BACHELOR OF SCIENCE

Physics

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 Communication 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.

Getting Started

First-year standing

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 Guide. 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.

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.

How to use the Program Plan:

Tuut 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.

Legends

Student Support and Resources

• Faculty provides academic and career support 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

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 to discuss program or career-related questions. Review graduation eligibility requirements and deadlines before you apply to graduate and learn about convocation.

Undergraduate Programs and Admissions: you.ubc.ca
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.

Get involved in the following:
- Student engagement opportunities
- Community organizations
- Internships
- Work experience opportunities
- Volunteer opportunities
- Leadership positions

Connect with the Student Union Okanagan (SUO) resource groups
- Equity & Inclusion Office
- Peer Support Network (PSN)
- Pride Resource Centre (PRC)
- Women's Resource Centre (WRC)
- Sex Positivity Centre (SPC)
- Student & Alumni Job Board
- Ten Thousand Coffees
- Collegia
- Quantitative Sciences Course Union
- Undergraduate Programs and Admissions
- Okanagan Physics

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.

Get involved with cross-cultural initiatives organized by the Global Engagement Office (GEO) to increase cultural awareness and grow professionally.

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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 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 Colloquium spaces on campus to relax, study, and socialize with others.

Planning to live on campus? Apply to join a Living Learning Community.

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

Get more involved and build your skills and connections.

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).

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.

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.