



# Composite Materials Technology Program Orientation

COMP 0005

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**Room:**  
1059

**Advisement Hours:**  
During classroom hours

**COMP Program Faculty:**  
[https://www.davistech.edu/  
programs/composite-materials  
-technology#faculty](https://www.davistech.edu/programs/composite-materials-technology#faculty)



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## Introduction

Welcome to the Composite Materials Technology program at the Davis Technical College (Davis Tech)! This program orientation aims to acquaint you with information specific to the program and its unique policies and procedures. You must read this document thoroughly and discuss any unclear sections with your instructor or a Career and Academic Advisor. You may also review college policies on the Davis Tech website ([www.davistech.edu](http://www.davistech.edu)) or in Student Services.

## Program Description

The Composite Materials Technology program at Davis Technical College prepares students to work in industries such as aerospace, automotive, bridge building, marine, sporting goods, and parts assembly. This program introduces basic composite materials, techniques, and procedures and progresses through advanced composite skills. Students demonstrate industry standards concerning safety, composite terminology, hand lay-ups, and composite inspection and repair. Our instructors are from the aerospace industry and have years of hands-on experience. This program prepares students for entry-level employment as a composite technician.

## Program Objectives

Students will practice their skills through hands-on experience, instructional videos, information sheets, and competency tests. Upon completion of this program, students will have received specialized training as an entry-level composite technician. Students will have the opportunity to learn and apply the following while enrolled in the Composite Material Technology program:

- Recognize safety and be aware of safety concerns such as Safety Data Sheets (SDS) and Personal Protective Equipment (PPE)
- Identify composite and advanced composite materials
- Practice composite and advanced composite molds and tooling
- Prepare and practice vacuum and non-vacuum bagging procedures, techniques, and applications
- Practice advanced prepreg and core material processing techniques
- Recognize composite and advanced composite repair procedures
- Complete composite part finishing and painting
- Interpret blueprints and build composite parts from blueprints

- Design and test composite parts

## **General Information**

You can access this orientation on the Davis Tech program website, as well as current information on the following items:

- Admission Requirements
- Classroom Availability
- Training Location
- Graduation Requirements
- Course Descriptions
- Program Requirements
- Gainful Employment Disclosures
- Estimated Cost (*tuition, fees, program, and course materials*)
- Financial Aid
- Credentials
- Job Outlook
- Transfer Options
- Academic Agreements
- Industry Licensing and Certification

## **Learning Resources**

### **Student Resource Center**

The classroom includes a Student Resource Center with industry publications, periodicals, manuals, and media materials. In addition, you will be given opportunities to use equipment and materials, such as computers with Internet access and software applications currently being used in the industry.

### **Electronic Student Resources**

Your Canvas orientation course contains electronic learning resources that can be used throughout the program. Each canvas course links to these resources and will be updated regularly. If you find a frequently used resource (website, video, tutorial, etc.) that you think would be helpful for other students in your program, consider sharing the link with your instructor.

## **Advisement**

Teacher advisement is vital for your success at Davis Tech. Students who receive regular advisement are more likely to achieve their goals and complete their training program on schedule. Your instructor can also meet with you during the advisement hours listed at the beginning of this orientation. These meetings are used for you and the instructor to accomplish the following tasks:

- Update contact information in Northstar, the Student Information System.
- Review performance and attendance.
- Define and clarify training and career goals.
- Discuss professional work ethic in performance, attendance, attitude, dress, behavior, and communication.
- Discuss challenges with referral to appropriate institutional support systems that can help improve your success.



## **Competency-based Training**

Davis Tech courses are competency-based, requiring you to demonstrate your knowledge and skill according to industry-based objectives and performance standards. Course lengths are based on actual clock hours and are calculated on the average length you are expected to complete designated coursework. At the beginning of each course, you will receive a curriculum with guided learning modules. This includes the amount of time you should spend on each learning activity. This will help you meet industry time standards and complete coursework in an appropriate amount of time.

## **Scheduling**

Courses in this program have an Open-start/Defined-end schedule. Courses in this program may be started at any time. Following course enrollment, you will receive a schedule that shows the date by which the course must be completed. If you fail to complete a course by the end date, you must re-enroll and repay for the course. This scheduling type is also called course-based because courses are paid for one at a time.

## **Campus Technology**

You will log in to and out of the Northstar Classroom Login Station each time you attend class using your 10-digit student number. You were given this number when you completed the Davis Tech enrollment process. You will use your student number to access the Student Portal as well. Your instructor will provide you with information on Canvas access.

