

Bellingham Technical College

Engineering Technology



Engineering Technology:
Civil Specialization
Composites Specialization
Geomatics Specialization
Mechanical Design Specialization

Bachelor of Applied Science (BAS)
Engineering Technology

**FORGE YOUR
OWN PATH**
www.btc.edu



2023/24

FORGE YOUR OWN PATH



www.btc.edu/Engineering

Where others see challenges, you see puzzles to be solved. At BTC, you can find engineering programs that combine your problem-solving skills with hands-on training and high-tech equipment to prepare you for a satisfying career.

Engineering Technology

- Civil Specialization
- Composites Specialization
- Geomatics Specialization
- Mechanical Design Specialization

Bachelor of Applied Science (BAS):
Engineering Technology

Mechanical aptitude or an
interest in ***math, science,***
and technology.

► **Practical & Professional**

You'll learn by doing, with immersive labs, high-tech equipment, internships and instructors with industry experience.

► **Built-in Community**

BTC's Engineering Technology programs offer small classes, so you'll build a supportive community of classmates and get plenty of one-on-one time with instructors.

► **Return on Investment**

With strong financial support for students and shorter certificates and two-year degrees, you'll graduate with less debt ready to join the engineering workforce.



About Bellingham Technical College

Bellingham Technical College has been training students for in-demand, high-paying careers for more than 65 years. At BTC, the focus is always on our students and helping them succeed. We're proud to have one of the highest graduation rates of all public two-year colleges in Washington state, as well as high job-placement rates for our graduates.

At our vibrant campus in the heart of Bellingham, we educate a diverse population of over 3,700 students in 50 degrees, 41 certificate programs and two bachelor of applied science degrees.

Bellingham Technical College's mission is to provide student-centered, high-quality professional technical education for today's needs and tomorrow's opportunities.

BTC students prepare for careers in many areas, including high-demand fields such as advanced manufacturing, engineering, nursing, accounting and more.

Smaller classes mean your instructors really know you, and our lectures are reinforced in the lab, whether it is in a fast-paced kitchen, on the welding floor, or in a salmon hatchery.

At every step, you'll know that BTC's faculty and employees are here to support you in pursuit of your professional goals.

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Bellingham Technical College would like to acknowledge that our service area today is within the usual and accustomed lands of the Lhaq'temish or Xwlemi (Lummi) Nation, and of the Noxws'á'q (NookSack) Tribe of the Coast Salish peoples, as well as the original territory of the s'éməš (Samish) Indian Tribe. Our respect and gratitude go to our indigenous neighbors, whose care and protection of the land and water continues to this day.

Engineering Technology programs at BTC are ideal for students with

mechanical aptitude or an interest in math, science, and technology.

Whichever path you choose, you'll learn skills needed for a career in high-demand, dynamic industries like engineering, aerospace, manufacturing, civil and commercial construction, and energy, either in the private sector or with the government.

The employment outlook for engineering technology graduates is very strong, and students can expect to earn excellent wages. Across the state, the number of engineering graduates is well below industry needs, and employers in many fields are urgently seeking qualified engineering technicians and technologists.

BTC Degree Options

Associate of Applied Science (AAS) degree:

A two-year associate degree that allows you to go directly to work in your field.

Associate of Applied Science-Transfer (AAS-T) degree:

A two-year associate degree with transferable general education courses that allows you to either go directly into your field, transfer to a specific program at a four-year college or university, or prepare for your bachelor of applied science degree at BTC.

Bachelor of Applied Science (BAS) degree:

A two-year bachelor's degree that can be added on top of an existing associate degree from an accredited college, or even a previous bachelor's degree.

Transitioning to BTC: BTC accepts both traditional and non-traditional credit for equivalency to BTC courses on a case-by-case basis. Contact Admissions at admissions@btc.edu or call **360.752.8345**

Learn more: www.btc.edu/transfers

*Wage & Employment Data Sources

Earning potential: Washington State Employment Security Department 2021 Occupational Employment and Wage Estimates (esd.wa.gov) reflect 2018-21 employment; average annual wage reflects the 50th percentile, and earning potential reflects the 75th percentile of annual wages across Washington state.

Employment data come from the Washington State Board for Community and Technical Colleges and reflect WA/OR employment for students enrolled in BTC between 2017-18 and 2019-20.

