

INTRODUCTION

Students within the School of Film Arts need to buy or have access to a DSLR camera with video capabilities. These cameras are the most affordable option compared to other video-only cameras. We recommend looking at options between the following reputable brands: Canon, Sony, Nikon, Panasonic or Black Magic Design.

For FV100 major students who are unsure of where to position themselves, we have options at hand. The first option is to buy your own camera once you know you want to major in Film and Television. The second option is to use the rental agreement set-up specifically for OW students, where you will get a discounted rental rate from gear houses in our list - note that you will only need a DSLR camera from the third term onwards.

OUR RECOMMENDATION

We recommend Canon DSLR cameras, these are some of the most inexpensive solutions for video production. Canon has a large amount of DSLR video users, which means there is a bigger support network in South Africa.

Canon fits into the existing workflow and support structure at the Open Window.

THINGS TO KEEP IN MIND

DSLR cameras record low quality audio. For the purpose of the course and creating quality film / video content, you need to record on a separate audio recorder and microphone.

Don't buy a cheap microphone - rather use the sound equipment available at the school and make an informed decision on which microphone system to buy later.

Don't buy any equipment to move the camera yet (tracks, sliders, jibs, etc.) rather spend your initial capital on lenses and a solid tripod.

USING THIS BUYING GUIDE

The basic kit is numbered from 1 - 6.

On the last page, you will find an empty form with numbers and headings. Fill out the form with the corresponding equipment and price that you have chosen to see what the final price will be. You need to choose at least one option from every number listed.

In addition, you should have a lens pen and UV filter for your camera. ND filters are a must when filming on a DSLR camera.

Prices indicated in this guide are according to January 2023 pricing and may be subject to change during the year. All prices are only an indication and we recommend that further research should be done on pricing and equipment.





BASIC CAMERA KIT INCLUDES:

- 1. 1 x Camera Body, Camera Battery, Battery charger.
- 2. 1 x Lens
- 3. 1 x Memory card
- 4. 1 x Memory card reader
- 5. 1 x Tripod
- 6. 1 x Camera Bag (optional, but recommended)

MUST HAVE ACCESSORIES:

1 x UV filter - (R200 - R6000 depending on filter brand and size)

The UV filter is a clear, screw-on filter that protects your lens from general bumps and bashes. It is cheaper to replace a scratched filter than an entire lens. If the lens is scratched, you will have to replace the lens at greater cost. UV filters also reduce haziness created by ultraviolet lights. When buying a UV filter take your lens with you, or make sure of the correct size before buying online.

Suggested UV filter brands: Kenko, Hoya, Zeiss. https://www.outdoorphoto.co.za/filters

1 x Variable ND filter - (R700 - R6000)

The Neutral Density filter helps to reduce the amount of light entering the lens and is used when shooting outside where it is difficult to control the effect of sunlight.

Tip: Buy a bigger diameter filter (eg. 82mm) and use step-up rings to fit it onto smaller diameter lenses. This means you can use the filter on all your smaller lenses as well.

https://www.outdoorphoto.co.za/accessories/lens-accessories/filters

1 x Lens pen - (R190 - R600)

This is to keep your lenses clean.

Dirty lenses = dirty unusable footage.

https://www.outdoorphoto.co.za/lenspen





- Buying a store-assembled camera bundle may seem like an easy solution, but you are letting sales people and not filmmakers make decisions for you. They are only looking for a sale.
- Camera bundles usally don't come with everything you may need and the lenses on the lower end DSLR camera bundles are generally of bad quality.
- Use this guide as a starting point and do research before doing any purchases.
- Buy the camera body separately and add better quality lenses.
- One decent high quality lens is worth much more than 100 bad lenses.
- Your lenses will outlast your camera so rather invest in better quality lenses for the future.
- When buying lenses for your camera, make sure you buy lenses that fit the specific mount type of the camera body.
- Fixed focal length lenses are better for video than zoom lenses, and provide higher quality images at a lower price.
- Buy an extra battery if you can afford it so you always have one available, while the other one is charging.
- Buy two memory cards if possible.
- Buy a camera bag that will suit your needs now and in the future.
- Negotiate to have the lens filter and lens pen included for free.
- Ask for student discount. Take your student card and registration along when you go to purchase the gear.
- Make sure the prices you get quoted on include VAT to be able to compare with the prices provided in this guide.