You can access Canvas from any internet-connected computer at the following URL: <https://davistech.instructure.com/login>. If you have problems logging in to Canvas, please see your instructor or email [online.support@davistech.edu](mailto:online.support@davistech.edu). If you encounter technical issues in Canvas, use the Help button and the "Report a Problem" link. A general orientation to Canvas can be found in the New Student Orientation. Faculty will also offer an orientation specific to technology in your program on your first day of class.

## **Students with Disabilities**

If you have a disability that may require accommodations, contact and work through the counseling service located in Student Services.

## **Student Policies and Procedures**

You may find further information on institutional student policies and procedures here: <http://www.davistech.edu/student-policies>.

## **Instructor Response Time**

Your instructor will respond to any question regarding the program, assignments, or assessments within 24 hours within the Davis Tech operational schedule.

## **Performance Standards**

### **Progress**

Progress is calculated by the number of scheduled hours versus the completed coursework. Program progress must be maintained at 67 percent or better to qualify for financial aid. It is recommended that progress be maintained at 85 percent or better. This will ensure that you can complete the program promptly. Please meet with your instructor if you have difficulty meeting 85



percent progress. If you do not complete a course by the end date, you will have to pay for the course again (adult students only), and a faculty member will help create a Student Success Plan to ensure your success on a second attempt.

### **Grading**

Davis Tech courses are competency-based, requiring you to demonstrate your knowledge and skill according to industry-based objectives and performance standards. Course lengths are based on actual clock hours and are calculated on the average length you are expected to complete designated coursework. At the beginning of each course, you purchase or receive a course curriculum that provides guided learning modules for you to follow. This includes the amount of time that should be spent on each learning activity. This will help you meet industry time standards and complete coursework in an appropriate amount of time.

Grades are based on your progress in the course, attendance, and shop attitude (respectfulness, using your time wisely, etc.). To achieve a high grade, you must be *on time*, keep on task, and use your time wisely.

You are allowed three attempts to achieve a passing score on all quizzes and tests within Canvas. If you do not complete a passing score in two attempts or less, you must meet with the instructor to address any discrepancies. You will not be able to move forward in a course if you fail any quiz or test three times and are required to meet with an instructor to discuss options for remediation.

If you have questions, all student communications with an instructor will be answered within 24 hours of Davis Tech's operational schedule.

Progress is based on how quickly you complete the course based on the average completion time. The average completion time is the course length and the hours listed for each module. It is possible to achieve over 100 percent progress, but your progress will not be counted above 100 percent for grading purposes.

For disruptive or unproductive behavior, you will receive a verbal warning. If you continue the behavior, you will receive a 'U' for the day in citizenship.

Your grade will be calculated by taking the average of your attendance and progress (up to 100 percent). Each 'U' you have received will deduct one point from your average.

### **Citizenship**

H – Honorable                      S – Satisfactory                      N – Needs Improvement                      U – Unsatisfactory

If you cannot prove at least average competency or citizenship in a given course or module, you will not receive credit for having completed it.

### **Lab Grading Criteria**

All graded labs or repairs are Pass or Fail and based on the following:

- Visual Inspection
- Structural Tap Test
- Ultrasound (Non-Destructive)

### **Explanation of Lab Grading Criteria:**



- Visual inspection is the first line of Quality Assurance testing and grading of a given project. Visual inspection determines if the grading of the project continues to Structural Tap Testing.
- Structural Tap Testing is the second line of Quality Assurance testing and grading. The Structural Tap Test proves the soundness of the composite part. A sharp tapping sound will be heard if the part or repair is solid without voids, delamination, disbonds, or other defects.
- With the assistance of an instructor, you can conduct non-destructive ultrasound testing of the composite part if the part passes the Structural Tap Test.

Each lab grading criteria depends on the previous Quality Assurance test; therefore, you must rework or repair a part that does not pass the visual inspection. This grading standard is driven by industry and reflects what you will experience as a composites materials technician. You are expected to stay on task and use class time wisely.

### **Attendance**

Attendance must be 67 percent or better to be eligible for financial aid. The Composite Materials Technology program prefers 85 percent minimum attendance to ensure students can stay on track for the timely completion of each course. Attendance is calculated using the number of scheduled hours versus the number of hours you are present in the classroom. To meet this requirement, you must be in class on the days and times that you are scheduled. Your attendance requirement may be higher depending on any sponsorship or financial aid stipulations that apply to you. You must log in and out of Northstar each time you attend class so your attendance is documented.

