BACHELOR OF SCIENCE
Biochemistry and Molecular Biology

Major description
Investigate the world at the molecular level in Biochemistry and Molecular Biology, the study of chemical compounds and reactions that occur in living organisms. Biochemistry and Molecular Biology specifically deals with the structure and function of proteins, nucleic acids, carbohydrates and lipids—the basic constituents of living cells.

Program highlights
Biochemistry option: Provides students with in-depth knowledge of how life works at the molecular level and opportunities to explore related disciplines including bioinformatics, metabolomics, chemical biology, cellular biophysics, and biocatalysis.

Medical and Molecular Biology option: Takes students into the medical aspects of biochemistry and molecular biology, including pharmacology, medical microbiology and virology, and the biochemical basis of disease.

Get help students examine and explore their behaviors, relationships, feelings, or thoughts that cause concern or challenges

Medical conditions
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Looking for support?
UBC Okanagan provides a broad range of support services for students from admission through to graduation. Ranging from help with academics and careers to physical and emotional resources, visit Student Support and Resources for a full list of helpful supports. Some examples are included below:

- **Academic & Career Development**: provides academic and career support for all undergraduate students
- **Indigenous Programs & Services**: provides academic support to self-identified First Nations, Métis, and Inuit students
- **International Student Advising**: supports international students with immigration, employment in Canada, and more
- **Faculty Program Advisors**: provide faculty-specific academic support
- **Disability Resource Centre**: assists with disability-related accommodations and programming initiatives to help remove barriers for students with disabilities and ongoing medical conditions
- **Counsellors**: help students examine and explore their behaviors, relationships, feelings, or thoughts that cause concern or challenges
- **Financial support**: is available to help students learn to budget, pay tuition, or apply for awards and scholarships

How to use the Program Plan:
Tuuum est! This Program Plan is designed to help shape your UBC experience, challenge yourself to try new things, and become the person and scholar you want to be to help make your time at UBC Okanagan yours. The Program Plan offers suggestions – you don’t have to do it all!

The Program Plan includes four categories:
- **Explore the Major**: Explore what you’ll be studying and learning. Make connections between your program and future career or education opportunities and goals.
- **Connect and Build Community**: Making connections will help develop your support network throughout your studies and beyond.
- **Engage locally and globally**: Get ready for life beyond UBC by accessing programming and resources aligned with your goals, interests, and career pathways.
- **Develop Skills and Gain Relevant Experience**: Expand your capacity to understand the changing world and embrace different perspectives by seeking out new experiences and opportunities.

Legend
Experiential Education opportunities are highlighted with a symbol.
Plan ahead! Statements highlighted with a symbol must be completed during a specific term(s) or have an associated deadline.

Getting Started
First-year standing
Explore the Biochemistry and Molecular Biology major by visiting the Department of Chemistry or Department of Biology websites and reviewing the Academic Calendar. Learn more about your major requirements by logging into Degree Navigator and reviewing the First-Year Planning Guides.
Book an appointment with an advisor to discuss program or career-related questions. Find the advisor that is right for you by reviewing advising options available.
Visit the the Biology or Chemistry webpage and scroll down to the “Your Career Options” heading for more employment information.

Moving Through your Degree
Second-year standing
Declare the Biochemistry and Molecular Biology major on the Student Service Centre (SSC) during the registration period between June and mid-September after completing a minimum of 24 credits.
Find unique courses to fill your elective requirements or add a minor.
Meet with an instructor or TA during office hours: ask a question, discuss an assignment, or go over lecture material.
International Students: Contact International Student Advising to review your study status.
Considering further education? Find graduate programs at UBCO and beyond. Research application requirements, admissions information, and funding options.

Moving Through your Degree
Third-year standing
Explore a topic of interest in depth by participating in Undergraduate Research. Apply for an NSERC or an Undergraduate Research Award to fund your research.
Explore co-op opportunities to strengthen your skills and build your work experience by applying to the Co-operative Education Office. Applications open in September to students with 3rd year standing or higher.
Study abroad by participating in a Go Global program such as exchange, faculty-led global seminar, or research abroad.
Apply to the Biochemistry and Molecular Biology honours program at the end of the third year of study (after completing a minimum of 54 credits).

