## **MASSART**

## MASSACHUSETTS COLLEGE OF ART AND DESIGN

## **DEVICE REQUIREMENTS COMPARISON SHEET**

ProTools, Edit Share, Davinic Resolve, Unity, Media Composer (Film/Video)

ZBrush, Keyshot (Illustration)

AutoCAD 2, Autodesk Revit, Fusion 360, 3D Studio MAX, Sketchup Pro, Rhino, Keyshot, Microsoft Office (Architecture)

DEPARTMENT	Art Education Fine Arts 2D Fine Arts 3D Fashion Design Photography SIM	Animation Communication Design Illustration (Fashion Design) (Photography) (SIM)	Film/Video (Animation) (Illustration) (Photography)	Architecture Industrial Design (Film/Video)
***** Note: Above items in parenthesis indicate the higher range devices for users in the respective disciplines *****				
DEVICE	MAC LEVEL I	MAC LEVEL II	MAC LEVEL III	PC
INPUT/OUTPUT	Two Thunderbolt 3 (USB-C) ports	Four Thunderbolt 3 (USB-C) ports	Four Thunderbolt 3 (USB-C) ports	USB type C port Ethernet port
CPU	Intel Core i7 processor or better	Intel Core i9 processor or better	Intel Core i9 processor or better	Intel Core Processor i7-10875H (8 Core, 16MB Cache, 2.30)
HARD DRIVE	512 SSD NOTE: Fusion Drive or mechanical hard drives not recommended	1TB SSD (Minimum) NOTE: Fusion Drive or mechanical hard drives not recommended	1TB SSD (Minimum) NOTE: Fusion Drive or mechanical hard drives not recommended	512 GB SSD (minimum) NOTE: Fusion Drive or mechanical hard drives not recommended
GRAPHICS CARD	Intel Iris Plus Graphics 645	Intel Iris Plus Graphics	AMD Radeon Pro 5600M with 8GB of HBM2 memory	NVIDIA Quadro 3000
RAM	16GB (Minimum)	32GB (Minimum)	64GB (Minimum)	16 GB RAM
OTHER REQUIREMENTS	13-inch MacBook Pro Retina Display	16-inch MacBook Pro Retina Display	16-inch MacBook Pro Retina Display	Architecture:  - HD - 500 GB SDD (or larger)  - RAM - 16 GB or higher  - Video/Graphic Card  - 14" or 15" screen  - Cloud Storage  Industrial Design:  - 15.6" FHD 19-20x1080  - 60Hz  - Anti-Glare, Non-Touch, 100% DCIP3 screen  - 32GB, 2X16GB, DRR4 2933Mhz  Non-ECC Memory
RECOMMENDATIONS	Apple Care (3-4 year extended suggested)  USB-C Multi-adapter for HDMI,USB3 connections & for external monitor (you can purchase an inexpensive monitor or flat-screen TV to increase your screen size)	Apple Care (3-4 year extended suggested)  USB-C Multi-adapter for HDM,USB3 connections & for external monitor (you can purchase an inexpensive monitor or flat-screen TV to increase your screen size)	Apple Care (3-4 year extended suggested)  USB-C Multi-adapter for HDMI,USB3 connections & for external monitor (you can purchase an inexpensive monitor or flat-screen TV to increase your screen size)	PC manufacturer specific protection/repair plan (3-4 year extended suggested)  USB-C Multi-adapter for HDMI,USB3 connections for external monitor (you can purchase an inexpensive monitor or flat-screen TY to increase your screen size)
EXAMPLES	13-inch MacBook Pro 1.76Hz quad-core 8th-generation Intel Core i7 processor, Turbo Boost up to 4.5GHz 16GB 2133MHz LPDDR3 memory 512GB SSD storage \$2,060 w/ Apple Care (approximate)	13-inch MacBook Pro 2.3GHz quad-core 10th-generation Intel Core I7 processor, Turbo Boost up to 4.IGHz 32GB 3733MHz LPDDR4X memory Intel Iris Plus Graphics 2TB SSD storage \$3,322 w/ Apple Care (approximate)	16 inch MacBook Pro 2.3GHz 8-core 9th-generation Intel Core i9 processor, Turbo Boost up to 4.8GHz 64GB 2666MHz DDR4 memory 16-inch Retina display with True Tone Touch Bar and Touch ID Backlit Magic Keyboard - US English 4TB SSD storage \$4,250 w/ Apple Care (approximate)	Lenovo P50 w/ 16 GB RAM & 256 GB HD Nvidia Quadro M1000M Graphics card \$1850 (approximate)  LG Gram 17 in. Laptop, 10th Gen Intel Core i7, 16GB RAM, 512GB SSD \$1500 (approximate)  Dell i7 w/1 TB HD, 32 GB RAM & Nvidia Quadro 3000 \$2920 (Approximate)  Dell i7 w/512 GB HD, 16 GB RAM and Nvidia 3000 \$2,505 (approximate)  Dell i7 w/ 512 GB HD, 16 GB RAM & Nvidia Quadro 2000 \$2,230 (approximate)
ADDITIONAL TECHNOLOGY	BASIC Wacom Intuos Tablet - Small (\$80) - Animation, Illustration, Industrial Design, Architecture  MIDDLE Wacom Intuos Pro Tablet - Medium (\$380) - Animation, Illustration, Industrial Design, Architecture,  ADVANCED Wacom Cintiq Pro 16 Creative Pen & Touch Display (\$1500) - Animation, Illustration, Industrial Design, Architecture  A portable, external drive is recommended for all students for back up and storage of files.  Examples: Seagate Portable Drive - \$TB - \$155; WD - \$TB - \$1255; SanDisc - 2TB - \$250  (all prices are approximate)			
SOFTWARE USED	Adobe Suite*	Adobe Suite*  Autodesk Maya, Dragonframe, Toonboom, ZBrush (Animatlon)  ProTools, Edit Share, Davinic Resolve, Unity,	Adobe Suite*  Autodesk Maya, Dragonframe, Toonboom, ZBrush (Animation) ProTools, Edit Share, Davinic Resolve, Unity.	Adobe Suite* Solidworks, Fusion 360, Sketchup Pro, Rhino, Keyshot, MS Windows (Industrial Design)

ZBrush, Keyshot (Illustration)