

# Atlantic Technical College Drafting Program Syllabus 2025-2026



Instructor Name: Mr. Philip Alleman, LEED AP BD+C, CD

**Department Name:** Architecture & Construction **Office/Classroom Location:** Building 11, Room 215

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Email Address: philip.alleman@browardschools.com

Instructor Office Hours (M-F):

1:50 PM to 3:50 PM (By appointment only)

Student Hours: Monday – Friday	Program Name: Drafting Career Cluster: Architecture and Construction			
Monday – Friday		Course Number/Title	Course Length	
7:05 AM to 1:50 PM (Adults)	А	TDR0070/Introduction to Drafting	150 Hours	
7:05 AM to 10:10 AM (High School 11th Graders)	В	TDR0370/Drafting Assistant	450 Hours	
Lunch: 10:10 AM to 10:40 AM Break: 10:40 AM to 10:50 AM		TDR0775/Drafting Detailer 1	150 Hours	
	С	TDR0776/Drafting Detailer 2	150 Hours	
10:50 AM to 1:50 PM (High School 12th Graders)	D	TDR0570/Architectural Drafter	150 Hours	
	Е	TDR0874/Civil Drafter	150 Hours	
NOTE: All students are expected to be present during their entire scheduled class time(s). All classroom breaks will occur on an "as needed" basis. The wall clock in the classroom will serve as the official time.	F	TDR0777/Mechanical Drafter	150 Hours	
	G	TDR0875/Structural Drafter	150 Hours	
			1500 total hours (full time, including summer)	

#### ATTENDANCE:

**For Postsecondary (Adult) Students**: Excessive absences or tardies can lead to involuntary withdrawal from the program. Reentry will require referral to the program counselor or administrator.

To minimize class disruption, if a student is out of class for an excessive period as identified by the instructor, that student will be marked absent for the day for attendance and grading purposes.

Additional school attendance rules are as follows:

- A student must be withdrawn after being absent for six (6) consecutive days.
- Two (2) additional absences may be allowed under certain circumstances with appropriate documentation.
- For <u>Post-Secondary</u> students there are no excused absences.

Please refer to the Student Handbook for postsecondary students, ATC Student Handbook

#### Magnet High School/Attendance Policy:

A student who has had at least five unexcused absences, or absences for which the reasons are unknown, within a calendar month, or 10 unexcused absences, or absences for which the reasons are unknown, within a 90-calendar-day period, may be exhibiting a pattern of non-attendance (F.S.1003.26 (1) (b)) and the School Board of Broward County, Policy S.S.

# Required Book(s) and/or Online Access Available for purchase at the ATC Bookstore:

- Engineering Drawing and Design, 6<sup>th</sup> Edition ISBN# 9781305659728
- Architectural Drafting and Design, 7<sup>th</sup> Edition ISBN# 9781285165738

Not for purchase at the ATC Bookstore (Teacher provides Access codes to students):

- SolidWorks® Access Code
- SolidProfessor Access Code

# Recommended Materials/Supplies

Purchased from ATC Bookstore:

- USB Drive / 16 GB \* Not Purchased from ATC Bookstore
- 12" Architect's Triangular Scale
- 10" 30-60-90 Triangle
- 8" 45-45-90 Triangle
- Erasing Shield
- 6" Bow Compass
- Divider 6"
- Circle Template
- Architectural House Plan Template (Scale:1/4"=1'-0")
- . French Curves (Set of 4)
- Protractor 6" Semi-Circular
- Dusting Brush-10" Handle
- Plastic Eraser
- Lettering Guide & Rule (AMES)
- Portable Drawing Board with either parallel straightedge or a T-Square. (Minimum size 16" x 21")
- 12" Engineer's Triangular Scale
- Lead Holder (Mechanical Pencil) w/Lead
- Rotary Lead Pointer
- Two -3-Ring Hard Cover Black Binders (0.5" and 2" ring diameters) with package of heavy weight clear plastic sheet protectors \*
- Hard bound Sketchbook (8.5" x 11" with White Bond Paper) \*
- Solar Powered Scientific Calculator \*
- Earbuds (no headphones) \*

**ADULT STUDENTS:** All required books & some materials/supplies can be purchased from the school bookstore. Stop by during operational hours for pricing & purchasing information. All other required Materials/retail supplies not available at the bookstore need to be purchased elsewhere. All required books and required materials/retail supplies need to be obtained prior to the start of the program.

