



Atlantic Technical College

Drafting

Program Syllabus

2021-2022



Instructor Name: Mr. Philip Alleman, LEED AP BD+C, CD
Department Name: Technical Trades Department
Office/Classroom Location: Building 11, Room 215
Phone Number: (754) 321-5100
Email Address: philip.alleman@browardschools.com

Instructor Office Hours:
M-F: 1:50 PM – 3:50 PM
(by appointment only)

Student Hours:

Monday – Friday

7:05 AM – 1:50 PM
(Adults)

7:05 AM to 10:05 AM
(High School 11th and/or 12th
Graders)

Lunch: 10:05 AM to 10:35 AM

Break: 10:35 AM to 10:50 AM

10:50 AM to 1:50 PM
(High School 11th and/or 12th
Graders)

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.

Program Name: Drafting

Career Cluster: Architecture and Construction

| OCPs | Course Number / Title | Course Length |
|------|------------------------------------|--|
| A | TDR0070 / Introduction to Drafting | 150 hours |
| B | TDR0370 / Drafting Assistant | 450 hours |
| - | TDR0775 / Drafting Detailer 1 | 150 hours |
| C | TDR0776 / Drafting Detailer 2 | 150 hours |
| D | TDR0570 / Architectural Drafter | 150 hours |
| E | TDR0874 / Civil Drafter | 150 hours |
| F | TDR0777 / Mechanical Drafter | 150 hours |
| G | TDR0875 / Structural Drafter | <u>150 hours</u> |
| | | 1500 total hours (full-time, including summer) |

Technical College Policy/Adult Student Attendance:

- A student must be withdrawn after being absent for six (6) consecutive days.
- Two (2) additional absences may be allowed under certain circumstance with appropriate documentation.
- Please refer to the Broward Technical College Student Handbook for postsecondary students:
<http://www.atlanticttechnicalcollege.edu/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 5.5.

Required Book(s) and/or Online Access

Available for purchase at the ATC Bookstore:

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

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

- SolidWorks® Access Code
- SolidProfessor Access Code

Required 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 (stainless steel)
 - 6" Bow Compass
 - Divider 6"
 - Circle Template (contains approx. 44 circles)
 - 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 straight-edge or a T-Square. (Minimum size 16"x21")
 - 12" Engineer's Triangular Scale
 - Lead Holder (Mechanical Pencil) w/Lead
 - Rotary Lead Pointer
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- Two - 3-Ring Hard Cover Black Binders (0.5" and 2" ring diameters) with, package of heavy weight clear plastic sheet protectors *
 - Hardbound 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, for the exception of those required materials/retail supplies that have an asterisk (*) after their name. High School students are responsible for the care and return of all of 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 System:

- A 90 - 100%
- B 80 - 89%
- C 70 - 79%
- D 60 - 69%
- F 0 - 59%
- I Incomplete

Additional Program Specific Grading Information:

- Assignments / Classwork 55 %
- Quizzes / Tests 35 %
- Work Habits / Class Participation 10 %

Online Course Grading Policy:

Not Applicable

View Your Grades:

Grades can be viewed online by following the directions below:

1. Go to <https://browardfocus.com> (access FOCUS using Chrome, Firefox or Safari)
2. Student ID which is on your student schedule.
3. Passcode: Student's date of birth formatted as PMM/DD/YYYY.
Two digits for the month, two digits for the day and Four digits for the year.

Class Room/ Lab Rules:

1. Students are expected to be in their seats and ready to work when the bell rings.
2. Students are to remain in their assigned seats, unless given permission to relocate.
3. Students are required to adhere to the Code of Conduct at all times, as set forth by the School Administration and the Student Handbook.
4. Students are to show respect to other students and the teacher at all times.
5. 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.
6. Students are responsible to keep their personal belongings with them at all times.
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.
9. No food and/or drinks are permitted in the classroom.
10. Students are not allowed to chew gum in class.
11. Students are expected to always maintain a clean and neat work area.
12. Log off of computer & turn off monitor before leaving class each day (except on Thursdays, when updates occur).
13. Remain seated, when the bell rings, until you are dismissed.

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| 14. Students must notify teacher, in advance, if planning to miss a portion of class time(s) for ANY reason. 15. Students shall familiarize themselves and adhere to all safety procedures as noted in the Classroom Safety Manual. 16. Students must visibly wear their school-issued identification badges at all times, both inside the classroom and while on campus. 17. Masks are mandatory in the classroom and on campus. | |
| Industry Certification & Credential Exam Costs: <ul style="list-style-type: none"> 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. |
| Program Name: Drafting | |
| Course Number: TDR0070 Course Name: Introduction to Drafting Occupational Completion Point: A Intended Outcomes: <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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.

The School Board of Broward County, Florida, prohibits any policy or procedure which results in discrimination on the basis of age, color, disability, gender identity, gender expression, national origin, marital status, race, religion, sex or sexual orientation. Individuals who wish to file a discrimination and/or harassment complaint may call the Director, Equal Education Opportunities/ADA Compliance Department at 754-321-2150 or Teletype Machine (TTY) 754-321-2158. Individuals with disabilities requesting accommodations under the Americans with Disabilities Act Amendments Act of 2008, (ADAAA) may call Equal Educational Opportunities/ADA Compliance Department at 754-321-2150 or Teletype Machine (TTY) 754-321-2158.