

# Forest Sciences

## Degree Requirements

### First Year

Required Courses	Credits	Done	Notes
Choose two of: FRST 150, WRDS 150B, ENGL 110, ENGL 111, and WOOD 225 <sup>1</sup> or Land One students take: FRST 150 plus one of ENGL 110, ENGL 111, or WOOD 225 <sup>1</sup>	6	<input type="checkbox"/>	
BIOL 112 <sup>2</sup> Biology of the Cell, BIOL 121 <sup>2</sup> Genetics, Evolution and Ecology, and BIOL 140 Laboratory Investigations in Life Sciences	8	<input type="checkbox"/>	
CHEM 121 (111) <sup>3</sup> Structure and Bonding in Chemistry and CHEM 123 Thermodynamics, Kinetics and Organic Chemistry	8	<input type="checkbox"/>	
MATH 100 <sup>4</sup> Differential Calculus with Applications and MATH 101 Integral Calculus with Applications	6	<input type="checkbox"/>	
CONS 101 Introduction to Conservation or FRST 110 <sup>5</sup> Land One: First-year Integrative Seminar	3	<input type="checkbox"/>	
APBI 200 Introduction to Soil Science	3	<input type="checkbox"/>	
<b>Total Credits</b>	<b>34</b> <b>(35/37)</b>	<input type="checkbox"/>	

<sup>1</sup> Students who want to take WOOD 225 need to take either ENGL 110, ENGL 111, FRST 150 or WRDS 150B first.

<sup>2</sup> Students without Grade 11 and/or Grade 12 Biology need to take BIOL 111 before taking BIOL 121 or BIOL 112.

<sup>3</sup> Students without Chemistry 12 need to take the Chemistry Basic Skills Test to determine if they should take CHEM 111 or CHEM 100: <https://www.chem.ubc.ca/ubc-chemistry-basic-skills-test-information>.

<sup>4</sup> Students may take MATH 180 (4 credits) or MATH 110 (6 credits) instead of MATH 100 (3 credits), but the credit difference cannot be applied towards program elective requirements. Please refer to "First Year Calculus Choices" on <https://www.math.ubc.ca/undergraduate/advising-and-resources/first-year-calculus-options>.

<sup>5</sup> Only Land One students are eligible to take FRST 110.

## Second Year

Required Courses	Credits	Done	Notes
APBI 244 (or GEOS 204) Atmospheric Environments	3	<input type="checkbox"/>	
BIOL 200 Fundamentals of Cell Biology	3	<input type="checkbox"/>	
BIOL 201 Introduction to Biochemistry	3	<input type="checkbox"/>	
CHEM 233 Organic Chemistry for the Biological Sciences and CHEM 235 Organic Chemistry Laboratory	4	<input type="checkbox"/>	
FRST 200 <sup>6</sup> Foundations of Conservation	3	<input type="checkbox"/>	
FRST 201 <sup>6</sup> Forest Ecology	3	<input type="checkbox"/>	
FRST 210 <sup>6</sup> Forest Plant Biology II	3	<input type="checkbox"/>	
FRST 211 <sup>6</sup> Forest Classification and Silvics	3	<input type="checkbox"/>	
FRST 231 <sup>6</sup> (or BIOL 300) Introduction to Biometrics	3	<input type="checkbox"/>	
Elective <sup>7</sup>	3	<input type="checkbox"/>	
<b>Total Credits</b>	<b>31</b>	<input type="checkbox"/>	
FRST 350 or FRST 351 immediately preceding third year <sup>8</sup>	2	<input type="checkbox"/>	

<sup>6</sup> Students who choose the Honours option in third and fourth years are required to have at least an 80% overall GPA in FRST 200, 201, 210, 211 and 231.

<sup>7</sup> PHYS 100 is suggested for students who do not have credit for Physics 12.

<sup>8</sup> Credit will be given for only one of FRST 350 or FRST 351. Students will be assigned to the most appropriate course based on their levels of forestry and field experience as determined by the course instructors.