Talk to your instructor when an absence is necessary. Excused absences will be given for job interviews, Davis Tech-sponsored activities, major illness or significant life events, off-site training, or high school activities. If you require an extended absence from the program, consult with your instructor before the absence. If necessary, a counselor in Student Services may assist you in this process.

Students are expected to attend class for the hours they are scheduled. If absent for ten consecutive scheduled days, you will be withdrawn from Davis Tech. Per the College Student Records Policy, student attendance information may be released to potential employers.

### **High School Students**

High school students must meet minimum standards in grading, progress, and attendance before transitioning into a place in the program as an adult student. These standards are established by the program and may differ across the college. In the Architectural and Engineering Design program, a high school student who will become an adult student should meet the following minimum standards:

Attendance: 75 percent      Progress: 75 percent      Grade: 75 percent

You will be subject to academic discipline if you do not meet Davis Tech or Architectural and Engineering Design performance standards. Reasons for academic discipline include but are not limited to violations of Davis Tech or program policies and procedures, violations of academic



integrity, failure to maintain minimum attendance standards, failure to maintain progress standards, and repeating a course.

## **Break Times**

You can take breaks whenever you see fit but must stay on task and complete the day's work.

Lunch: 11:00 am – 12:00 pm

\*The lab will be closed to students during lunch.

## **Academic Performance**

Your success in this program is vital to us. We will work with you to help you succeed, but if you are not meeting the minimum standards described in this orientation, we are committed to taking appropriate actions to help you improve. The following steps may be taken if you fail to meet the minimum performance, progress, and attendance standards or violate Composite Materials Technology policies and procedures:

### **Academic Probation**

Students on academic probation may lose Federal Financial Aid, scholarship eligibility, or sponsorship and benefits, as determined following college Financial Aid requirements and Department of Education regulations.

If you cannot complete a course by the course end date or meet program performance standards, you will be put on probation, and a Student Success Plan will be developed. The plan will include details of the unsatisfactory performance, outline a plan and timeframe for performance improvement, and describe the process that will be used to monitor and evaluate future performance. This Plan will be submitted to Student Services to become part of your student record. You and the instructor will sign the Plan.

If you are unable to correct the unsatisfactory performance or complete the repeated course by the repeated course end date, you will remain on probation and will need to meet with your instructor and a college counselor to modify and further define the Student Improvement Plan. The instructor and counselor may also evaluate barriers preventing your success in the program and whether or not other training options should be considered.

If you fail to meet the performance standards outlined in the Student Improvement Plan, you must participate in a Committee Review to continue as a student at Davis Tech. The committee will comprise you, the instructor, the program director, an impartial program director, and a college counselor. The committee will evaluate the corrective actions taken by the college, the Composite Material Technology program, and you to determine a mutually beneficial course of action. Possible options may include but are not limited to continued academic probation, additional assessment, recommended change to another educational program, suspension, or termination from the program.

If you fail to appear for the Committee Review, you may be considered for disciplinary termination. If you have received a Student Improvement Plan or have been placed on academic probation and subsequently leave the institution, you may be considered for disciplinary termination. If you are



terminated for academic performance, you must meet with a Career and Academic Advisor to discuss a plan for correction before being permitted to re-enroll at Davis Tech.

### **Problem Resolution**

Discuss your concerns with your instructor if you are not satisfied with classroom management, grading or academic disciplinary actions. If this does not resolve your concerns, please contact Student Services.

### **Placement Services**

Placement services are available to you when you complete your program. These services include resume review, interview skills, and job placement assistance.

### **Student Follow-up**

Your success in finding employment indicates the quality of our instruction. To evaluate the effectiveness of our programs, we ask that you notify us of your employment status. Please inform your instructor if you are already employed, have become employed, or your employment status has changed. You may also report current military service or the pursuit of additional education or indicate reasons that may prevent you from completing your program or finding employment. If we do not receive a response from you, a Davis Tech employee will contact you to request your employment status.

