Architectural and Engineering Design Program Orientation

AEID 0000

Room:
2006, Main Building

Program Phone:
801-593-2434

Program Email:
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Advisement Hours:
By Appointment

Classroom Hours:

Monday	Tuesday	Wednesday	Thursday	Friday
8am-11am	8am-11am	8am-11am	8am-11am	8am-11am
Lunch 11am-12pm				
12pm-3pm	12pm-3pm	12pm-3pm	12pm-3pm	12pm-3pm
6pm-9pm	6pm-9pm	6pm-9pm	6pm-9pm	-

Program Faculty:

Faculty

Introduction

Welcome to the Drafting and Design program at Davis Technical College (Davis Tech)! This program orientation aims to inform you about the program, its policies, and its procedures. You must read this document thoroughly and discuss any unclear sections with your instructor or a Career and Academic Advisor.

As this orientation outlines, all students must comply with Davis Technical College's and the program's specific policies and procedures. To review the college's policies, visit the Davis Tech website (www.davistech.edu) or Student Services.

Program Description

Students in the Architectural and Engineering Design program are immersed in a project-based curriculum focused on architectural or mechanical drafting. They are exposed to state-of-industry software such as AutoCAD, Revit, SketchUp, and SOLIDWORKS. They receive one-on-one aid from experienced instructors, review best practices, and focus on industry standards. Throughout the program, students learn about drafting symbols, units of measure, scale, notation systems, 2D and 3D layouts, proper drawing sheet orientation, and redlining for drawing revision. All courses are computer-use intensive and competency-based. Students develop a solid working knowledge of visual communication and technical skills. Upon completion, students are prepared for entry-level employment or further continuing their education.

Program Objectives

- Develop a general knowledge of the drafting and design industries
- Define terminology and processes related to drafting and design
- Demonstrate correct sketching techniques
- Use visual communication to convey design ideas

- Interpret and prepare industry standard documents
- Create accurate 2D and 3D models using the state of industry software
- Develop drawings that align with industry conventions and standards
- Practice redlining and iterating designs
- Create physical models

General Information

You can access this orientation on the Davis Tech program website (davistech.edu/programs/architectural-and-engineering-design), as well as current information on the following items:

- Admission Requirements
- Training location
- Course Descriptions
- Gainful Employment Disclosures
- Financial Aid
- Job Outlook
- Academic Agreements
- Graduation Requirements
- Program Requirements
- Estimated Costs (*tuition & fees/books & materials*)
- Credentials
- Transfer Options
- Industry Certifications

College Resources

Student Resource Center (College)

The Davis Tech campus has a Student Resource Center in the main building. It is a safe space for all students to access and utilize a variety of campus and community resources to foster student success through acceptance, respect, and empowerment. There are computers and printers for student use, hygiene packs, along with financial, mental health, and physical resources. Please visit the Student Resource Center webpage on the Davis Tech website.

Student Resource Center

The classroom includes a Student Resource Center, where you will find industry publications, scratch paper, and other materials you may need in class. These materials are provided as a courtesy. Industry publications, e.g., course textbooks and code books, should not leave the classroom. An industry publication must be checked out via instructor assistance if it is needed for reference. Students who check out the publication are responsible for replacing the item(s) if they become lost, damaged, or otherwise altered.

In addition, students will be given opportunities to use equipment and materials, such as computers with Internet access and software applications currently being used in the industry.

Canvas

You can access Canvas from any Internet-connected computer at the following URL: https://davistech.instructure.com/login . If you need help logging in to Canvas, please see your instructor or email online.support@davistech.edu . If you encounter technical issues in Canvas, use the Help button and the “Report a Problem” link.

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. If you find a frequently used resource (website, video, tutorial, etc.) that would be helpful for other students in your program, consider sharing the link with your instructor.

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.

Instructor Response Time

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

Program Health, Safety, and Fire Prevention

You will learn about the practice of occupational safety while working on computers in WSKS 1400 Workplace Success.

