

# Forest Resources Management

## Degree Requirements (High School Grads)

### First Year

Required Courses	Credits	Done	Notes
APBI 200 Introduction to Soil Science	3	<input type="checkbox"/>	
Select one of the following English courses: FRST 150, NRES 150 <sup>1</sup> , WRDS 150B, ENGL 110, or ENGL 111	3	<input type="checkbox"/>	
BIOL 111 <sup>2</sup> Introduction to Modern Biology and 121 Genetics, Evolution and Ecology	6	<input type="checkbox"/>	
CHEM 121 (CHEM 100 or 111) Structure and Bonding in Chemistry OR PHYS 131 (PHYS 100) <sup>3</sup> Energy and Waves	3 or 4	<input type="checkbox"/>	
ECON 101 Principles of Microeconomics OR FRST 101 <sup>4</sup> Principles of Microeconomics for Forestry and Land and Food Systems	3	<input type="checkbox"/>	
FRST 100 Sustainable Forests OR FRST 110 <sup>4</sup> Land One: First-year Integrative Seminar	3	<input type="checkbox"/>	
FRST 232 <sup>5</sup> Computer Applications in Forestry	3	<input type="checkbox"/>	
MATH 100 Differential Calculus with Applications or MATH 190 <sup>6</sup> Calculus Survey	3/4/6	<input type="checkbox"/>	
Electives	3	<input type="checkbox"/>	
Total Credits	30/31/32/ 33/34	<input type="checkbox"/>	

<sup>1</sup> NRES courses will be offered beginning Winter 2024 academic year

<sup>2</sup> Students who have completed Grade 11 and/or Grade 12 Biology do not need to take BIOL 111. Instead they can take three credits of electives. Students with no high school biology are strongly recommended to take BIOL 111 in Term 1 and BIOL 121 in Term 2.

<sup>3</sup> CHEM 100/111 and PHYS 100 are intended for students without CHEM 12 and PHYS 12, respectively. If students do not have Grade 12 level in both sciences, they are encouraged to select a science not taken at the Grade 12 level.

<sup>4</sup> Only Land One students are eligible to take FRST 101 and FRST 110.

<sup>5</sup> Students with strong computing skills, especially in the use of spreadsheets, can replace FRST 232 with 3 credits of electives, upon approval by the program director.

<sup>6</sup> Students may take MATH 180 or 190 (4 credits) or MATH 110 (6 credits) instead of MATH 100 (3 credits), but the credit difference cannot be applied towards program elective requirements. MATH 190 is strongly encouraged for all students with or without Calculus 12 (or a previous calculus course). Please refer to "First Year Calculus Choices": <https://www.math.ubc.ca/undergraduate/advising-and-resources/first-year-calculus-options> for more information.

## Second Year

Required Courses	Credits	Done	Notes
CONS 200 Foundations of Conservation	3	<input type="checkbox"/>	
FRST 200 or NRES 200 Forest Plant Biology I	3	<input type="checkbox"/>	
FRST 201 or NRES 201 Forest Ecology	3	<input type="checkbox"/>	
FRST 210 or NRES 210 Forest Plant Biology II	3	<input type="checkbox"/>	
FRST 211 or NRES 211 Forest Classification and Silvics	3	<input type="checkbox"/>	
FRST 231 or NRES 231 Introduction to Biometrics	3	<input type="checkbox"/>	
FRST 239 Tree and Stand Level Measurements	3	<input type="checkbox"/>	
FOPR 264 Introduction to Forest Operations	4	<input type="checkbox"/>	
Electives	6	<input type="checkbox"/>	
<b>Total Credits</b>	<b>31</b>	<input type="checkbox"/>	
FRST 350 or 351 immediately preceding third year <sup>7,8</sup>	2	<input type="checkbox"/>	

<sup>7</sup> Credit will be given for only one of FRST 350 or FRST 351.

<sup>8</sup> Students will be assigned to the most appropriate course based on their levels of forestry and field experience as determined by the course instructors.

## Specialization in Community and Aboriginal Forestry

Required Courses	Credits	Done	Notes
CONS 370 Aboriginal Forestry	3	<input type="checkbox"/>	In place of CONS 200
FRST 370 Community Forests and Community Forestry	3	<input type="checkbox"/>	In place of 6cr of electives
Specialization-specific Elective <sup>9</sup>	3	<input type="checkbox"/>	

<sup>9</sup>Specialization-specific electives are to be chosen from the following: ANTH 201A (3), ANTH 220 (3), CONS 340 (3), CONS 481 (3), FNLG 101B (3), FNPS 210 (3), FRST 339 (3), FRST 386 (3), FRST 439 (3), FRST 470 (3), FRST 490 (3), LAW 200 (3), LAW 395A (2), POLI 316A (3), SOCI 201A (3), SOCI 220 (3), SOCI 360 (3).

