MacBook Pro (13-inch, 2017, Four Thunderbolt 3 ports)
- MacBook Pro (15-inch, 2017)
- MacBook Pro (13-inch, 2018, Four Thunderbolt 3 ports)

You may learn more about these models on the <u>Apple Store website</u>. If you need help identifying your MacBook Pro model, please visit the <u>How to Identify MacBook Pro models</u> <u>page</u> on the Apple website. (https://support.apple.com/en-us/HT201300)

Connection ports on older models may include:

- Thunderbolt 2 port
- USB 2 or USB 3 port
- Firewire 800 port
- Network port
- HDMI port
- 3.5 mm headphone jack

PLEASE READ:

For both older and newer models, adapters may be necessary. Please see below for links to appropriate adaptors.

Any MacBook Pro models manufactured after 2012 will not include a Firewire 800 port. A Thunderbolt to Firewire Adapter is required to connect a firewire hard drive.

Thunderbolt 2 to Firewire Adapter

Any MacBook Pro models manufactured after 2016 will have Thunderbolt 3 (USB C) connections. You will need adapters to connect USB, Firewire, and other devices.

USB-C to USB Adapter

Thunderbolt 3 (USB-C) to Thunderbolt 2 Adapter

MacBooks manufactured after 2012 no longer carry a CD drive. If this option is preferred, students may purchase an USB Superdrive.

USB-C Multiport Pro Adapter

II. External Hard Drive (Required for 200 level audio courses and above)

For best performance with external drives and using Avid's Pro Tools, we suggest having a either a USB 3.0, Thunderbolt 2 or Thunderbolt 3 external hard drive. Please note that new MacBook Pro models come equipped with Thunderbolt connectivity instead of USB. In these cases you will need a USB-C to USB adapter (see above for link).

We recommend Glyph (<u>https://www.glyphtech.com/all-products.html</u>) or G-Tech (<u>http://www.g-technology.com/products</u>) hard drives with a minimum of 500GB capacity. Please note it is best practices to backup your data. Please consider having an additional drive/location for backup of data (ex., using OSX Time Machine).

III. Stereo Headphones (Required for courses at 200 level and above)

Students may use any number of stereo headphones for work in the DMI studios/labs and at home. However, please note the following recommended models for your use as you move into the advanced audio production courses. (Organized by price low to high)

Stereo Closed-Backed Headphones Recommendations (may be purchased at various music retailers or online sources):

- Audio-Technica ATH-M40
- Audio-Technica ATH-M50
- Shure SRH 440
- Sony MDR-7506
- Sennheiser HD 280 PRO
- Sennheiser HD 600

USB Keyboard Controller (Suggested)

Students who wish to pursue music production in any form (i.e. songwriting, sound design, hip hop production, etc.) are urged to purchase a keyboard controller for their use at home. The DMI maintains multiple keyboard controllers available for student use in the DMI building.

As you move to the upper level courses, you may wish to invest in higher quality equipment. Please consult DMI faculty for recommendations based upon your budget.

IV. Additional Software

Pro Apps Bundle for Education: Includes Final Cut Pro X, Logic Pro X, Motion 5, Compressor 4, and MainStage 3.

https://www.apple.com/us-hed/shop/product/BMGE2/pro-apps-bundle-for-education

Due to changing technology, students are encouraged to contact course instructors for specific software requirements prior to registering for classes.