# General (No Thesis) Option

## Third and Fourth Years

Required Courses	Credits	Done	Notes
FRST 302 Forest Genetics	3	<input type="checkbox"/>	
FRST 307 Biotic Disturbances	3	<input type="checkbox"/>	
FRST 395 Forest Wildlife Ecology and Management	3	<input type="checkbox"/>	
FRST 399 Introduction to Research Methods	3	<input type="checkbox"/>	
FRST 430 Advanced Biometrics	3	<input type="checkbox"/>	
FRST 495 Biological Diversity and Conservation (or BIOL 416)	3	<input type="checkbox"/>	
Area of concentration <sup>9</sup>	9	<input type="checkbox"/>	
General Electives	9	<input type="checkbox"/>	
Forestry Electives <sup>10</sup>	18	<input type="checkbox"/>	
Total Credits	54	<input type="checkbox"/>	

## Concentration Courses - choose 9 credits from your concentration

Concentration Category	Course Choices
Plant Genetics/Genomics/Physiology	CONS 302; FRST 311, 413, 432; APBI 318; BIOL 335, 338, 352
Forest Ecology and Management	FRST 305, 310, 320, 385, 408; APBI 401, 402.
Biodiversity Conservation and Management	CONS 330, 481, 486, 495; FRST 386; APBI 416
International Forestry/Sustainability	FRST 411, 415, 439, 444; CONS 330, 425; WOOD 461
Geomatics/Mensuration	CONS 340; FRST 232, 239, 339, 443 (or GEOS 373), 490; GEOS 370, 479

<sup>9</sup> Students will choose 9 credits from one of the groupings above for their Area of Concentration. Substitutions may be allowed at the discretion of the Director of the Forest Sciences Program.

<sup>10</sup> All 300- and 400-level APBI, CONS, FRST, UFOR and BEST courses that are not specifically required for the program are eligible as Forestry electives as long as students have the necessary prerequisites.

# Honours (with Thesis) Option

The BSFS Honours specialization is restricted to students with a minimum 80% overall average in the following core courses: FRST 200, 201, 210, 211 and 231. Exceptions may be made at the discretion of the Director of the Forest Sciences Program. Application for admission to the honours specialization should be made to the Director of the Forest Sciences Program. Applications will be accepted in the first weeks of September, January or May of the 3rd academic year. Students in the Honours specialization can also register in the dual degree in Education and Forest Sciences following consultation with the Program Director.

## Third and Fourth Years

Required Courses	Credits	Done	Notes
FRST 302 Forest Genetics	3	<input type="checkbox"/>	
FRST 307 Biotic Disturbances	3	<input type="checkbox"/>	
FRST 395 Forest Wildlife Ecology and Management	3	<input type="checkbox"/>	
FRST 399 Introduction to Research Methods	3	<input type="checkbox"/>	
FRST 430 Advanced Biometrics	3	<input type="checkbox"/>	
FRST 495 Biological Diversity and Conservation (or BIOL 416)	3	<input type="checkbox"/>	
FRST 498 B.Sc. Thesis in Forestry <sup>9</sup>	6	<input type="checkbox"/>	
Area of concentration <sup>10</sup>	12	<input type="checkbox"/>	
General Electives	9	<input type="checkbox"/>	
Forestry Electives <sup>11</sup>	18	<input type="checkbox"/>	
<b>Total Credits</b>	<b>63</b>	<input type="checkbox"/>	

<sup>9</sup> A 6-credit B.Sc. thesis will be completed in fourth year.

<sup>10</sup> An area of concentration must be declared before the start of third year. Courses should be selected in consultation with the Forest Science Program Director.

<sup>11</sup> All 300- and 400-level APBI, CONS, FRST, UFOR and BEST courses that are not specifically required for the program are eligible as Forestry electives as long as students have the necessary prerequisites.

# Co-op Option:

The co-operative education (co-op) option within Forest Sciences is a highly competitive program which increases your chances of working in your chosen field. As a co-op student you gain up to 20 months of paid, relevant and invaluable work.