Students with Disabilities

If students have a disability that may require accommodations, please visit https://www.davistech.edu/disability-services to contact the Davis Tech American with Disabilities Act (ADA) Coordinator about classroom accommodations.

Scheduling

Davis Tech utilizes course-based scheduling. Meaning courses are paid for 1 at a time. Students will define their individualized course schedules as part of the course enrollment process. These course schedules identify when the student will attend class to gain competencies in the course curriculum. Per policy, there are minimum course schedule requirements per week. These minimum requirements are dependent upon when the student schedules their class time as follows:

- **Day Students** – 12 hours per week
- **Night Students** – 9 hours per week
- **High School Students** – 6 hours per week
- **Hybrid Students** – 18 hours per week (See Distance and Hybrid Education section)

Following course enrollment, students receive a copy of their course schedule that shows the end date. Course end dates detail the date by which students must complete their course. In the event a student fails to complete their course by the end date, depending on the situation, the following procedures apply:

- **2nd Attempt Course Retake*:**
    I. Development of a Student Success Plan (SSP)*

II. 2nd Attempt course re-enrollment via eForm with the expectation for the student to follow their SSP*

**Note: See the "Academic Performance and Discipline" section for further details on the "Student Success Plan" and additional retake attempts.*

- **Course Extension:**
  I. Verification that the student has completed at least 80% of their coursework†
  II. Course extension enrollment via eForm with the expectation for the student to complete the course within 5 business days

†*Note: Course extensions are granted solely at the discretion of the program instructor(s).*

Competency-Based Education

Competency-based education is an instruction and evaluation method based on students demonstrating competency in a subject. In this program, students demonstrate their competency by industry-based objectives and performance standards related to drafting and design.

Learning within competency-based education here at Davis Tech is self-directed. Keep in mind that self-directed learning does not mean self-taught. When questions or the need for assistance arise, students are expected to approach their instructors for help.

At the beginning of each course, students will receive a course timeline. This timeline details the minimum pace of the course. Students are expected to maintain this minimum pace to ensure their success in completing the course on time. Understanding the competency-based education model is essential for student success. The following expectations apply for maintaining course pace:

- Complete coursework on-site in class during scheduled times.
- Complete coursework at home when absences occur.

There is the opportunity for students to move at an accelerated course pace by also completing coursework at home during their free time. Alternatively, students with prior knowledge, industry experience, and/or formal education may qualify for the following:

- **Competency Demonstrations (Comp-Demos)**
  - When students have prior industry experience but less formal education that aligns with 1 of the courses on their training plan, it is possible to demonstrate competency in the course via a test-out rather than enrolling in the course
  - Upon enrollment in a Comp Demo, students will have 5 school days to demonstrate competency of 90% or above in the test-out assessment (exam and/or project) identified by the instructor to show the student's mastery of the course objectives
- **Alternate Documentations (Alt-Docs)**
  - When students have prior formal education that aligns with 1 of the courses on their training plan, it is possible to provide a transcript from another institution

reflecting a passing grade (C- or better) to demonstrate competency in the course rather than enrolling in the course

Qualification and application of these alternate forms of competency are granted solely at the discretion of the program instructor(s.) Students who feel they qualify should initiate a conversation with their instructor.

Work-Based Learning Opportunities

If students choose to enroll in an Architectural and Engineering Design Externship, they will work with local companies to apply skills learned through their coursework in a real-world setting. The instructor will work with business partners to arrange and manage the details of the externship. The student will complete 90 hours of work. Consult with your instructor if you are interested in work-based learning or have any questions.

Progress

Progress is calculated by the number of scheduled hours versus the completed coursework. Program progress must be maintained at 67% or better to be eligible for financial aid. It is recommended that progress be maintained at 85% or better. This will ensure that you can complete the program timely. Therefore, students are expected to do the following:

- **Maintain progress at 67% minimum.**

Students are expected to meet with their instructor(s) or program advisor if they need help to maintain this progress. Periodic meetings and conversations with your instructor are encouraged.