## Third Year

Required Courses	Credits	Done	Notes
FRST 305 Silviculture	3	<input type="checkbox"/>	
FRST 307 Biotic Disturbances	3	<input type="checkbox"/>	
FRST 318 Forest and Conservation Economics	3	<input type="checkbox"/>	
FRST 320 Abiotic Disturbances: Fire and Climate	3	<input type="checkbox"/>	
FRST 339 Forest Level Measurement and Productivity	3	<input type="checkbox"/>	
FRST 385 Watershed Hydrology	3	<input type="checkbox"/>	
FRST 386 Aquatic Ecosystems and Fish in Forested Watersheds	3	<input type="checkbox"/>	
FRST 395 Forest Wildlife Ecology and Management	3	<input type="checkbox"/>	
WOOD 365 Wood Industry Business Management	3	<input type="checkbox"/>	
Forestry Elective	3	<input type="checkbox"/>	
Elective pool: APBI 244/GEOS 204 (3); CONS 310 (3), 340 (3), 370 (3), 412 (3), 415 (3), 481 (3); FOPR 362 (3), 464 (4); FRST 302 (3), 370 (3), 403 (3), 404 (4), 427 (3), 439 (3), 443 (3), 491 (3); WOOD 492 (3).			
Total Credits	32	<input type="checkbox"/>	
FRST 452 immediately after third year	2	<input type="checkbox"/>	

## Specialization in Community and Aboriginal Forestry

Required Courses	Credits	Done	Notes
COMR 457 Fundamentals of Financial Accounting	3	<input type="checkbox"/>	In place of FRST 386 and Forestry Elective
FRST 444 Agroforestry	3	<input type="checkbox"/>	

## Fourth Year

Required Courses	Credits	Done	Notes
FRST 415 Sustainable Forest Policy	3	<input type="checkbox"/>	
FRST 422 Mathematical Modelling in Forest Resource Analysis	3	<input type="checkbox"/>	
FRST 423 Forest Management Planning	6	<input type="checkbox"/>	
One of CONS 340, NRES 340, NRES 241	3	<input type="checkbox"/>	
FRST 497 Communications and Professionalism	3	<input type="checkbox"/>	
WOOD 461 Globalization and Sustainability	3	<input type="checkbox"/>	
Forestry Elective	3	<input type="checkbox"/>	
Elective pool: APBI 244/GEOS 204 (3); CONS 310 (3), 340 (3), 370 (3), 412 (3), 415 (3), 481 (3); FOPR 362 (3), 464 (4); FRST 302 (3), 370 (3), 403 (3), 404 (4), 427 (3), 439 (3), 443 (3), 491 (3); WOOD 492 (3).			
Electives	6	<input type="checkbox"/>	
<b>Total Credits</b>	<b>30</b>	<input type="checkbox"/>	

## Specialization in Community and Aboriginal Forestry

Required Courses	Credits	Done	Notes
COMR 329 Principles of Organizational Behaviour	3	<input type="checkbox"/>	In place of 3cr Forestry
Specialization-specific Elective <sup>9</sup>	6	<input type="checkbox"/>	Electives and 6cr Electives

<sup>9</sup> Specialization-specific electives are to be chosen from the following: ANTH 201A (3), ANTH 220 (3), CONS 340 (3), CONS 481 (3), NRES 341 (3), FNLG 101B (3), FNPS 210 (3), FRST 339 (3), FRST 386 (3), FRST 439 (3), FRST 470 (3), FRST 490 (3), LAW 200 (3), LAW 395A (2), POLI 316A (3), SOCI 201A (3), SOCI 220 (3), SOCI 360 (3).

# Minor in Commerce (Option for Community and Aboriginal Forestry)

Students who desire a stronger foundation in business may consider the Minor in Commerce. Upon successful completion of this minor program, the notation "Minor in Commerce" will be placed on the student's transcript.

Enrolment in this program is limited. To be considered, the student must be eligible for at least third-year standing in the Faculty (B.S.F. Forest Resources Management Major) with a cumulative average of at least 68% in the previous two years. Completion of ECON 101 (or ECON 310) and ECON 102 (or ECON 311) plus MATH 100 is required before applying. Meeting the stated minimum requirement does not guarantee admission into the Minor.