Co-op students will extend their degree by one year, completing eight academic terms and five work terms over a five-year period. Below is the standard Forest Sciences program map for those in co-op:

	<b>Term 1 Sep – Dec</b>	<b>Term 2 Jan – Apr</b>	<b>Summer May – Aug</b>	
<b>Year 1</b>	Basic Sciences, English, Math, Intro to Forestry, and Soils		Summer	
<b>Year 2</b>	Cell Biology, Organic Chemistry, Biometrics, Forest Plant Biology and Forest Ecology		<b>Co-op 1 (Junior)</b>	Fall Interior Field School
<b>Year 3</b>	Entomology, Pathology, Fire, Hydrology, Wildlife, Advanced Biometrics, and Electives	Forest Genetics, Silviculture, Aquatic Ecosystems, and Electives	<b>Co-op 2 (Intermediate)</b>	
<b>Year 4</b>	Plant Physiology, Soils, Research Methods, Seminar, Conservation Biology, and Graduating Thesis	<b>Co-op 3 (Intermediate)</b>	<b>Co-op 4 (Intermediate)</b>	
<b>Year 5</b>	<b>Co-op 5 (Senior)</b>	Forest Soils, Biological Diversity, and Specialization		

## Good to know:

- Undergraduate students must apply to co-op in September of their second year
- You should acquire a driver's license if you do not already have one
- Work in British Columbia, across Canada and around the world
- Be supported by our Co-op Coordinators every step of the way

To learn more about the Co-op Program and how you can apply, contact the Forest Sciences Co-op Coordinator:

**Nazlyn Pirani**  
 Dean's Office  
 604-827-5196  
 nazlyn.pirani@ubc.ca  
 FSC 2615

# How to successfully complete first year:

1. You must follow your program closely – take the appropriate classes outlined for your degree. The most up-to-date program requirements are always listed on the UBC Calendar at [www.students.ubc.ca/calendar](http://www.students.ubc.ca/calendar) (click on 'Faculties, Colleges, and Schools' and then on 'Forestry').
2. You must pass at least 60% of the total number of credits attempted in both Terms 1 and 2 (summer classes are not included).
3. You must also obtain an average grade of at least 60% in both Terms 1 and 2, including any failed courses (summer classes are not included). If your average for Terms 1 and 2 is at least 55%, but less than 60%, you will be placed on academic probation and will be sent a letter outlining additional steps you must take in order to remain in your program. If you do not meet the criteria noted above, you will be asked to leave UBC for at least one year. Following this probationary period, you may re-apply to UBC but you must complete at least 12 credits at a college during your time away.

## Professional Designations

### Courses toward Registration as a BC Professional Forester

Students who wish to work towards membership in the Associations of BC Forest Professionals (ABC FP) are advised to contact Forestry Student Services. The information is also available on the ABCFP website at [www.abcfp.ca](http://www.abcfp.ca). There are also information sessions held throughout the academic year in the Faculty of Forestry – please contact Forestry Student Services for this schedule.

### Courses toward Registration as a BC Professional Biologist

Students who wish to work toward registration as a Registered Professional Biologist during their program should contact the College of Applied Biology of BC for course and other membership requirements at their website, [www.cab-bc.org](http://www.cab-bc.org). There are also information sessions held throughout the academic year in the Faculty of Forestry – please contact Forestry Student Services for this schedule.

## Contacts:

### Dr. Allan Carroll

Program Director  
604-822-3360  
[allan.carroll@ubc.ca](mailto:allan.carroll@ubc.ca)  
FSC 3034

### Forestry Student Services

Advising Office  
604-822-1834  
[forestry.undergad@ubc.ca](mailto:forestry.undergad@ubc.ca)  
FSC 2609

### Nazlyn Pirani

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FSC 2615

*The UBC Calendar is always the most up-to-date resource for degree requirements, <http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,203,0,0>.*