Attendance

The expectations for attendance are based upon that of a working environment. If a student were at a place of employment and continually arrived late or left early for their scheduled work shift, they probably would only hold that job briefly. Similarly, if said student could not attend their scheduled work shift and did not inform their employer of their needed absence, they probably would only hold that job briefly. Therefore, students are expected to do the following:

- **Maintain attendance at 67% minimum**
- **Communicate absences**
  - Per policy, students absent for 10 consecutive scheduled days will be withdrawn from the program

Distance and Hybrid Education

The Architectural and Engineering Design Program offers a hybrid format for students meeting the minimum program standards. Students must receive instructor approval for hybrid learning and maintain the program standards detailed in the Distance and Hybrid Education Policy (https://www.davistech.edu/media/pp3eda5t/2-distance-and-hybrid-education-policy.pdf) and the following sections listed within this orientation syllabus: Progress, Grading, Program Expectations, Non-Negotiables, and Academic Performance and Discipline. Contact your instructor if you have any additional questions.

Northstar

Northstar is the student information system used at Davis Tech. Each classroom has a computer near the entrance for students to scan their Student ID badge (or type in their Student ID number) to clock into and out of class. When students enter their ID number (by scanning or typing), the Northstar interface displayed on the screen will reflect a successful clock in/out. If an error occurs, notify an instructor immediately.

Clocking in and out of class mimics the industry employment expectations for starting and stopping a work shift. If a student is scheduled for both morning and afternoon sessions, they must clock out for lunch and back in after lunch in a similar manner as expected at one's place of employment. Northstar marks attendance based on the clock in/out time and the respective student's course schedule.

- **Present –** Students arriving at class between start and 10 minutes after class starts will be marked 'P' for present.
- **Tardy** – Students arriving at class between 11 and 20 minutes after class start will be marked 'T' for tardy.
- **Absent** – Students arriving at class 21 minutes after class starts or leaving class more than 10 minutes before class ends will be marked 'A' for absence.

Grading

Every assignment and final competency project in the program have been designed to correlate with a list of objectives that act as checkpoints. These objectives are the skills or concepts students are expected to demonstrate competency in for mastery of the topic and preparation for industry-related employment. Refer to the "Course Navigation" section in individual course's syllabus for a detailed explanation of each activity type.

Expectations

Every assignment and final competency project in the program are scored on whether they align with the instructions or industry standards. ***Every assignment and final competency project must demonstrate competency of 80% or above to pass.*** Unlike secondary and university-level education, retake opportunities and additional attempts are permitted per the procedure detailed below, as a competency demonstration of 80% or above is *required*.

Demonstrating Competency

Assignment and final competency submissions will be scored on whether they align with the instructions or industry standards. In the event assignments and final competency submissions do not demonstrate 80% or above competency, the following procedure applies:

- **Retake Opportunities** – If your work does not demonstrate competency, you will be given 1 retake opportunity. 1 point will be deducted from your score.

- **Additional Attempts** – A 3rd attempt will be permitted upon review with your instructor and additional study of the module's key concepts. Another point will be deducted from your score.
- **Correction Steps** – If your score does not demonstrate competency after 3 attempts, schedule a meeting with your instructor to discuss the next steps.

Final Competency Projects

Final competency projects are designed to test your knowledge and skill level of the material and software. You must work on these projects by yourself. You can ask instructors for clarification about the project — you cannot ask instructors or other students for help with the project. Refer to previous key concepts and assignments where you did similar work for clarity if you become stuck.