Students may require an additional term to complete the Minor in Commerce, although it is intended to be completed over two years. For students entering the Faculty from secondary school, the program consists of 136 credits taken over four years.

## First Year

Required Courses	Credits	Done	Notes
Select one of the following English courses: FRST 150, NRES 150, WRDS 150B, ENGL 110, or ENGL 111	3	<input type="checkbox"/>	
BIOL 111 <sup>1</sup> Introduction to Modern Biology and BIOL 121 Genetics, Evolution and Ecology	6	<input type="checkbox"/>	
CHEM 121 (CHEM 100 or 111) Structure and Bonding in Chemistry OR PHYS 131 (PHYS 100) <sup>2</sup> Energy and Waves	3 or 4	<input type="checkbox"/>	
ECON 101 Principles of Microeconomics OR FRST 101 <sup>3</sup> Principles of Microeconomics for Forestry and Land and Food Systems	3	<input type="checkbox"/>	
ECON 102	3		
FRST 100 Sustainable Forests OR FRST 110 <sup>3</sup> Land One: First-year Integrative Seminar	3	<input type="checkbox"/>	
FRST 232 <sup>4</sup> Computer Applications in Forestry	3	<input type="checkbox"/>	
MATH 100 <sup>5</sup> Differential Calculus with Applications	3/4/6	<input type="checkbox"/>	
Electives	3	<input type="checkbox"/>	
Total Credits	30/31/32/ 33/34	<input type="checkbox"/>	

<sup>1</sup> Students who have completed Grade 11 and/or Grade 12 Biology do not need to take BIOL 111. Instead they can take three credits of electives. Students with no high school biology are strongly recommended to take BIOL 111 in Term 1 and BIOL 121 in Term 2.

<sup>2</sup> CHEM 100/111 and PHYS 100 are intended for students without CHEM 12 and PHYS 12, respectively. If students do not have Grade 12 level in both sciences, they are encouraged to select a science not taken at the Grade 12 level.

<sup>3</sup> Only Land One students are eligible to take FRST 101 and FRST 110.

<sup>4</sup> Students with strong computing skills, especially in the use of spreadsheets, can replace FRST 232 with 3

credits of electives, upon approval by the program director.

<sup>5</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”: <https://www.math.ubc.ca/undergraduate/advising-and-resources/first-year-calculus-options> for more information.

## Second Year

Required Courses	Credits	Done	Notes
FRST 200 or NRES 200 Foundations of Conservation	3	<input type="checkbox"/>	
FRST 201 or NRES 201 Forest Ecology	3	<input type="checkbox"/>	
FRST 210 or NRES 210 Forest Plant Biology II	3	<input type="checkbox"/>	
FRST 211 or NRES 211 Forest Classification and Silvics	3	<input type="checkbox"/>	
FRST 231 or NRES 231 Introduction to Biometrics	3	<input type="checkbox"/>	
FRST 239 Tree and Stand Level Measurements	3	<input type="checkbox"/>	
FRST 370 Community Forests and Community Forestry	3	<input type="checkbox"/>	
FOPR 264 Introduction to Forest Operations	4	<input type="checkbox"/>	
Specialization-specific Elective <sup>6</sup>	3	<input type="checkbox"/>	
Elective	3	<input type="checkbox"/>	
<b>Total Credits</b>	<b>31</b>	<input type="checkbox"/>	
FRST 350 or 351 immediately preceding third year <sup>7,8</sup>	2	<input type="checkbox"/>	

<sup>6</sup> Specialization specific electives are to be chosen from following: ANTH 201A (3), ANTH 220 (3), CONS 340 (3), CONS 481 (3), FNLG 101B (3), FNPS 210 (3), FRST 339 (3), FRST 386 (3), FRST 439 (3), FRST 470 (3), FRST 490 (3), LAW 200 (3), LAW 395A (2), POLI 316A (3) SOCI 201A (3), SOCI 220 (3), SOCI 360 (3).

<sup>7</sup> Credit will be given for only one of FRST 350 or FRST 351.

<sup>8</sup> Students will be assigned to the most appropriate course based on their levels of forestry and field experience as determined by the course instructors.