1. CAMERA BODY, CAMERA BATTERY, BATTERY CHARGER

The following camera bodies all have the basic requirements for shooting video at a resolution of 1920 x 1080 at 25 frames per second. We suggest you buy the camera body separately - bundled camera packages mostly come with EF-S lenses, which can't be used on higher end cameras. This means when you upgrade to a higher full-frame camera later, it won't fit and you will need to buy new lenses.

When you buy a camera body, one camera battery and battery charger will be included.

1.1 ENTRY TO MID-LEVEL CAMERAS (WITH SMALLER SIZED SENSORS)

The camera options listed below have been selected as entry to mid-level camera options. If you are on a tight budget, you can always look at purchasing a second hand camera body, either online or through a trusted retailer. Be aware when buying cameras online through unknown sources - there may be some cheap options out there but be vigilant towards scams. Below you can find two trusted resellers of used or refurbished camera equipment.

https://www.outdoorphoto.co.za/second-hand-cameras

https://www.ormsdirect.co.za/used-gear

CANON EOS 250D DSLR Camera Body (R 11,595.00 NEW)

Camera information:

25.8 megapixel APS-C CMOS Sensor, DIGIC 8 Image processor.

Full HD 1080p Video Recording / UHD 4K SD / SDHC* / SDXC* memory cards Canon EF-S mount.



https://www.outdoorphoto.co.za/canon-eos-250d-dslr-camera-body-black



CANON EOS 850D DSLR Camera Body (R 16,895.00 NEW)

Camera information:

24.1 megapixel APS-C CMOS Sensor, DIGIC 8 Image processor. 3.0" 1.04m-Dot Vari-Angle Touchscreen Full HD 1080p Video Recording / UHD 4K 45-Point All Cross-Type AF System SD / SDHC* / SDXC* memory cards Canon EF-S mount.



https://www.outdoorphoto.co.za/canon-eos-850d-dslr-camera-body-black

CANON EOS 90D DSLR Camera Body (R 23,595.00 NEW)

Camera information:

32.5 megapixel APS-C CMOS Sensor, DIGIC 6 Image processor. 3.0" 1.04m-Dot Vari-Angle Touchscreen Full HD 1080p / UHD 4K 45-Point All Cross-Type AF System SD / SDHC* / SDXC* memory cards Canon EF-S mount. Compatible lenses: Canon EF lenses (including EF-S lenses) * Excluding EF-M lenses



https://www.outdoorphoto.co.za/canon-eos-90d-dslr-camera-body

CANON EOS 6D Mark II DSLR Camera Body (R19,595.00 NEW)

Camera information:

26.2 megapixel Full Frame CMOS Sensor. DIGIC 7 Image Processor 3.0" 1.04m-Dot Swivel Touchscreen 45-Point All Cross-Type AF System Full HD 1080p Video Recording at 60 fps EF lens mount (excludes EF-S, EF-M lenses) SD, SDHC or SDXC (UHS-I) card



https://www.fotodiscountworld.co.za/product/canon-eos-6d-mark-ii-body-dslr-camera



CANON EOS RP Full-Frame Mirrorless Camera (R19,495.00 NEW)

Camera information:
26.2MP Full-Frame CMOS Sensor
DIGIC 8 Image Processor
1x SD/SDHC/SDXC and UHS-II Memory Card Slot
Dual Pixel CMOS AF
2.36m-Dot Electronic Viewfinder
Vari-Angle Touchscreen LCD



https://www.outdoorphoto.co.za/canon-eos-rp-full-frame-mirrorless-camera-body

EXTRA BATTERY FOR CANON CAMERAS

When you buy a camera body only, it will include one battery. Because video shooting on a DSLR camera uses the live view mode, it drains the battery quickly. One battery should last about 3 hours maximum shooting time. To be able to shoot for an entire day you need at least two batteries.

