

# Academy of Architecture & Construction

## Career Cluster: Architecture & Construction

### Program Strand: Drafting / Illustrative Design Technology

Students who choose a career in Drafting/Illustrative Design Technology produce technical drawings and plans that are used in construction, architecture, and engineering. Their drawings show details and dimensions, explain procedures, and list materials.

#### Secondary Career Academy Development Timetable Academy classes are listed in bold type.

| Pre-Academy<br>Grades 6 – 8   | Grade 9  | Grade 10   | Grade 11  | Grade 12   |
|---|--|--|---|--|
| 6 <sup>th</sup> grade—Middle Moves<br>7 <sup>th</sup> grade—Career Preparation Requirement<br>8 <sup>th</sup> grade—Transition Tools<br><br>MJ Wheel 8600020015<br>Introduction to Technology 860001001<br>Exploring Technology 860002012<br>Exploration of Communications Technology 860003001<br>Exploration of Production Technology 860005001 | English I  | English II   | English III   | English IV   |
|   | Algebra or higher  | Geometry or higher   | Algebra II or higher  | Pre-calculus or Other Mathematics Course                   |
|   | Earth & Space Science or Biology                           | Biology or Chemistry                                       | Chemistry or Physics or Physical Science                            | Science Elective or Other Elective                         |
|   | World History  | Elective   | American History  | American Government / Economics                            |
|   | 9 <sup>th</sup> Grade Transition                           | Foreign Language or Other Elective                         | Foreign Language or Other Elective                                  | Foreign Language or Other Elective                         |
|   | <b>Drafting/Illustrative Design Technology 1 860081001</b> | <b>Drafting/Illustrative Design Technology 2 860082001</b> | <b>Drafting/Illustrative Design Technology 3 860083001 (Honors)</b> | <b>Advanced Technology Applications 860190001 (Honors)</b> |
|   | Elective   | Elective   | Elective  | Elective   |
|   | Elective   | Elective   | Elective  | Elective   |

#### Suggested Electives:

- Students may in their Junior or Senior year opt to participate in the Career Experience Opportunity (CEO) internship program using the following course numbers: Workplace Essentials – 83003101A (Honors .5) and CEO internship – 0500330CE (Honors .5).
- Students may complete more than one program within the Academy of Architecture and Construction providing courses are offered at the school site.
- In addition, students can choose to enroll in Materials and Processes Technology or Construction Technology classes to enhance their marketability.

To find a Miami-Dade County Public High School with this Program Strand, please link to [http://ssr.dadeschools.net/acad\\_tally\\_schls.pdf](http://ssr.dadeschools.net/acad_tally_schls.pdf)

| Internship Opportunities  | Student Organizations / Clubs   | Earn Upon Completion  |
|---|---|---|
| <ul style="list-style-type: none"> <li>• Internship</li> <li>• Cooperative Education</li> <li>• Job Shadowing</li> <li>• School-Based Enterprise</li> <li>• Service Learning</li> <li>• Dual Enrollment</li> <li>• <a href="#">Portal to CEO</a></li> </ul> | <ul style="list-style-type: none"> <li>• Technology Student Association (TSA)</li> <li>• SECME</li> <li>• U.S. FIRST Robotics League</li> </ul> | <ul style="list-style-type: none"> <li>• Industry Title &amp; FLDOE OCP's correlated to the individual areas.</li> <li>• For more information on the Florida Department of Education Bright Futures Scholarship Programs: Florida Academic Scholars Award (FAS), Florida Medallion Scholars Award (FMS), and Florida Gold Seal Vocational Scholars Award (GSV) please contact a guidance counselor or visit: <a href="http://www.floridastudentfinancialaid.org/ssfad/factsheets/BF.htm">http://www.floridastudentfinancialaid.org/ssfad/factsheets/BF.htm</a>.</li> <li>• For more information on advanced standing at local public and private post secondary institutions as established per articulation agreements please contact a guidance counselor.</li> </ul> |

#### POSTSECONDARY OPTIONS

| Certification Programs  | Community College (A.A./A.S.) or Proprietary Programs   | Four-Year College and University Programs  | Other  |
|---|---|--|--|
| <ul style="list-style-type: none"> <li>• Drafting</li> <li>• AutoCAD</li> <li>• <a href="#">Robert Morgan Educational Center</a></li> <li>• <a href="#">Miami Lakes Educational Center</a></li> </ul> | <ul style="list-style-type: none"> <li>• Associate Of Applied Science In Construction Technology</li> <li>• Drafting Technology</li> <li>• Computer Drafting A.S.</li> <li>• Residential Drafting A.S.</li> <li>• <a href="#">Miami Lakes Educational Center</a></li> <li>• <a href="#">Miami Dade College</a></li> <li>• <a href="#">Robert Morgan Educational Center</a></li> </ul> | <ul style="list-style-type: none"> <li>• Architecture</li> <li>• Civil Engineering</li> <li>• Construction Technology</li> <li>• Drafting and Design Technology</li> <li>• Mechanical Engineering</li> <li>• Surveying</li> <li>• Design Engineering</li> <li>• <a href="#">Univ. of Florida College of Design, Construction and Planning</a></li> </ul> | <ul style="list-style-type: none"> <li>• On the job training</li> <li>• Technical Institute</li> </ul> |

#### CAREER OPTIONS

| Entry Level   | After Post-Secondary Education   |
|---|--|
| <ul style="list-style-type: none"> <li>• Assistant Drafter</li> <li>• Junior Drafter</li> <li>• Engineer Assistant</li> </ul>   | <ul style="list-style-type: none"> <li>• Manufacturing CNC Machine Operator</li> <li>• Production Modeler Assistant</li> </ul>   |
| <ul style="list-style-type: none"> <li>• Architect</li> <li>• Civil Engineer</li> <li>• Senior Drafter</li> <li>• Technical Illustrator</li> <li>• CNC Tool Designer</li> </ul> | <ul style="list-style-type: none"> <li>• TV or Movie Set Designer</li> <li>• Industrial Designer</li> <li>• Engineering Technician</li> <li>• Surveyor</li> <li>• Mechanical Engineer</li> </ul> |