### **Program Health, Safety, and Fire Prevention**

You must wear the proper personal protective equipment (PPE) and follow all other safety procedures and operations outlined in COMP 1015 Composite Safety and Workplace Relations. The following safety guidelines will be required at all times throughout the Composites program:

- Safety glasses must be worn at all times when in the lab areas. The yellow lines on the floor designate these areas.
- Provided protective gloves must be worn when handling any composites-related materials. This includes fibers along with any chemicals.
- Dust masks must be worn at all times while in the sanding room.
- Provided Kevlar™ cutting gloves must be worn at all times while cutting materials.

### **First Aid Supplies**

The classroom also includes a first aid kit and other supplies needed in an emergency. Evacuation maps can be found in strategic locations throughout the College.

### **Fire Prevention**

Fire prevention and safety are paramount in our classrooms. We are committed to ensuring a safe learning environment for all students and staff. Please familiarize yourself with the location of fire exits, fire extinguishers, and emergency procedures posted in each classroom. In case of a fire alarm, calmly evacuate the building using the nearest exit and assemble at the designated meeting point.

### **Course Evaluations**

At the end of each course, your curriculum will guide you to an online evaluation with questions about instructional content and your primary instructor. We appreciate and value your feedback. Although you will be asked to enter your student number, this is simply to verify the evaluation is





completed only once per student. The results of the actual survey are anonymous. Feedback is used for program improvement and professional development.

## Employer Advisory Committee

The Composite Material Technology Employer Advisory Committee comprises local industry professionals who meet at least twice a year. During the meetings, the advisory committee reviews the program, courses, equipment, materials, facilities, and the learning environment to ensure that what is being taught aligns with industry practices. They also provide information about the employment outlook in the field and specific changes that help us to meet their employment needs better.

## Class Policies

- **Projects:** Students cannot build anything considered a weapon, i.e., guns or gun parts, axes, knives, swords, nun chucks, martial arts weapons, drug paraphernalia, or any tobacco items. **All projects must have a sketch or blueprint and be approved by an instructor before beginning.**
- **Home Projects:** Students cannot build anything that can be considered a weapon. All personal projects must have a sketch or blueprint and be **approved** by an instructor before beginning. Remember, the curriculum comes first, and you must be on task and up to progress before any home projects are made.
- **Books:** You may use any classroom copies in the classroom. Books may not be taken home or put in your locker. All texts in the student resource center must be checked out and returned at the end of class. All students are required to purchase textbooks and workbooks. They are available in the bookstore. Be sure to ask if there are any used books available. It is a copyright violation to copy pages of a published text.
- **Classroom Conduct:** We expect all Davis Tech students to conduct themselves professionally. We prepare students to act appropriately in class and on the job so they can enter the workforce and be successful.
- **Use of Electronics:**
  - iPods or other devices may not be used in the shop but can be used in the classroom. Take care not to disturb others.
  - No headphones are allowed in the shop.
  - No downloading of music or using the computers for music. These privileges may be revoked at the instructor's discretion.
- **Language:** Abusive, vulgar, or disrespectful language will **NOT** be tolerated.
- **Appropriate Behavior:** Horseplay, roughhousing, and practical jokes are unacceptable in the industry and often lead to accidents. This behavior will not be tolerated anywhere in the shop or classroom.
- **Clothing:** Students need to wear clothing appropriate to the work environment to work in the shop or classroom. Do not wear loose or baggy clothing. Long hair should be contained to work safely around the machines. No immodest or offensive clothing may be worn. Pants





worn below the waistline and low necklines are considered immodest. Appropriate clothing is defined as follows: leather work shoes, long pants, T-shirts, or polo shirts, preferably short sleeves. No tank tops or sleeveless shirts are permitted. No shorts or open-toed shoes will be allowed in the shop or classroom.

- **Computers:** The computers in the Composite Lab and the classroom are for **class-related use only**. Students are not permitted to use the computers to play games, browse non-course related internet sites, or download any software or projects. All disks/USB devices must be scanned for viruses before being used in the lab. Computer use may be monitored and recorded at any time.
- **Phones:** Please keep non-related calls to a bare minimum. Some exceptions may be made for emergencies or program/job-related business. If you receive a call and must take it, please excuse yourself and take the call outside. If possible, explain, "I can't talk right now." If cell phones become a problem, you will be asked to turn them off or put them in a locker, car, etc.
- **Tool Boxes/Lockers:** All toolboxes and lockers will be inspected upon withdrawal from the program. Lockers must be cleaned out within 30 days of withdrawal. Any items that are left after 30 days will become Davis Tech property. Locks may be cut off after 30 days if no identification is on the locker.