CANON LP-E6 (R 2,249.99)

Compatible with Canon EOS 7D Mark II, 5DS, 5D Mark III 60D, 70D, 6D.

https://cameralandsandton.co.za/product/canon-lp-e6nh-lithium-ion-battery-pack/

CANON LP-E8 (R 1,150.00)

Compatible with Canon 550D, 600D, 650D, 700D.

https://www.outdoorphoto.co.za/canon-li-ion-rechargeable-battery-pack-lp-e8



Always check the model of your camera and the battery model for compatibility before purchasing.



1.2 HIGHER-END CAMERA OPTIONS

CANON EOS 5D Mark IV DSLR Camera Body (R 39,995.00 NEW)

Camera information:
30.4 megapixel Full-Frame C CMOS Sensor
DIGIC 6+ Image Processor
3.2" 1.62m-Dot Touchscreen LCD Monitor
DCI 4K Video Recording
SD & CF memory card slots. Fast SD/CF card
recommended for 4K recording
Canon EF mount (excludes EF-S / EF-M lenses)



https://www.outdoorphoto.co.za/cameras/dslr-cameras/canon-eos-5d-mark-iv-dslr-camera-body

CANON EOS R Full Frame Mirrorless Camera with RF Adaptor (R 30,995.00 NEW)

Camera information:
30.3 megapixel Full-Frame C CMOS Sensor
DIGIC 8 Image Processor
Dual Pixel CMOS AF, 5655 AF Points
RF Lens mount. EF & EF-S lenses attach with RF
Mount Adaptor
4K Video Recording



https://www.outdoorphoto.co.za/canon-eos-r-full-frame-mirrorless-camera-body-black

Sony Alpha a7 IV Mirrorless Digital Camera (R 44,995.00 NEW)

Camera information: 33MP Megapixel Full-Frame Exmor R CMOS sensor UHD 4K Uncompressed 4K via HDMI E-mount - Sony E-mount lenses



https://www.outdoorphoto.co.za/sony-alpha-a7-iv-mirrorless-digital-camera-body



CANON EOS C100 Mark II Cinema Camera (R56,895.00 NEW)

Camera information:

Super 35mm 8.3MP CMOS Sensor + EF Mount 1920x1080p 59.94/50/29.97/25/23.98 Built-In Dual Pixel CMOS AF Hardware AVCHD + MP4 Recording Dual SDHC/SDXC Media Card Slots HDMI Output with Timecode & Canon Log Two XLR Audio Connectors Built-In 2.4 GHz & 5 GHz WiFi Capability



https://www.ormsdirect.co.za/canon-eos-c100-mark-ii-cinema-camera-ef-mount-with-daf-installed

BLACKMAGIC Design Pocket Cinema Camera 4K (R30,510.00 NEW)

(*Note: This camera takes Micro 4/3 lenses & requires rigging)

Camera information:

Internal 4K UHD/DCI 60fps recording in 10-bit ProRes or 12-bit RAW 5" 1920 x 1080 touchscreen with on screen histogram and focus peaking Active MFT mount 4/3"-Sized HDR Sensor DCI 4K60, 2.8K80 Raw in 4:3 Anamorphic Up to 2.6K 120 Raw for Super16 Lenses



https://www.ormsdirect.co.za/blackmagic-design-pocket-cinema-camera-4k

PANASONIC Lumix DMC-GH5 4K Mirrorless Camera (R31,489.00 NEW)

(*Note: This camera takes Micro 4/3 lenses)

Camera information:
18MP Digital Live MOS Sensor
Micro Four Thirds System
DCI 4K Video Recording at up to 60fps
4:2:2 10 bit internal recording
SD, SDHC, SDXC Memory card types





- The rule of thumb is to buy your lenses separately.
- When buying Canon lenses, stick to EF lenses don't buy EF-S or EF-M lenses. EF lenses can work on both the full-frame and APS-C sensor size cameras, EF-S can't.
- Preferably, you want a set of fast prime / fixed focal length lenses. Fast lenses allow you to shoot in low light situations as well as giving you very nice shallow depth of field.
- Samyang / Rokinon make great sets of affordable cinema lenses. You can find some here: https://cinephototools.co.za/
- Prime lenses can't zoom but what makes them great is that it gives you higher optical quality at lower cost because the lens has fewer moving parts.
- Stay away from cheap zoom lenses. The optical quality is very low on entry level zoom lenses. Lenses with IS (Image Stabilization) are also favourable, especially on telephoto lenses.
- If you put most lenses on a APS-C size sensor camera they will have a crop factor of x 1.6 because of the smaller sensor size. This means a 35mm lens used on an APS-C size sensor camera will give 56mm focal length. Keep this in mind when choosing lenses. We have recommended lenses specifically to work with this in mind.
- A good range of lenses includes a 35mm, 50mm and 80mm lenses. First master the basics, then you can invest in a longer range telephoto lens.



