

Wood Products Processing

Degree Requirements

First Year

Required Courses	Credits	Done	Notes
FRST 150 Scholarly Writing and Argumentation in Forestry or NRES 150 ¹ or WRDS 150B Writing and Research in the Disciplines OR ENGL 110 Approaches to Literature OR ENGL 111 Approaches to Non-fictional Prose	3	<input type="checkbox"/>	
CHEM 121 ² Structure and Bonding in Chemistry or CHEM 111 Structure, Bonding, and Equilibrium in Chemistry	4	<input type="checkbox"/>	
CHEM 123 Thermodynamics, Kinetics and Organic Chemistry	4	<input type="checkbox"/>	
MATH 100 ³ Differential Calculus with Applications to Physical Sciences and Engineering	3	<input type="checkbox"/>	
MATH 101 Integral Calculus with Applications to Physical Sciences and Engineering	3	<input type="checkbox"/>	
PHYS 117 ⁴ Dynamics and Waves or PHYS 131 Energy and Waves	3	<input type="checkbox"/>	
WOOD 120 Introduction to Wood Products and Global Trade	3	<input type="checkbox"/>	
Electives ⁵	9	<input type="checkbox"/>	
Total Credits	32	<input type="checkbox"/>	

¹ NRES courses will be available beginning the 2024 Winter academic year

² 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>

³ 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. To determine which MATH course you should take, please consult: <https://www.math.ubc.ca/undergraduate/advising-and-resources/first-year-calculus-options>

⁴ Students without Physics 12 must replace 3 credits of electives with PHYS 100 prior to taking PHYS 117 or PHYS 131.

⁵ For admission to the Minor in Commerce, students need to take ECON 102 as one of their first year electives.

Second Year

Required Courses	Credits	Done	Notes
ECON 101 Principles of Microeconomics OR FRST 101 ⁶ Principles of Microeconomics for Forestry and Land and Food Systems	3	<input type="checkbox"/>	
FRST 231 or NRES 231 Introduction to Biometrics	3	<input type="checkbox"/>	
WOOD 225 or NRES 225 Communications Strategies	3	<input type="checkbox"/>	
WOOD 244 Quantitative Methods in the Wood Industry	3	<input type="checkbox"/>	
WOOD 245 Programming for Wood Products Manufacturing Applications	3	<input type="checkbox"/>	
WOOD 249 Contemporary Topics in Forestry and Wood Products	1	<input type="checkbox"/>	
WOOD 276 Mechanics of Wood Products	3	<input type="checkbox"/>	
WOOD 280 Wood Anatomy and Identification	3	<input type="checkbox"/>	
WOOD 282 Wood Physics and Mechanics	3	<input type="checkbox"/>	
WOOD 290 Secondary Wood Products Manufacturing	3	<input type="checkbox"/>	
WOOD 292 Two-Dimensional and Solid Computer-Aided Graphics	2	<input type="checkbox"/>	
Total Credits	30	<input type="checkbox"/>	
WOOD 353 ⁷ Mill Site Visits	2	<input type="checkbox"/>	
WOOD 305 ⁸ Wood Machining Skills	3	<input type="checkbox"/>	

⁶ Only Land One students are eligible to take FRST 101

⁷ Six working days of on-site study of wood products manufacturing plants immediately before or after WOOD 305.

⁸ Practical woodworking course taken at the end of second year.

