

# **BCIT School of Construction and the Environment Forest and Natural Area Management Program**

**To:** 1<sup>st</sup> Year Forest and Natural Area Management Students (2025)

From: FNAM Program Staff

**Re:** Program Expenses for Books, Computers, Field Equipment and Field Lab Supplies

Welcome to the Forest and Natural Areas Management Program (FNAM). As part of this program, you will require certain personal gear and equipment to successfully complete course work and field labs. Each student is responsible for ensuring they have all necessary personal equipment for a given activity and for the maintenance and care of this gear.

**COMPUTERS:** You are required to have your own *PC laptop* with the following minimum requirements. *Chromebooks* and *Notebooks* are *NOT* a suitable alternative.

Minimum Device Requirements	
Operating system: Windows 10 or 11 (Apple macOS not supported)	<b>Processor</b> : Intel 10th Gen i5 or better, or AMD Ryzen 5 4000 "U" Series or better
Memory: 16GB or greater	<b>Hard Drive</b> : Primary: 500 GB Solid State Drive (SSD), consider 2nd data drive or external storage
<b>Graphics card</b> : Discrete Graphics: nVidia MX250/Quadro P520 or better	Screen: 13" or larger with at least 1920 x 1080 resolution (1080P)
<b>Battery:</b> Recommended: 3-hour or greater battery life	Warranty: Accidental damage coverage recommended

Wi-Fi: Supports 802.11n or 802.11ac, ideally with a 2x2-capable wireless card

Internet: High-speed internet connection of at least 30 Mbps download/10 Mbps upload

**Other:** Web camera, speakers, and microphone. These can be integrated into your device or purchased and installed separately. You may be participating in online lectures, tutorials, labs, tests, group assignments, exams and the ability to interact and communicate visually and verbally is necessary.

**Recommended accessories:** Stand-alone monitor for your personal workspace. This will improve your ability to work with GIS programs and allow you to view and edit files while participating in remote lectures and tutorials.

Computer mouse for ease of use, particularly when using Geographic Information Systems (GIS).

One 16 GB USB drive.

If you are planning to purchase a laptop for school use, we strongly recommend a Windows 11 based laptop. *Chromebooks* and *Notebooks* are *NOT* a suitable alternative.

**Apple macOS** computers are **NOT** compatible with BCIT's software requirements. If you already have an Apple macOS computer, you will not be able to use the required software in the program. Additionally, other software, BCIT interfaces, and cloud-based software applications will require additional steps to setup and may not be as responsive.

Please check the Student & Employee Technology Discount menu for student discounts.

**SMARTPHONES:** A smartphone with GPS/location services, a camera, and 2 to 5 GB data plan is required and is quickly becoming a standard requirement for the workplace (most smartphones have GPS/location



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capability). If you have any questions related to computers or smartphones, please contact the computer contact person noted at the end of this letter.

**CALCULATORS:** You will require a *scientific, non-programmable calculator*: the *Sharp EL-546* or *Sharp EL-520* are recommended for the Math courses and most other courses (programmable calculators such as the TI-83 or TI-84 are not permitted in the Math courses in this program). You will also require a battery powered *Texas Instrument TI 30x* or similar scientific calculator for field labs (solar powered is not suitable).

**BOOKS:** The estimated cost of books and guides for the two years is **\$400-\$500.** Your instructors will provide a list of required books and field guides at the start of each course. Most books will be available at the campus bookstore, but some are readily available at most major bookstores.

**TRANSPORTATION:** You may incur additional expenses for transportation to field labs, field trips and various optional certification courses. Access to, and available use of a vehicle for transportation to local field lab sites is highly recommended for our programs, as most field sites do not have access by public transportation. You are encouraged to carpool for local field lab sites as much as possible. A driver's license is a requirement for most summer and graduating positions in this employment sector. Students without a driver's license should consider taking Driver Training classes.

**FIELD EQUIPMENT and SUPPLIES:** The estimated expenses for field equipment and supplies are between \$800 - \$1000 during the first year and \$200 - \$400 during the second year. For a successful experience in your courses, it is important that you are prepared and have basic field equipment and supplies. The following list of equipment and supplies will also form a necessary part of your "field toolkit" in your career. When feasible, you will spend much of your learning in the field (outdoor) conditions. Labs take place in all kinds of weather conditions, and you will need to dress appropriately.