Preparing for Graduation and Your Future
Fourth-year+ standing
Prepare for a career in healthcare, government regulation, veterinary medicine, pharmacy, agriculture, biotechnology, research and more.
Develop Skills and Gain Relevant Experience: Expand your capacity to understand the changing world and embrace different perspectives by seeking out new experiences and opportunities.

Undergraduate Programs and Admissions: you.ubc.ca
Explore Expereiential Education
Participate in hands-on, immersive learning experiences.

Explore high-impact, “learn-by-doing” experiences that take your education beyond the classroom. Whether on- or off-campus, paid or volunteer, participating in directed experiences and focused reflection helps to increase knowledge, develop skills, clarify values, and build your capacity to contribute to your communities.

Experiential Education opportunities are highlighted with a " symbol. Most opportunities highlighted below can be pursued at any time. Opportunities with timelines or deadlines are noted with a " symbol.

Getting Started:
Explore new opportunities and interests.

New to UBC? 
• Participate in orientation and transition programming to connect with other students and get involved in the campus community.

Find on-campus events to meet new people and get involved with the campus community using the Events Calendar.

Meet a Student Connector at Student Connect for help with navigating campus and to learn more about the opportunities available at UBC Okanagan.

Follow @UBCOStrategic on Instagram for campus tips, opportunities, and event updates.

Attend a Heat Varsity Athletics game. Admission is free with your student UBCcard.

Develop Interests and Broaden Perspectives:
Get more involved and build your skills and connections.

Branch out, get involved in student life, and have fun by joining a student association or the Biochemistry Course Union to meet peers and participate in events and activities.

Get active! UBCO Recreation offers activities like intramural sports, fitness classes, and other special events and activities.

Build your networking skills with alumni working in careers in your desired industry by using Ten Thousand Coffees and LinkedIn or by attending career events and workshops.

Commuting? Visit Colleges spaces on campus to relax, study, and socialize with others.

Planning to live on campus? Apply to Living Learning Communities.

Connect your experiences
Whether you’re new-to-UBC or nearing graduation, reflect on the questions below to help connect your values, interests, and education to your future career or personal goals. Practicing reflection can help deepen your learning, strengthen your connections, and encourage life-long learning. These reflection questions are meant to help you build a UBC Okanagan experience that is unique to you.

• What are you hoping to learn as you progress through your degree?
• What kind of career are you interested in after completing your degree?
• How will the skills and knowledge you acquire during your studies help you in your career after graduation?
• What relationships and experiences are you hoping to gain from your time at university?

Use the Program Plan regularly throughout your time at UBC to build an experience that is fulfilling and rewarding.

Immersive Experiences: Take part in unique opportunities and programs. Find ways to immerse yourself in your experiences.

Explore professional associations such as the Association of Professional Biology for more information about potential careers, networking and professional development opportunities and more.

Give back to the campus community by volunteering or applying to work on campus: Student & Alumni Job Board.

Engage with your community in a meaningful way and help to create social change by participating in the Community Service Learning program.

Create your own student association, study group, or social club to connect with peers.

Apply to the Tuum Est Initiative Fund for funding support to attend a conference, fund a student-led program, or represent UBC Okanagan at an academic competition.

Find other work opportunities or apply to the co-op program to strengthen your resume.

Summarize and organize your academic and out-of-classroom experiences and accomplishments in a resume, CV, or portfolio with help from a Career Development Specialist.

Gain leadership experience by running for an executive position in a student association or the Student Union Okanagan (SUO).

Join the Get Involved Program: sign up for volunteer projects in the Okanagan.

Attend Kelowna community events to get connected and learn about different cultures, activities, and experiences that make the Okanagan unique.

Build your cross-cultural skills and intercultural fluency by participating in the Intercultural Development Program.