Third Year

Required Courses	Credits	Done	Notes
COMM 204 Logistics and Operations Management	3	<input type="checkbox"/>	
WOOD 330 Industrial Engineering	3	<input type="checkbox"/>	
WOOD 335 Quality Improvement	3	<input type="checkbox"/>	
WOOD 356 Machine Components	2	<input type="checkbox"/>	
WOOD 365 Wood Industry Business Management	3	<input type="checkbox"/>	
WOOD 373 Wood Adhesives and Coatings	3	<input type="checkbox"/>	
WOOD 384 Wood Sawmilling and Drying	3	<input type="checkbox"/>	
WOOD 386 Applied Mechanics of Materials	3	<input type="checkbox"/>	
WOOD 464 Wood Finishing and Protection	4	<input type="checkbox"/>	
WOOD 482 CAD/CAM	4	<input type="checkbox"/>	
WOOD 487 Wood Composites	3	<input type="checkbox"/>	
Electives ⁹	3	<input type="checkbox"/>	
Total Credits	37	<input type="checkbox"/>	

⁹ Elective courses are chosen in consultation with the Program Director, and must be numbered 300 or higher.

Fourth Year

Required Courses	Credits	Done	Notes
COMR 457 Fundamentals of Financial Accounting	3	<input type="checkbox"/>	
WOOD 440 Engineering Economics	3	<input type="checkbox"/>	
WOOD 461 Globalization and Sustainability	3	<input type="checkbox"/>	
WOOD 485 Furniture Construction	3	<input type="checkbox"/>	
WOOD 491 Environmental Facilities Design	3	<input type="checkbox"/>	
WOOD 492 Modelling for Decision Support	3	<input type="checkbox"/>	
WOOD 494 Principles of Wood Cutting and Tooling	3	<input type="checkbox"/>	
WOOD 499 Wood Products Capstone	6	<input type="checkbox"/>	
Electives ⁹	6	<input type="checkbox"/>	
Total Credits	33	<input type="checkbox"/>	

⁹ Elective courses are chosen in consultation with the Program Director, and must be numbered 300 or higher.

Co-op Option:

UBC Wood Products Processing Co-op Education Program takes your learning beyond the limitations of the classroom and extends it into the working world by alternating periods of full-time academic study with a total of up to 20 months of paid, relevant and hands-on industry work experience. Through this educational process you will benefit from the opportunity to test drive career options in the Wood Products industry in a highly supportive environment, while gaining practical skills and experience. As a co-op student, you will not only have the chance to make money while building valuable work experience; you will also increase awareness of your potential, capabilities, and areas of interest to help you take steps towards your future career goals.

The Wood Products Processing Co-op Program is a competitive academic program. Accepted 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 program map for those in co-op:

	Term 1 Sep – Dec	Term 2 Jan – Apr	Summer May – Aug
Year 1	Basic Sciences		Summer
Year 2	Wood Material Science		WOOD 353 WOOD 305 <i>Co-op 1 (Junior)</i> WOOD 300
Year 3	Manufacturing Basics	<i>Co-op 2 (Intermediate)</i> WOOD 311	<i>Co-op 3 (Intermediate)</i> WOOD 312
Year 4	Advanced Manufacturing		<i>Co-op 4 (Senior)</i> WOOD 411
Year 5	<i>Co-op 5 (Senior)</i> WOOD 412	Integration	

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 Wood Products Processing Co-op Coordinator:

Alberto Renteria
 Co-op Coordinator
 604-827-5196
 alberto.renteria@ubc.ca
 FSC 2615

Minor in Commerce

Enrolment in this program is limited. Applications are open just before the reading break in term 2 – the application deadline is normally around the middle of March. Students normally apply at towards the end of their second or third year and they must have a cumulative average of at least 68% in the previous two years of UBC courses. Applicants must have successfully completed one of MATH 100 or 180 and both of ECON 101/FRST 101 (or ECON 310) and ECON 102 (or ECON 311). Meeting the stated requirements does not guarantee admission to the program. The program consists of COMM 204, COMR 329, 457, 465, 473, and 493. Upon successful completion of this Minor program, the notation "Minor in Commerce" will appear on the student's transcript. The Commerce Minor is intended to be completed over two years.

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 (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 combined, 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.
4. If you do not meet the criteria noted above, you will be asked to leave UBC for at least one year. Following this one year absence, you may re-apply to UBC but you must complete at least 12 credits at a college during your time away.

Contacts:

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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>.