ARCHITECTURAL & ENGINEERING DESIGN TECHNOLOGY

Architectural and Engineering Design Technology Certificate

This specialization is designed to provide a pathway to the fields of architectural, visual, and civil engineering technologies. Students take basic courses that introduce them to a wide range of disciplines in the design-build community. In addition, students are introduced to architecture through several academic courses and provided an opportunity to transfer credit to a four-year institution.

Specialization: Architectural and Visual Technology Certificate and Associate of Applied Science

This program prepares students for careers in the design, building, and general business sectors. Students learn to communicate design solutions for architects, engineers, builders, and development companies through construction documents and numerous 2D and 3D visualizations. Students are trained in various industry standard software including AutoCad, Revit, Photoshop, and Illustrator. Upon completion of this program, students will be skilled in emerging technologies such as 3D printing, Building Information Modeling (BIM), and advanced graphic techniques. In addition, students are introduced to architecture through several academic courses and provided an opportunity to transfer credit to a four-year institution.

Specialization: Architectural and Civil Engineering Technology Certificate and Associate of Applied Science

This degree is designed to assist students in preparing architectural, structural and civil construction documents for commercial, industrial and civil projects. Students are trained in various industry standard software including AutoCad, Revit, Microstation and Civil 3D to produce construction documents. They develop skills in the production of working/study models, Building Information Modeling (BIM), 3D printing and through specialized courses learn basic civil engineering technologies and surveying techniques. In addition, students are introduced to architecture through several academic courses and provided an opportunity to transfer credit to a four-year institution.

Advisory Committee Members
Hugo Avila, Engineer, DBR Engineering Consultants
Yvette Barrera, City Engineer, City of McAllen
Sergio Castillo, Revit Specialist, ERO Architects
Alfonso Soto, Principal Architect, Terracon
Katrin Leonard, Associate, Raba-Kistner Consultants, Inc.
Esteban Zamora, Negrete & Kolar Architects
John Gates, Principal Architect, Boultinghouse Simpson Gates Architects
Erica Salinas, PBK Architects

Certificates
• Architectural & Civil Engineering Technology Certificate (p. 1)

Associate Degrees
• Architectural & Engineering Design Technology
  • Specialization: Architectural and Civil Engineering Technology Certificate (p. 1)
  • Specialization: Architectural and Visual Technology Certificate (p. 1)

Architectural & Civil Engineering Technology Certificate

TSI EXEMPT

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>DFTG 1409</td>
<td>Basic Computer-Aided Drafting</td>
<td>4</td>
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<tr>
<td>DFTG 1315</td>
<td>Architectural Blueprint Reading and Sketching</td>
<td>3</td>
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<tr>
<td>ARCH 1311</td>
<td>Introduction to Architecture</td>
<td>3</td>
</tr>
<tr>
<td>DFTG 1493</td>
<td>Introduction to Civil Drafting</td>
<td>4</td>
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<td>Total Credit Hours</td>
<td>14</td>
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Architectural and Engineering Design Technology Certificate

Gainful Employment (https://www.southtexascollege.edu/ge/Architectural-Drafting/index.html)

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ARCE 1421 Architectural Illustration 4

Second Semester
DFTG 2419 Intermediate Computer-Aided Drafting 4
DFTG 2400 CAPSTONE: Intermediate Architectural Drafting - Residential 4
INDS 1445 Commercial Design I 4

Credit Hours 12
Total Credit Hours 26

Architectural & Engineering Design Technology
Specialization: Architectural and Civil Engineering Technology Associate of Applied Science

TSI LIABLE

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INDS 1445 Commercial Design I 4
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Credit Hours 12

Summer Session I
Math Elective 1 3
ENGL 1301 Composition I 3

Credit Hours 6

Fourth Semester
DFTG 1441 Intermediate Technical Animation and Rendering 4
PHTC 2431 Architectural Photography 4
ARCH 1301 Architectural History I 3
ARCH 1303 Architectural Drafting I 3

Credit Hours 14

Fifth Semester (Spring)
Social and Behavioral Sciences Elective 1 3
ARCH 1302 Architectural History II 3
DFTG 2438 Final Project - Advanced Drafting 4
DFTG 1480 Cooperative Education 4

Credit Hours 14
Total Credit Hours 60

1 Identifies courses to fulfill minimum 15 credit hour General Education requirement

Architectural & Engineering Design Technology
Specialization: Architectural and Visual Technology Associate of Applied Science

TSI LIABLE

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