

# Aircraft Structures Technician

## CERTIFICATE

## Why earn an aircraft structures certificate?

You know you want to work with your hands, you love troubleshooting, and you're thinking of a career that's rewarding and will take you places. UFV's 10-month Aircraft Structures Technician program can jump-start you into a challenging, high-tech career in the aerospace industry. The program is offered in our Aerospace Centre at the Abbotsford International Airport.

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This certificate program is Transport Canada approved and will give you a thorough introduction to the structural maintenance, repair and overhauling aircraft bodies. Working and learning at a busy airport location will give you a taste of real-life experience and also help you make connections with potential employers.

### WHAT TYPE OF CAREER CAN I EXPECT?

As a successful aircraft structures technician grad, you will repair and overhaul aircraft. Some of your tasks might include manufacturing, modifying and repairing sheet metal parts, structures, skins, and panels to exacting tolerances, and using and interpreting manufacturers' structural repair manuals. Once you complete the certificate program, you will be qualified to start your career as an aircraft structures apprentice and, since time spent in this program is worth 11 months credit, you can then go on to earn your Aircraft Maintenance Engineer "S" licence.

The aerospace-related industry has been identified by the City of Abbotsford as one of the key growth engines for the local economy. The Industry Training Authority predicts that the aerospace industry will require some 4,000 new trades and technical workers within five years, including structural technicians.



*“UFV’s teachers are very knowledgeable and they created a fun and safe, working environment. I am confident I will enjoy working in this field for many years to come.”*

— DAVID USLAR,  
2007 UFV graduate

# Aircraft Structures



*“Coming straight from Grade 12, I thought I would be behind as this is a specialized class, but that was not the case. There is a wide variety of ages and experience levels in this program. Thanks to UFV’s great instructors I have learned a lot and it has been a really fun learning process.”*

— NADINE VARNER,  
2007 UFV graduate.

## WHY TAKE THE PROGRAM AT UFV?

Our Aerospace Centre is a great example of a hands-on training opportunity and industry partnership. We’re particularly proud that our students get to train right at the Abbotsford International Airport in our specially designed facility. Of course, some lessons involve a desk, while others take you onto the shop floor where you will work on aircraft structures. There’s no better way to learn. The Aircraft Structures program introduces you to the fundamentals of aircraft structural maintenance and repair. Everything from basic hand tools to carbon fibre is included in this program. You will work on shop projects as well as real-life damage scenarios on actual aircraft. Once you’ve completed the program, you will be prepared for:

- Repair and overhaul of fixed-wing aircraft
- Rotary wing (helicopter) repair and overhaul
- Aircraft parts manufacturing
- Composite component fabrication and repair
- Aircraft structures assembly and modification

There’s no doubt that as a student, you will benefit from the experience of one-on-one contact with knowledgeable instructors in the department, and the opportunity to gain hands-on, applied experience throughout the program.

Our Aircraft Structures Technician program is Transport Canada-approved basic training.

## WHEN SHOULD I APPLY?

Apply right away. Applications are accepted on a continuous basis throughout the year. Qualified applicants are considered for the next intake that has space.

To determine when the next intake occurs, contact the Aerospace centre directly at 604-852-7377 ext. 101, or email [aerospace@ufv.ca](mailto:aerospace@ufv.ca) to get details.

## WHAT DO I NEED TO GET IN?

You need to have a B.C. secondary school graduation (Grade 12) or equivalent. We also require a Math and English comprehension entrance exam, which is a standard test for all trades programs at UFV. You’ll then be asked to attend a personal interview where your suitability and interest in the aerospace industry will be discussed and assessed. You should also be in good physical condition and have no fear of heights. A current criminal record search document may be required.

A medical statement from a qualified physician may be required at any time before you start the program, or during your studies. You will be notified by a UFV official if and when that statement is required.

### ANYTHING ELSE I NEED TO KNOW?

UFV's Aircraft Structures Technician program is offered at the Aerospace Centre at 30645 Firecat Avenue, at the Abbotsford Airport. It is open from 8 a.m. to 3:30 p.m. Monday to Friday. Our program runs for 42 consecutive weeks, which are broken into three 14-week modules.

The Aircraft Structures program requires continuous attendance through all three modules to complete the program. You will be expected to attend classes five days a week. Transport Canada stipulates that no more than five per cent of any module can be missed due to absenteeism. Students who fail to meet the attendance requirements may be subject to an academic warning or withdrawal from the program.

### WHAT KIND OF COURSES WILL I TAKE?

The program is comprised of 42 weeks of in-class instruction. You must show that you understand the theory introduced in the program by successfully completing a written test for each unit and then applying it to an acceptable level of practical skills as assigned in that unit. You must complete all requirements with a minimum of 70 percent or better. You will be working with the help of learning packages that will give step-by-step instructions. The learning materials may include printed worksheets, videotapes, display boards, lab manuals, instructions, demonstrations, and/or lectures.