Industry Standards

Grading practices related to industry standards are incorporated in detailed rubrics featured within the assignment/final competency on Canvas. All detailed rubrics relate to this generalized list of industry standards as follows:

- Dimensions are to scale and meet ANSI/ASME standards
- Correct placement of lines and symbols
- Correct spacing of components
- Correct component proportions
- Accuracy of design
- Layout of design
- Clear labeling
- Followed directions
- Work saved correctly
- Professional in quality

Grade Scale:

A 94% – 100%	A- 93% – 90%	B+ 87% – 89%
B 84% – 86%	B- 80% – 83%	C+ 77% – 79%
C 74% - 76%	C- 70% – 73%	

Students scoring less than 70% will not be considered as meeting the minimum competency requirements for course completion.

Citizenship Scale:

Honorable	90% – 100%	Satisfactory	80% – 89%
Needs Improvement	70% – 79%	Unsatisfactory	69% or below

Grades will be calculated using the following criteria:

Tests/Assignments:	Your score is divided by the total possible points (see Canvas).
Course Grade:	Average your completed Canvas course grade and Progress per scheduled hours.

Citizenship:	Your attendance per course's scheduled hours.

Program Expectations

Part of why the Architectural and Engineering Design program is so successful is ensuring we have the right students in the right program from the beginning. We achieve this by explaining how the program functions, what characteristics make an individual successful as a drafter, and ensuring that each student is comfortable with what will be expected of them in the industry. Below are some tips for success in the program, and expectations on academic performance and discipline.

File Storage

The Architectural and Engineering Design Program is a data-rich program that relies heavily on properly storing files. Therefore, your success in this program depends on your ability to save and store the files you are asked to create logically and safely. Please use a reputable branded flash drive to ensure your success.

Non-Negotiables

What are your non-negotiables for success? Throughout the program, we encourage students to think about their values and items that they consider non-negotiable (not open for discussion/modification) for them to succeed. Some good examples include rest, proper nutrition, mental health awareness, self-care, taking a study break, etc.

The program's non-negotiables are broader ideals for everyone's well-being to ensure a safe and respectful classroom climate conducive to learning.

Professionalism

We always expect students to act professionally. Students should consider their time in the program a lengthy job interview. Employers reach out to us regularly for student hire recommendations. We advise that if one would act differently in an interview, do not to act that way in the program. Otherwise, how can we recommend you for industry employment? Professional misconduct violations, including but not limited to the following, will not be tolerated.

- **Laziness** – unwillingness to work, making excuses, or attempting shortcuts.
- **Complaining** – expressing dissatisfaction/annoyance about the program, its rules, or requirements.
- **Lying** – purposefully deceiving or misleading others.
- **Lack of Accountability** – not taking ownership of one's actions/choices.
- **Irresponsibility** – being careless about the consequences of one's actions/attitude.
- **Poor Behavior** – conduct that disrupts functions of the college, its personnel, classroom, or other students learning.
- **Disrespect** – showing a lack of respect for others or program resources/equipment.

Academic Integrity

We always expect students to act with integrity. Academic integrity is critical to the learning process. Acting with integrity allows students to grow their competency while respecting and acknowledging others' work. Academic misconduct violations, including but not limited to the following, will not be tolerated.

- **Cheating –** acquiring or providing unauthorized help on coursework.
- **Plagiarism** – misrepresentation of another's work as one's own.

Academic Performance and Discipline

Your success in this program is important to us. We will work with you to help you succeed. If you are struggling to meet the minimum standards described in this orientation, we are committed to taking appropriate actions to help you improve.

When students who fail to meet the minimum professionalism, performance, progress, and attendance standards set by Davis Technical College and the Architectural and Engineering Design Program, the following steps may be taken.

Verbal Warning

An instructor will speak with you about any issues involving your behavior, conduct, or performance. Failure to rectify the issue will result in creating a student success plan.