Engineering Technology: Civil Specialization

Associate of Applied Science Degree

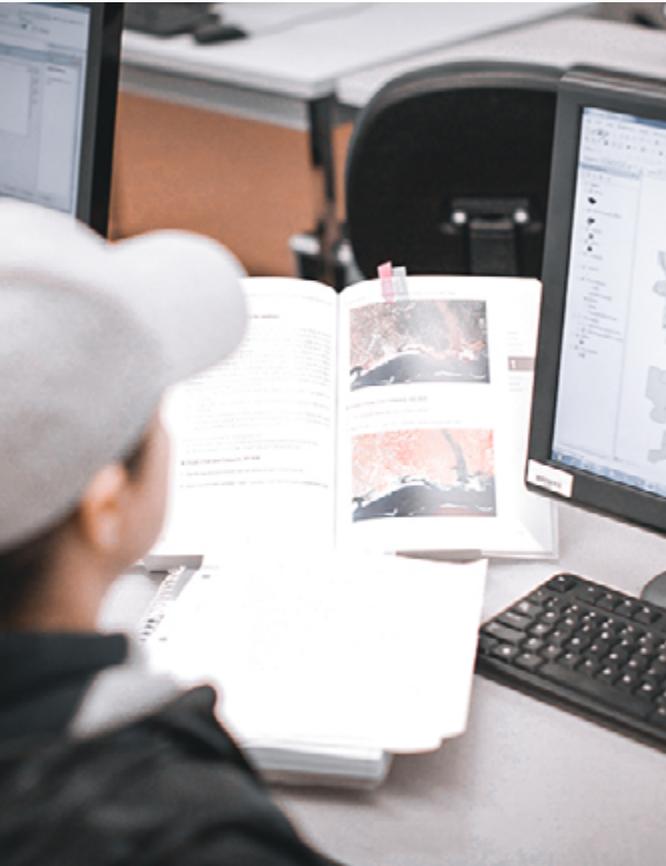
Associate of Applied Science – Transfer Degree

Program Length: 6 quarters

Civil engineering technicians aid in the design, construction, operation, and maintenance of large construction projects, including roads, dams, bridges, airports, and buildings.

This program will prepare you for a career as a civil engineering technician, computer-aided drafter, construction manager, transportation technician, or geographic information systems (GIS) technician.

You'll learn valuable skills such as civil drawing, design, geographic information systems, and field engineering.



*About 86% of BTC Civil students are employed within nine months of graduation. The average annual wage in this field is \$66,096, with an earning potential of about \$76,287 per year.**

be you



*You've never shied away from a challenge, but the idea of a college degree always seemed out of reach. At BTC, you found affordable technical education to launch your career, with high wages and the flexibility to take you where you want to go. **FORGE YOUR OWN PATH. BE YOU.***



Engineering Technology: Composites Specialization

Associate of Applied Science Degree

Associate of Applied Science – Transfer Degree

Program Length: 6 quarters

BTC's Composites Engineering Technology program provides hands-on experience focused on aerospace and industrial manufacturing. This discipline combines design, fabrication, and material science as students apply theoretical engineering principles with practical technical projects that they work on in BTC's high-tech lab. Students design, build, and test products using innovative polymer materials like carbon fiber.

By specializing in composites engineering, students are prepared to fill a growing need for skilled engineering technicians. Graduates are ready for careers in CAD/CAM, CNC automation, metrology, quality assurance, non-destructive testing (NDT), ultra-sound inspection (UT), materials testing, assembly, and more.

"The instructors have been working in the industry and can tell us how relevant all of this is."

— Oso Ghoffrani, Composites student

*The average annual wage in this field is \$79,144, with an earning potential of about \$92,331 per year.**



Engineering Technology: Geomatics Specialization

Associate of Applied Science Degree

Program Length: 6 quarters

If you'd like to prepare for a career in a growing field that will allow you to use advanced technology and won't confine you to an office, then choose our Geomatics Specialization. You can put your math and computer skills to work as a geomatic technician doing surveying, mapping and more for construction firms, surveying and engineering firms, mining companies, oil and gas companies, and public utilities. Or, go to work for a government agency, such as U.S. Geological Survey, Department of Natural Resources, the Bureau of Land Management, or the U.S. Forest Service.

BTC's courses will give you an understanding of boundary laws, zoning, permitting, and platting, with in-depth experience using the expanding technology of Geographic Information Systems and the Global Positioning System, as well as conventional surveying equipment and procedures for working in the field or the office.