THE BEST / MOST AFFORDABLE LENSES FOR CANON CAMERAS

- Some of these lenses are not covered in the guide.

 *Ask dealer for pricing on these and if you can afford them, buy them.
- Canon Cinema series lenses.*
- Zeiss lenses.*
- Canon RF series lenses.*
- Sigma fixed focal length lenses.
- Tamron fixed focal length lenses.
- Canon EF fixed focal length lenses.
- Samyang VDSLR fixed focal length lenses.*

AS A BASE START YOU WILL ONLY NEED ONE LENS.

For your first lens we recommend a lens from the Medium lens options (40mm - 60mm range).

2.1 MEDIUM LENGTH LENS OPTIONS

Tamron 45mm f/1.8 Prime Lens for Canon (R 11,795.00)

72mm equivalent on APS-C size camera.

https://www.outdoorphoto.co.za/tamron-45mm-f18-lens-for-canon



CANON EF 50mm f/1.8 STM Lens (R 2,595.00)

80mm equivalent on APS-C size camera.



https://www.outdoorphoto.co.za/lenses/fixed-focal-lenses/canon-ef-50mm-f1-8-stm-prime-lens



2.2 TELEPHOTO LENS OPTION

CANON EF 85mm f/1.8 USM Lens (R 9,395.00)

136mm equivalent on APS-C size camera.

https://www.outdoorphoto.co.za/canon-ef-85mm-f18-usm



2.3 WIDE LENS OPTIONS

Tamron 15-30mm f/2.8 Di VC USD G2 Lens for Canon (R 27,495.00)

24mm - 48mm equivalent on APS-C size camera.

https://www.outdoorphoto.co.za/tamron-15-30mm-f2-8-di-vc-usd-g2-lens-canon-ef



Samyang AF 14mm f/2.8 EF Lens (Full Frame Canon EF Mount) (R 15,995)

22mm equivalent on APS-C size camera.

https://www.ormsdirect.co.za/samyang-af-14mm-f-2-8-ef-lens-full-frame-canon-ef-mount

Sigma 24mm f/1.4 DG HSM Art Lens (Canon EF) (R14,495.00)

38mm equivalent on APS-C size camera.

https://www.ormsdirect.co.za/sigma-24mm-f1-4-dg-hsm-art-lens-canon









3. MEDIA STORAGE - MEMORY CARDS

- *Check your chosen camera model for media requirements, these are only guidelines.
- When shooting high quality video, you will need fast memory cards with enough space.
- Most APS-C size sensor cameras use SD cards.*
- The full-frame cameras generally shoot on CF cards.*
- SD cards have a speed classification on them. Make sure to get a Class 10 (or higher) SD card so the card is fast enough to shoot high quality video.
- For 4K upward shooting, you will need a faster card with more space available.
- CF cards also have a speed classification on them. Make sure you get a CF card faster than x350. Look in the range of x450 upwards for a good CF card speed, depending on camera.
- \bigcirc 32 GB cards will roughly give you 45 minutes when shooting at 1920 x 1080.
- Only buy well-known, trusted brands they will normally adhere to standards for speed classifications.