HIGH SCHOOL STUDENTS: Students receive all required books and most of the required materials/supplies on loan, except for those required materials/retail supplies that have an asterisk (\*) after their name. High School students are responsible for the care and return of all the required books and required materials/supplies on loan and will be issued an obligation for damaged or missing books and/or materials/supplies. Some of the required materials/supplies can be purchased from the school bookstore. Stop by during operational hours for pricing & purchasing information. All other required materials/retail supplies not available at the bookstore need to be purchased elsewhere. Required materials/supplies that have an asterisk (\*) after their name need to be obtained prior to the start of the program.

Grading Scale:		Additional Program Specific Criteria:		
A B	90-100% 80-89%	Grading Categories		
С	70-79%	Assignments/Classwork	55%	
D	60-69%	Quizzes/Tests	35%	
F	0-59%			
I	Incomplete	Work Habits/Class Participation	10%	

#### View your grades:

Grades can be viewed online by following the directions below.

- Go to https://Browardfocus.com (access FOCUS using Chrome, Firefox or Safari)
- Student ID which is on your student schedule.
- Password- student's date of birth formatted as PMM/DD/YYYY.
   Capital P- 2 digits for the month- 2 digits for the day- 4 digits for the year.

#### Classroom/Lab Rules:

- Students are expected to be in their seats and ready to work when the bell rings.
- Students are to remain in their assigned seats, unless given permission to relocate.
- Students are required to always adhere to the Code of Conduct, as set forth by the School Administration and the Student Handbook.
- Students are to always show respect to other students and the teacher.
- Good manners are necessary for a pleasant classroom environment. Please raise your hand to be recognized. Do not speak when someone else is speaking. Rudeness, bullying or disruptive behavior will NOT be tolerated.
- Students are responsible for always keeping their personal belongings with them.
- 7. All electronic devices must be silent and out of sight during instructional time. This includes cell phones, earbuds, smartwatches, headphones, mp3 players, etc. The school and/or teacher are not responsible for lost or stolen devices/personal belongings of any kind.
- 8. Computer use is a privilege and should only be used for researching drafting-related information and to complete required assignments / classwork.
- No food and/or drinks are permitted in the classroom.

- Students are not allowed to chew gum in class.
- Students are expected to always maintain a clean and neat work area.
- 12. Log off the computer & turn off the monitor before leaving class each day.
- Remain seated when the bell rings, until you are dismissed.
- Students must notify the teacher, in advance, if planning to miss a portion of class time(s) for ANY reason.
- Students shall familiarize themselves and adhere to all safety procedures as noted in the Classroom Safety Manual.
- Students must visibly always wear their school-issued identification badges, both inside the classroom and while on campus.

### Industry Credentials:

#### Costs:

 American Design Drafting Association (ADDA) Certified Architectural Drafter (CD) - \$155

## Outstanding Student Recognition Information:

A gold seal will be applied to a Program Completion Certificate or an Applied Technology Diploma if the student has earned a 3.5 GPA or higher in their Career and Technical Education (CTE) classes.

Course Number: TDR0070

Course Name: Introduction to Drafting Occupational Completion Point: A

Intended Outcomes:

01.0 Apply basic drafting skills.

- 02.0 Demonstrate algebra mathematics knowledge and skills related to drafting.
- 03.0 Prepare multi-view drawings.
- 04.0 Prepare sectional views.
- 05.0 Prepare auxiliary drawings.
- 06.0 Apply basic dimensioning.
- 07.0 Prepare pictorial drawings.
- 08.0 Prepare surface developments.
- 09.0 Perform basic Computer-Aided Drafting (CAD) functions.
- 10.0 Prepare physical three-dimensional 3-D model from a two-dimensional 2-D drawing.