### **REQUIRED FIELD EQUIPMENT and FIELD LAB SUPPLIES:**

- ✓ Compass with hinged sighting mirror and declination adjustment. (Suunto MC-2DL or equivalent).
- ✓ Suunto Clinometer: PM5/360PC with % and degree scales.
- ✓ Diameter tape metric (FRR 283D5M).
- ✓ Loggers/Plot Tape 30m Spencer (with d-Tape on reverse side).
- ✓ 14cm X 18.5cm six ring field notebook binder.
- ✓ 1 x 100 sheet pkg of 8 column waterproof field notebook paper that fits the notebook. Must have 8 column waterproof note page backed with a metric grid map page.
- ✓ Field Pocket Scale rule (CTH 10029) with 1:5000, 1:10000, 1:20000 scales.
- ✓ Tri-scale ruler (Staedtler-Mars 987-18-1) with 1:20, 1:25, 1:50, 1:75, 1:100, 1:125 or equivalent scales.
- ✓ Metric Navigational Protractor.
- ✓ 20cm x 25cm metric area dot grid 4 dots per square centimeter.
- ✓ 10x or 16x mineral hand lens.
- ✓ Hard hat wide brim style or a regular hard hat with a rain shield, preferably with 6-point suspension.
- ✓ Field map pocket: (or x-large Ziplock bag): waterproof see-through plastic case large enough for a 25cm x 25cm aerial photo and folded maps.
- ✓ Cruiser field vest (orange) with WorkSafeBC regulation hi-vis colour and stripes.
- ✓ Safety boots (waterproof): As you spend much of your field training time off-trail in forested settings, *you will require safety toed caulk boots* (boots with spiked soles) for safe, off-trail footing and protection. Make sure you size the boots with insoles and wearing a minimum two pairs of socks (light and heavy wool work socks). You will also need a pair of hiking boots with ankle support and rugged tread.



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- ✓ Hi-vis rain jacket and pants good for off trail bush walking. These should be sized for a loose fit to go over field vest and winter clothing. Please, keep your expensive rain gear for recreational use.
- ✓ Personal First Aid kit with additional field dressing.
- ✓ Personnel safety whistle: Marine, Fox40 or equivalent (avoid whistles with a floating pea or wooden ball).
- ✓ CSA approved safety glasses: hard plastic.
- ✓ Work gloves (for use with hand tools, power tools, etc.).

### **OPTIONAL ITEMS - things you might find useful:**

- ✓ Ear plugs (deci-dams).
- ✓ Bama Socks: Highly recommended especially with smaller feet, help to keep feet warm and dry, make sure you fit with boots.
- ✓ Pocket flashlight.
- ✓ Binoculars, 8x50 or similar power.
- ✓ Pocketknife: folding with a locking blade or a sheath-knife (with sheath). Used for probing, vegetation sampling etc.

FIELD EQUIPMENT SUPPLIER: Motion Canada is our recommended supplier of field equipment, giving you the opportunity to purchase most of the equipment and supplies at a reasonable savings. A purchase order list will be sent to you in mid-July with ordering and sizing instructions. You will need to place an order directly with Motion Canada and pick up from their warehouse in Coquitlam, allowing you to try on sized items. Time will be provided for equipment pickup during the first week of September and you will be required to have all field equipment as of the second week of September. For reference, please see the Motion Canada Field Solutions Catalogue.

If you have any questions, please contact the equipment contact at the end of this letter. If you do plan to purchase equipment online (Amazon, Craigslist etc.) please make sure that it is from a reputable supplier as there are many similar products of inferior quality on the market.

**SAFETY:** Personal Protective Equipment (PPE) and other safety requirements for field labs and activities will be provided by the instructors in advance. Failure to meet PPE and safety requirements for a field lab session will exclude you from activity. Note that if you miss a field lab session, it is not possible for faculty to offer alternate field activities and labs due to limited time, resources, and access to field sites.

#### If you have any questions about equipment and supplies, please contact:

Program Head: Julia Alards-Tomalin e: jalardstomalin@bcit.ca

**Equipment & Computer Contact**: Jason Pon e: jpon4@bcit.ca

Motion Canada: Kurtis Wile e: Kurtis.Wile@motion.com

## For administrative questions please contact the Program Head or our Program Assistant:

Program Assistant: Giti Abouhamzeh: e: giti abouhamzeh@bcit.ca