3.1 SDHC & SDXC CARDS

SanDisk Extreme Pro 32GB UHS-II V90 SDHC Memory Card (300MB/s) (R 1,495.00)

https://www.outdoorphoto.co.za/sandisk-extreme-pro-32gb-uhs-ii-v90-sdhc-memory-card-300mbs



SanDisk Extreme Pro 64GB UHS-II V90 SDXC Memory Card (300MB/s) (R 2,580.00)

https://www.outdoorphoto.co.za/sandisk-extreme-pro-64gb-uhs-ii-v90-sdxc-memory-card-300mbs





3.2 CF CARDS

SanDisk 800x 32GB Extreme CF Memory Card (120MB/s) (R 875.00)

https://www.outdoorphoto.co.za/sandisk-32gb-800x-extreme-cf-memory-card



SanDisk 1067x 64GB Extreme Pro CF Memory Card (160MB/s) (R 1,890.00)

https://www.outdoorphoto.co.za/sandisk-64gb-1067x-extremepro-cf-memory-card



4. CARD READER

SanDisk ImageMate Pro USB-C Multi-Card Reader/Writer (R 750.00)

https://www.outdoorphoto.co.za/sandisk-imagemate-pro-usb-c-multi-card-reader-and-writer



SanDisk Professional PRO-READER CFast Card Reader (R 1,995.00)

https://www.ormsdirect.co.za/sandisk-professional-pro-reader-cfast-card-reader





5. TRIPOD OPTIONS

- Choose a sturdy tripod. This will be a long term investment.
- Stay away from plastic tripods, they are flimsy and tend to break easily.
- A video tripod with a fluid head is ideal and recommended.
- Smaller DSLR cameras can fit on a photo tripod, but these are not designed for the demands of shooting video.
- Ask the retailer about good tripod options for use in filmmaking.

Benro KH25N Aluminium Tripod (R 3,795.00)

https://www.outdoorphoto.co.za/benro-kh25p-video-tripod-with-head



Manfrotto MK190X3-2W Aluminium 3-Section Tripod with 2-Way head (R 6,595.00)

https://www.ormsdirect.co.za/manfrotto-mk190x3-2w-aluminium-3-section-tripod-with-2-way-head



*Manfrotto 502 Fluid Video Head & 546GB Aluminium Twin Leg Tripod (R 18,555.00)

https://www.outdoorphoto.co.za/manfrotto-502-head-and-546gb-twin-leg-tripod-aluminium

*Best option for long term purchase.





6. CAMERA BAG

- You will need a quality, padded bag to protect your equipment.
- Buy a camera bag with future gear purchases in mind. Over time you will buy more accessories and you will need additional space in your bag.
- Think what else you need to take along: a laptop, hard drives, sound equipment, etc.
- Trusted brands are LOWE PRO, EVOC, TARMAC, PELICAN CASE and KATA.
- Prices range from R 950 R 9000 depending on the bag size.
- There are many possibilities, for storage, but don't skimp on this. You spend a lot on camera gear, so it makes sense to keep it safe and dry. A good quality camera bag or case will last you many years. Check out these websites to get an idea of your options:

https://www.ormsdirect.co.za/photo/camera-bags/backpacks

https://www.outdoorphoto.co.za/bags-cases-and-protection/camera-bags/backpacks

AUDIO SOLUTIONS

DSLR cameras record extremely low quality audio, so it does become necessary to consider external solutions for recording usable audio. Open Window does have audio recorders for students to use, as well as Shotgun Microphones and Lavalier Mics, but if one is interested in investing in an audio solution to accompany your camera setup, here are two good options to consider:

Zoom H5 Portable Digital Audio Recorder (R 5,995.00)

https://www.outdoorphoto.co.za/zoom-h5-portable-digital-audio-recorder



Zoom H6 Portable Digital Audio Recorder (R 8,195.00)

https://www.outdoorphoto.co.za/zoom-h6-portable-digital-audio-recorder





BUILD YOUR KIT HERE

ITEM	YOUR CHOICE GOES HERE	PRICE
1. Camera Body, Battery, Charger		
Your Camera:		
2. Camera Lens		
Your Lens 1:		
Your Lens 2: (optional)		
Your Lens 3: (optional)		
3. Your Memory Card		
SD Card 1:		
SD Card 2: (optional)		
CF Card 1:		
CF Card 2: (optional)		
4. Card Reader		
Your card reader:		
5. Tripod		
Your Tripod:		
6. Camera Bag		
Your camera bag choice:		
Must-have accessories		
1 x UV Filter		
1 x Lens Pen		
TOTAL		