*The average wage in this field is \$89,301, with an earning potential of about \$115,997 per year.**

Engineering Technology: Mechanical Design Specialization

Associate of Applied Science Degree

Associate of Applied Science – Transfer Degree

Program Length: 6 quarters

AutoCAD

Certificate of Completion

Program Length: 1 quarter

SolidWorks

Certificate of Completion

Program Length: 1 quarter

Mechanical engineering technicians help to design, build and analyze everything from cars and planes to robots and medical devices, even entire manufacturing plants. BTC's program will prepare you for design and engineering technician work at structural engineering companies, aerospace companies, architectural firms, refineries, construction companies, or manufacturing firms.

Learn drawing and design skills to use as a mechanical engineering technician, mechanical drafter, computer-aided drafter, engineering technician, or production planner.



*The average annual wage in this field is \$61,244, with an earning potential of about \$76,672 per year.**

BTC'S Bachelor of Applied Science Degree

General Information

Take your two-year degree further with BTC's fully online Bachelor of Applied Science degree.

If you've completed an associate degree from an accredited college, BTC's fully online Bachelor of Applied Science degrees allow you to use your existing degree as the first two years of one of our bachelor's programs, so you can earn your bachelor's degree in two years.

Cohorts for BTC's bachelor's programs start in Fall Quarter, but students can start their program entry requirements at any time.

Engineering Technology

Bachelor of Applied Science Degree

Program Length: 6 quarters

This two-year fully online Bachelor of Applied Science in Engineering Technology (BAS-ET) degree is designed for students who have an existing associate degree in a related field and want to train for higher paying jobs in the engineering industry.

BTC's BAS-ET degree is designed to meet the needs of students who want to practice engineering in industry. The program focuses on providing applied technical education that prepares graduates to be productive professionals who make meaningful contributions to the engineering industry. The curriculum balances theoretical content with robust applied problem solving. Intensive engineering design projects provide students with a strong foundation of engineering knowledge and skills that align with traditional and emerging engineering and technology careers.

Engineering Technology graduates will be qualified for a broad range of engineering positions, including project engineer, field engineer, manufacturing engineer, engineering technologist, and technical manager.



*The average annual wage in this field is \$78,062, with an earning potential of about \$98,488 per year.**

To get started, a one-on-one meeting with our program specialist is required:

EngineeringNav@btc.edu



Find more information:

www.btc.edu/admissions

Admissions & Funding checklist:

www.btc.edu/admissionsteps

Apply to BTC

Apply at www.btc.edu/applyonline and get your ctcLink ID number.

Apply for Financial Aid

File the Free Application for Federal Student Aid (FAFSA) if you are a U.S. citizen or eligible non-citizen.

<https://studentaid.gov>.

File the Washington Application for State Financial Aid (WASFA) if you are not eligible to complete the FAFSA.

<https://wsac.wa.gov/wasfa>

For other funding resources, visit:

www.btc.edu/financialresources

Assess Your Starting Point

Degree- and certificate-seeking students need to determine their math and English starting points.

BTC offers multiple options to determine where you start in those classes. Visit: www.btc.edu/assessment

Meet Your Navigator & Register for Classes

Students will meet with College Navigators for a mandatory GET Started appointment: navigate Goals, create an Education plan, become Tech ready, and register for classes.

Contact Admissions & Registration to schedule your appointment: admissions@btc.edu or call **360.752.8345**.

Bellingham Technical College does not discriminate on the basis of race, color, national origin, religion, gender identity or expression, sex, disability, veteran status, sexual orientation, age, or genetic information in its programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies: Executive Director for Human Resources, 3028 Lindbergh Avenue, Bellingham, WA 98225, 360.752.8354. BTC publications are available in alternate formats upon request by contacting the Accessibility Resources office at 360.752.8345.

Bellingham Technical College no discrimina en base a raza, color, origen, religión, sexo, discapacidad, militares veteranos dados de baja con honores o estatus militar, orientación sexual o edad en sus programas y actividades. La siguiente persona ha sido designada para manejar las peticiones de información relativas a la no discriminación política: Director ejecutivo de Recursos Humanos, 3028 Lindbergh Avenue, Bellingham, WA 98225, 360.752.8354. Las publicaciones de BTC están disponibles en formatos alternativos a petición, favor de contactar a la Oficina de Servicios de Accesibilidad (Accessibility Resources office) 360.752.8345.



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Bellingham, WA 98225
admissions@btc.edu | 360.752.8345