

Major description

Become a versatile scientist who seeks to understand how matter and energy work. The physics program aims to provide a comprehensive, hands-on education that allows students to develop the skills needed to pursue studies at the post-graduate level or to cross over into other professions such as medicine, actuarial science, meteorology, patent law, engineering, and secondary education.

Physicists find ways to apply laws and theories to problems in nuclear energy, electronics, optics, materials, communications, aerospace technology, navigation equipment, and medical instrumentation.

Program highlights

Senior laboratory components consist of long-range projects rather than prescribed exercises, to encourage initiative to help students prepare for the inventive atmosphere of modern high-tech industry. Students interested in medical physics are introduced to researchers at the BC Cancer Agency and faculty active in our CANPEP accredited graduate program in medical physics.

Complete a [Certificate in Communications and Rhetoric](#).

Your career options

Career options for graduates of the UBC Okanagan physics program range from astronomer and aerodynamicist, to meteorologist and radiation protection inspector.

Visit the [Physics](#) webpage and scroll down to the “Your Career Options” heading for more employment information.

Looking for support?

UBC Okanagan provides a broad range of support services from admission through to graduation. Visit [Student Support and Resources](#) for a full list. Some examples are included below:

- [Academic & Career Development](#) provides academic and career support for all undergraduate students
- [Indigenous Programs & Services](#) offers services including academic and career advising, experiential learning opportunities, peer mentoring and tutoring for 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](#)
- The [Student Learning Hub](#) offers free learning supports such as subject tutoring, learning strategies, and writing consultations

How to use the Program Plan:

Tuum 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 Major

Explore the [Physics](#) major by visiting the [Department of Computer Science, Mathematics, Physics and Statistics](#) website 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 [Student Learning Hub](#) throughout your degree for free supports from peers and professionals that include tutoring in math, sciences, languages, and writing.

Participate in [Supplemental Learning](#) – free, weekly, peer-facilitated study sessions.

✔ Consider applying for the [Dual Degree Master of Management](#).

Moving Through your Degree

Second-year standing

Declare the Physics 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 for summer research or summer schools at worldleading research facilities such as CERN, LIGO, TRIUMF, the Perimeter Institute for Theoretical Physics, or locally at the Dominion Radio Astrophysical Society or the BC Cancer Agency.

Apply to the Physics [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

Market yourself to employers by reflecting on your UBCO experience and identifying the skills and knowledge you developed through the activities you participated in. Meet with a [Career Development Specialist](#) for help with your resume, cover letter, and job search strategy.

Apply to NSERC for graduate funding, and to graduate schools.

[Schedule an appointment with an advisor](#) the term before you plan to graduate to ensure that you will meet all academic graduation requirements.

Review graduation eligibility requirements and deadlines before you ✔ [apply to graduate](#) and [learn about convocation](#).

Explore Experiential 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.

Connect your experiences



Whether you're new-to-UBCO 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 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?

A Career Development Specialist can help guide you through the reflection process to bolster the connections between your experiences, skills, and goals

Getting Started:

Explore new opportunities and interests.

Develop Interests and Broaden Perspectives:

Get more involved and build your skills and connections.

Immersive Experiences:

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



Connect & Build Community

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 @UBCOStudents on Instagram for campus tips, opportunities, and event updates. Attend a Heat Varsity Athletics game. Admission is free with your student UBCcard.

Branch out, get involved in student life, and have fun by joining a student association like the Quantitative Sciences 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 the Collegia spaces on campus to relax, study, and socialize with others. Planning to live on campus? ✔ ➡ Apply to join a Living Learning Community.

Explore professional associations such as the Canadian Association of Physicists, and the American Physical Society, 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.



Develop Skills & Gain Relevant Experience

Use the Events Calendar to find on-campus opportunities for personal and professional development. Connect with the Academic & Career Development team for support with exploring opportunities that will help you achieve your career or education goals. Looking to volunteer, intern, or gain work experience? Assess what experience you have and fill any gaps by participating in Career Development workshops and finding opportunities on the Student & Alumni Job Board.

Apply to the ➡ Work Study program to build skills and grow your professional network with paid on-campus positions that work around your class schedule. ✔ Apply to Entrepreneurship@UBCO to explore your start-up ideas through mentorship and training programs. Book an appointment with a Learning Strategist at any stage in your degree for help with study skills and learning strategies. Investigate requirements for full-time jobs or other opportunities related to careers of interest by looking at job boards and employer websites.

Apply to the Tuum Est Student 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).



Engage Locally & Globally

Learn about UBCO's commitments to Truth and Reconciliation and Indigenous initiatives. Explore course options and electives that broaden your own perspectives and worldviews. Learn about programs and supports available through the Equity & Inclusion Office.

Participate in cross-cultural initiatives organized by the Global Engagement Office (GEO) to increase cultural awareness and grow professionally. Get involved with Student Union Okanagan (SUO) resource groups: Indigenous Peoples Collective (IPC), Peer Support Network (PSN), Pride Resource Centre (PRC), Women's Resource Centre (WRC), Sex Positivity Centre (SPC).

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.