Practical hands-on training is a large part of the learning environment. As much as possible, study-lab and shop instruction are patterned after "on-the-job" situations.

#### MODULE 1

100	Program Orientation
101	Safety Factors
102	Aircraft Terminology & Components
103	Reference Material & Documentation
104	Blueprint & Technical Drawings
105	Tools & Equipment
106	Materials
107	Fastener Installation
109	Sheet Metal Fabrication

#### MODULE 2

108	Sealing
110	Advanced Structures & Assembly
111	Corrosion Assessment
112	Corrosion Control
113	Heat Treatment of Aluminum Alloys
114	Prime and Paint Metal Parts & Assemblies
115	Structural Damage Assessment
116	Sheet Metal Repairs

#### MODULE 3

117	Tubular Repairs
118	Composite Fabrication
119	Composite Repairs
120	Fabric Coverings
121	Wood Structures
122	Fluid Lines & Conduits
123	Windows & Lenses

### I'M INTERESTED. WHAT DO I DO NEXT?

Check out UFV's online calendar at [www.ufv.ca/calendar](http://www.ufv.ca/calendar). From there you can download an application form and submit it, along with the \$45 application fee, to any UFV Admissions and Records office or centre. You can also transmit it through the Internet at [www.pas.bc.ca](http://www.pas.bc.ca). If you're currently in Grade 12, you can apply now, but we require a statement from your school counsellor or principal indicating that you are likely to meet graduation requirements by June, and this must be presented at the time of your entrance exam appointment.

You will be notified of your entrance exam date by the UFV Trades & Technology Centre and there is no fee for writing these exams. If you have not been contacted within two weeks of submitting your application, please call us at 604-852-7377 ext. 101. Before classes start, you'll be called and given all the registration procedures. If we can't reach you, you'll be removed from the waitlist.

## HOW MUCH WILL IT COST?

You should budget about \$111 a week for program fees, which includes tuition fees plus 10 per cent of the tuition for ancillary fees. You should also plan on spending a minimum of \$1,500 for basic hand tools, \$260 for required textbooks, and \$300 for appropriate working apparel.

As a student with nine or more credits, you will also have to pay the annual health and dental fee (about \$160 for 2009/10) to provide extended medical and dental insurance for September to August.

Check with the Student Union Society or at [www.studentcare.net/works](http://www.studentcare.net/works) for details.

We require a deposit (currently \$200) to be paid when you register, which typically takes place one or two months before the start of each semester. The balance of your fees must be paid by the end of the second week of the semester. In addition, each semester you will be required to pay a \$30 Student Union Society membership fee, \$35 SUS building fee, a \$4.50 Cascade student newspaper fee, a \$40 university bus pass fee, and a \$3 radio station fee.

It's also worth a visit to the UFV financial aid and awards office, which facilitates the disbursement each year of approximately \$12 million in federal and provincial student loans, grants, bursaries, scholarships, and awards to UFV students. A helpful budget planning worksheet is available online at [www.ufv.ca/fineaid/budget](http://www.ufv.ca/fineaid/budget).

## CAN I SPEAK WITH SOMEONE ABOUT MY OPTIONS?

We want to hear from you! If you're unsure of your direction, contact Student Services at 1-888-504-7441 to connect with an educational advisor, or arrange for career counselling.

You can also contact the Aerospace centre directly at 604-852-7377 ext. 101, or email [aerospace@ufv.ca](mailto:aerospace@ufv.ca) to get more details.



The information contained in this document is subject to change. Please refer to [www.ufv.ca/trades](http://www.ufv.ca/trades) for up-to-date information. UFV reserves the right to cancel courses and programs.



## About UFV

Nestled in the beautiful Fraser Valley just east of Vancouver, in B.C., UFV is a fully accredited, public university that enrolls more than 11,000 students each year. UFV has campuses in Abbotsford, Chilliwack, and Mission and regional centres in Hope and Agassiz, and a growing presence in Chandigarh, India.

UFV is committed to exceptional post-secondary instruction and a nurturing learning environment. We are large enough to offer variety, yet small enough to offer the personal attention that our students need to thrive. Our small class sizes and focus on teaching allow our students to get to know their instructors and learn in a hands-on setting.

We offer more than 80 programs, including 13 bachelor's degrees, a master's degree, and more than a dozen trades and technology programs. We believe that anyone who wants to go to university should be given the chance, so our admission policies are flexible, and we provide university prep courses and high school completion options. There are many options for learning: full-time, in class, online, as part of a structured program or one tailored specifically to your interests.

Many of our programs "ladder" into one another, allowing students to keep their options open. Our international programming makes for a culturally diverse student body and great opportunities to study abroad, while our continuing studies offerings make learning a lifelong experience.

UFV is recognized nationally for student success, an excellent learning environment, creative integration of programming, and our work with our local communities.

Get to know us better at [www.ufv.ca](http://www.ufv.ca).

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