Course Number: TDR0370
Course Name: Drafting Assistant
Occupational Completion Point: B

#### Intended Outcomes:

- 11.0 Prepare basic architectural drawings.
- 12.0 Demonstrate geometry and mathematics knowledge and skills related to drafting.
- 13.0 Demonstrate mathematics knowledge and skills with respect to market and industry applications of drafting.
- 14.0 Apply tolerance dimensioning.
- 15.0 Demonstrate an understanding of basic civil drawings.
- 16.0 Demonstrate basic electrical/electronic literacy.
- 17.0 Perform advanced CAD functions.
- 18.0 Prepare a basic digital 3-D model from a 2-D drawing.
- 19.0 Explain the importance of employability and entrepreneurship skills.

Course Number: TDR0775 Course Name: Drafting Detailer 1

Occupational Completion Point: NONE

Intended Outcomes:

- 20.0 Prepare computer-aided 3-D architectural drawings.
- 21.0 Prepare architectural multi-level residential drawings.
- 22.0 Prepare a basic site/plot plan drawing.
- 23.0 Prepare a basic landscape plan drawing.
- 24.0 Convert basic architectural 3-D model to a mechanically created prototype.

Course Number: TDR0776
Course Name: Drafting Detailer 2
Occupational Completion Point: C

Intended Outcomes:

- 25.0 Prepare advanced computer-aided mechanical working drawings.
- 26.0 Convert computer-aided 3-D model to a rapid prototype of a mechanical device.
- 27.0 Prepare a typical wall section.
- 28.0 Prepare a basic foundation plan drawing.
- 29.0 Prepare a basic electrical plan drawing.
- 30.0 Prepare a basic Heating, Ventilation and Air-conditioning (HVAC) plan drawing.
- 31.0 Prepare a basic plumbing plan drawing.
- 32.0 Prepare a digital scale 3-D model from a 2-D drawing.

Course Number: TDR0570

Course Name: Architectural Drafter Occupational Completion Point: D

#### Intended Outcomes:

- 33.0 Prepare architectural drawings for a commercial building.
- 34.0 Prepare basic building utility drawings for a commercial building.
- 35.0 Prepare presentation drawings for a commercial building.
- 36.0 Integrate drawing sets.
- 37.0 Convert computer-aided 3-D or building information models to rapid prototypes of a building design or building components.
- 38.0 Engage in project planning activities to expedite the completion of architectural projects.

Course Number: TDR0874 Course Name: Civil Drafter

Occupational Completion Point: E

Intended Outcomes:

39.0 Prepare computer-aided map details.

40.0 Understand surveying and mapping procedures.

41.0 Prepare advanced map drawings.

42.0 Prepare advanced civil drawings.

43.0 Engage in project planning activities to expedite the completion of civil drafting projects.

Course Number: TDR0777
Course Name: Mechanical Drafter
Occupational Completion Point: F

Intended Outcomes:

44.0 Prepare advanced mechanical drawings.

45.0 Prepare production drawings using 3-D CAD techniques.

46.0 Prepare pneumatic/hydraulic drawings.

47.0 Prepare tool drawings using 3-D CAD techniques.

48.0 Engage in project planning activities to expedite the completion of mechanical drafting projects.

Course Number: TDR0875 Course Name: Structural Drafter Occupational Completion Point: G

Intended Outcomes:

49.0 Prepare structural details.

50.0 Prepare structural steel drawings.

51.0 Prepare reinforced concrete drawings.

52.0 Prepare structural wood drawings.

53.0 Prepare advanced 3-D computer-aided drawings.

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