## Third Year

Required Courses	Credits	Done	Notes
COMR 329 Principles of Organizational Behaviour	3	<input type="checkbox"/>	
COMR 398 Introduction to Business Processes and Operations OR	3	<input type="checkbox"/>	
COMM 458 Fundamentals of Managerial Accounting			
COMR 457 Fundamentals of Financial Accounting	3	<input type="checkbox"/>	
COMR 465 Marketing Management	3	<input type="checkbox"/>	
CONS 370 Aboriginal Forestry	3	<input type="checkbox"/>	
FRST 305 Silviculture	3	<input type="checkbox"/>	
FRST 307 Biotic Disturbances	3	<input type="checkbox"/>	
FRST 318 Forest and Conservation Economics	3	<input type="checkbox"/>	
FRST 320 Abiotic Disturbances: Fire and Climate	3	<input type="checkbox"/>	
FRST 385 Watershed Hydrology	3	<input type="checkbox"/>	
FRST 395 Forest Wildlife Ecology and Management	3	<input type="checkbox"/>	
WOOD 365 Wood Industry Business Management	3	<input type="checkbox"/>	
<b>Total Credits</b>	<b>36</b>	<input type="checkbox"/>	
FRST 452 immediately after third year	2	<input type="checkbox"/>	

## Fourth Year

Required Courses	Credits	Done	Notes
COMR 473 Business Finance	3	<input type="checkbox"/>	
COMR 493 Strategic Management in Business	3	<input type="checkbox"/>	
FRST 415 Sustainable Forest Policy	3	<input type="checkbox"/>	
FRST 422 Mathematical Modelling in Forest Resource Analysis	3	<input type="checkbox"/>	
FRST 423 Forest Management Planning	6	<input type="checkbox"/>	
FRST 444 Agroforestry	3	<input type="checkbox"/>	
FRST 497 Communications and Professionalism	3	<input type="checkbox"/>	
One of CONS 340, NRES 340, NRES 241	3	<input type="checkbox"/>	
WOOD 461 Globalization and Sustainability	3	<input type="checkbox"/>	
Specialization-specific Elective <sup>9</sup>	6	<input type="checkbox"/>	
<b>Total Credits</b>	<b>33</b>	<input type="checkbox"/>	

<sup>9</sup> Specialization specific electives are to be chosen from following: ANTH 201A (3), ANTH 220 (3), CONS 340 (3), CONS 481 (3), NRES 341 (3), FNLG 101B (3), FNSP 210 (3), FRST 339 (3), FRST 386 (3), FRST 439 (3), FRST 470 (3), FRST 490 (3), LAW 200 (3), LAW 395A (2), POLI 316A (3) SOCI 201A (3), SOCI 220 (3), SOCI 360 (3).

# Co-op Option:

The co-operative education (co-op) option within Forest Resources Management 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 experience.

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 Resources Management 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, Intro to Biometrics and Computer Applications, Economics, English, Math and Soil Science			
<b>Year 2</b>	Intro to Conservation, Forest Plant Biology, Ecology, Forest Measurement, Forest Operations I, and Climatology.		<b>Co-op 1 (Junior)</b>	Fall Interior Field School*
<b>Year 3</b>	Silviculture I, Entomology, Pathology, Fire Science, Wildlife, Watersheds and the Integrated Field Lab.	<b>Co-op 2 (Intermediate)</b>	<b>Co-op 3 (Intermediate)</b>	
<b>Year 4</b>	<b>Co-op 4 (Intermediate)</b>	Silviculture II, Forest Economics, Forest Measurements, Fish & Aquatic Ecosystems, First Nations, and Forest Operations II.	Spring Coastal Field School*	<b>Co-op 5 (Senior)</b>
<b>Year 5</b>	Social Science, Applied Programming, Visualization, Recreation, and a Graduating Paper	Sustainable Forest Management Integrated Course, Business and Wood Products Manufacturing.		

\*The Field Schools are one week in duration. They are scheduled immediately before or after regular classes.

## 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 Resources Management Co-op Coordinator: **Nazlyn Pirani, Dean's Office - FSC 2615, 604-827-5196, [nazlyn.pirani@ubc.ca](mailto:nazlyn.pirani@ubc.ca)**



# 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 (ABCFP) 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. Dominik Roeser**

Program Director  
604-822-3559  
[Dominik.roeser@ubc.ca](mailto:Dominik.roeser@ubc.ca)  
FSC 2036

### **Forestry Student Services**

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

### **Nazlyn Pirani**

Co-op Coordinator  
604-827-5196  
[nazlyn.pirani@ubc.ca](mailto:nazlyn.pirani@ubc.ca)  
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>.*