



# Atlantic Technical College Drafting PSAV Program Syllabus 2017-2018



**Instructor Name:** Mr. Philip Alleman, LEED AP BD+C  
**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 11<sup>th</sup> and/or 12<sup>th</sup> 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 11<sup>th</sup> and/or 12<sup>th</sup> 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 PSAV

**Career Cluster:** Architecture and Construction

| OCPs | Course Number / Title              | Course Length   |
|------|------------------------------------|---|
| A    | TDR0070 / Introduction to Drafting | 150 hours   |
| B    | TDR0370 / Drafting Assistant       | 450 hours   |
| C    | TDR0775 / Drafting Detailer 1      | 150 hours   |
| D    | TDR0776 / Drafting Detailer 2      | 150 hours   |
|      | TDR0570 / Architectural Drafter    | 150 hours   |
| E    | TDR0874 / Civil Drafter            | 150 hours   |
| F    | TDR0777 / Mechanical Drafter       | 150 hours   |
| G    | TDR0875 / Structural Drafter       | 150 hours   |
|      |                                    | <b>1500</b> 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- A student must be withdrawn after being absent for six (6) consecutive days.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.atlantictechcollege.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.

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| <p><b>Required Book(s) and/or Online Access</b></p> <p>Available for purchase at the ATC Bookstore:</p> <ul style="list-style-type: none"> <li>• Engineering Drawing and Design, 6<sup>th</sup> Edition</li> <li>• Architectural Drafting and Design, 7<sup>th</sup> Edition</li> </ul> <p>Not for purchase at the ATC Bookstore<br/>(Teacher provides Access codes to students):</p> <ul style="list-style-type: none"> <li>• SolidWorks® Access Code</li> <li>• SolidProfessor Access Code</li> </ul>   | <p><b>Required Materials/Supplies</b></p> <p>Purchased from ATC Bookstore:</p> <ul style="list-style-type: none"> <li>• USB Drive / 16 GB *</li> </ul> <p>Not Purchased from ATC Bookstore:</p> <ul style="list-style-type: none"> <li>• 12" Architect's Triangular Scale</li> <li>• 10" 30-60-90 Triangle</li> <li>• 8" 45-45-90 Triangle</li> <li>• Erasing Shield (stainless steel)</li> <li>• 6" Bow Compass</li> <li>• Divider 6"</li> <li>• Circle Template (contains approx. 44 circles)</li> <li>• Architectural House Plan Template (Scale:1/4"=1'-0")</li> <li>• French Curves (Set of 4)</li> <li>• Protractor 6" Semi-Circular</li> <li>• Dusting Brush - 10" Handle</li> <li>• Plastic Eraser</li> <li>• Lettering Guide &amp; Rule (AMES)</li> <li>• 12" Engineer's Triangular Scale</li> <li>• Lead Holder (Mechanical Pencil) w/Lead</li> <li>• Rotary Lead Pointer</li> </ul> <hr/> <ul style="list-style-type: none"> <li>• Two - 3-Ring Hard Cover Black Binders (1" and 2" ring diameters) with heavy weight clear plastic sheet protectors *</li> <li>• Hardbound Sketchbook (8.5" x 11" with White Bond Paper) *</li> <li>• Solar Powered Scientific Calculator *</li> <li>• Earbuds (no headphones) *</li> </ul> |
| <p><b>ADULT STUDENTS:</b> <i>All required books &amp; some materials/supplies can be purchased from the school bookstore. Stop by during operational hours for pricing &amp; 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.</i></p> <p><b>HIGH SCHOOL STUDENTS:</b> <u><i>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 &amp; 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.</i></u></p> |   |

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|---|--|
| <p><b>Grading System:</b></p> <p>A 90 - 100%</p> <p>B 80 - 89%</p> <p>C 70 - 79%</p> <p>D 60 - 69%</p> <p>F 0 - 59%</p> <p>I Incomplete</p>   | <p><b>Additional Program Specific Grading Information:</b></p> <p>Assignments / Classwork 55 %</p> <p>Quizzes / Tests 35 %</p> <p>Work Habits / Class Participation 10 %</p>   |
| <p><b>Online Course Grading Policy:</b><br/>Not Applicable</p>  |  |
| <p><b>View Your Grades:</b><br/><b>Grades can be viewed online by following the directions below:</b></p> <ol style="list-style-type: none"> <li>1. Go to <a href="https://browardfocus.com">https://browardfocus.com</a> (access FOCUS using Chrome, Firefox or Safari)</li> <li>2. Student ID which is on your student schedule.</li> <li>3. Passcode: Student's date of birth formatted as YYYYMMDD.<br/><i>Four digits for the year, two digits for the month and two digits for the day.</i></li> </ol>  |  |
| <p><b>Class Room/ Lab Rules:</b></p> <ol style="list-style-type: none"> <li>1. Students are expected to be in their seats and ready to work when the bell rings.</li> <li>2. Students are to remain in their assigned seats, unless given permission to relocate.</li> <li>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.</li> <li>4. Students are to show respect to other students and the teacher at all times.</li> <li>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.</li> <li>6. Students are responsible to keep their personal belongings with them at all times.</li> <li>7. All electronic devices must be silent and out of sight during instructional time. This includes cell phones, headphones, mp3 players, etc. The school and/or teacher are not responsible for lost or stolen devices/personal belongings of any kind.</li> <li>8. Computer use is a privilege and should only be used for researching drafting-related information and to complete required assignments / classwork.</li> <li>9. No food and/or drinks are permitted in the classroom.</li> <li>10. Students are not allowed to chew gum in class.</li> <li>11. Students are expected to always maintain a clean and neat work area.</li> <li>12. Log off of computer &amp; turn off monitor before leaving class each day (except on Thursdays, when updates occur).</li> <li>13. Remain seated, when the bell rings, until you are dismissed.</li> <li>14. Students must notify teacher, in advance, if planning to miss a portion of class time(s) for ANY reason.</li> <li>15. Students shall familiarize themselves and adhere to all safety procedures as noted in the Classroom Safety Manual.</li> </ol> |  |
| <p><b>Industry Certification &amp; Credential Exam Costs:</b></p> <ul style="list-style-type: none"> <li>• American Design Drafting Association (ADDA) Architectural Certified Drafter (CD) - \$155</li> </ul>  | <p><b>Outstanding Student Recognition Information:</b><br/>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.</p> |

**Program Name:** Drafting PSAV

**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 functions.
- 10.0 Prepare physical 3-D model from a 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 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 understanding of basic civil drawings.
- 16.0 Demonstrate basic electrical/electronic literacy.
- 17.0 Perform advanced computer aided drafting 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 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 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 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.
- 35.0 Prepare presentation drawings.
- 36.0 Integrate drawing sets.
- 37.0 Convert computer aided 3-D or building information models to rapid prototypes of 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 three-dimensional 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.