Student Success Plans

Student Success Plans (SSP) are written improvement plans initially created between the program instructor(s) and the student. These plans allow the student to discuss with their instructor(s) to identify barriers to success, address concerns, answer questions, and develop a plan for improving their performance. SSP may be initiated for the following:

- Course Retakes
- Unsatisfactory Progress – failure to maintain the program minimum of 67%
- Unsatisfactory Attendance – failure to maintain the program minimum of 67%
- Professional Misconduct
- Academic Misconduct
- Breech of Davis Tech Code of Conduct
- Missing 2 consecutive scheduled instructor meetings (hybrid students only)

Academic Probation

Generally, when a student with less than satisfactory performance follows their plan for improvement as detailed in their SSP, they are successful and have no further performance issues. If performance issues persist, the student must meet with their instructor(s) and the Director of Technical and Apprenticeship Programs. Depending on the situation, the following procedures will apply.

- **3rd Attempt Course Retake:**
    I. Modify the SSP to set new goals

II. Warning of academic probation if the course is not finished within this attempt
III. 3rd Attempt course re-enrollment with the expectation for the student to follow their modified SSP

- **All Other Performance Issues:**
  - The student who agreed to the stipulations of their SSP but did not follow through or improve will be placed on academic probation

Student Hearing

A Student Hearing will occur if performance issues persist after implementing SSP and Academic Probation. Depending on the situation, the following procedures will apply.

- **4th Attempt Course Retake:**
  I. A committee comprised of the program instructor, program director, Assistant Vice President (AVP) of the Training Division, and a Student Services representative will review the student's performance and determine further action. Possible outcomes include:
    - Academic probation
    - Additional assessments
    - Recommended program change
    - Dismissal from the institution

- **All Other Performance Issues:**
  I. A committee comprised of the program instructor, program director, AVP of the Training Division, and a Student Services representative will review the student's performance and determine further action. Possible outcomes include:
    - Suspension from the program
    - Dismissal from the institution

Suspension

Students may be suspended from the program for a predetermined amount of time. The hearing committee will decide on what steps must be completed during the suspension to continue enrollment once the suspension ends. Suspension lengths vary depending on many factors; they can be as short as 2 weeks or up to 1 year.

Dismissal

Students may be dismissed from the program for failure to meet the academic standards, for inappropriate conduct as defined by Davis Tech and the Architectural and Engineering Design program, and/or for any of the following reasons.

- Failure to progress through proficiencies promptly (85% standard time).

- Multiple attempts within the same course (i.e. not finish courses on time).
- Academic misconduct, including but not limited to cheating and plagiarism (as previously defined in the "Non-Negotiables" section), neither are tolerated.
- Displays of behavior that are considered harassment, sexual or otherwise.
- Professional misconduct, including but not limited to laziness, complaining, lying, lack of accountability, and poor behavior (as previously defined in the "Non-Negotiables" section).

Problem Resolution

If you are dissatisfied with your instructor(s), classroom management, grading, or academic disciplinary actions taken, please visit the Grievance Policy on the Davis Tech website. Discuss your concerns with your instructor(s), and do not hesitate to contact Student Services.

Program Outlook

The Architectural and Engineering Design program is designed to equip students with the practical skills and industry knowledge needed for successful employment within the drafting and design industries. Student employment success reflects the quality of the program. Students and instructors alike play a crucial role in this process. To help us assess our program, please inform your instructor(s) about industry-related employment. You can also report military service, further education, or any reasons affecting your program completion or job search. Instructors provide students with personalized guidance and do the following.

- **Hosting Occupational Advisory Committee (OAC) Meetings –** These meetings are held annually with local industry professionals to review the program, courses, and facilities to ensure teaching aligns with industry practices. OAC members also share insights on the job outlook in the field and suggest changes to align our program with their employment needs better.
- **Completing Verified Outcomes –** Maintain a record of students' industry-related employment or other related outcomes.
- **Connecting Students with Career Placement Services –** A student resource within Student Services that aids in resume and/or cover letter creation/review, developing and practicing interview skills, and learning tips on searching for jobs effectively.

Conclusion

The most important advice we can give students is to make sure they *want* to enroll in the Architectural and Engineering Design program. It is a challenging program that pushes students to their limits. However, if they are committed to the program, they can motivate themselves through the hard parts and see it through until the end.