

**Tech Express Articulation Agreement  
Between  
VALENCIA COLLEGE**

**A.S. degree in Construction and Civil Engineering Technology  
and**

**THE SCHOOL BOARD OF ORANGE COUNTY, FLORIDA O/B/O  
ORANGE TECHNICAL COLLEGE**

**Heating, Ventilation, AC/Refrigeration (HVAC/R) 1 & 2  
Building Construction Technologies  
Computer Aided Drawing and Modeling  
Electricity**

In a continuing effort to provide career ladder opportunities for students in career and technical education programs, Valencia College agrees to extend full college credit at no cost to eligible students who have completed one of the following articulated programs at Orange Technical College and met all of the requirements.

**COURSE EQUIVALENCY IN SPECIALIZED COURSES**

**ORANGE TECHNICAL COLLEGE**

**VALENCIA COLLEGE PROGRAM**

*(Based on License/Certification or Portfolio Assessment)*

**Heating, Ventilation, AC/  
Refrigeration HVAC/R) 1 & 2**  
(750 + 600 hours for total of 1350 Hours)

**Construction & Civil Engineering Technology  
A.S. Degree (3 credits)**

BCN 1272 Construction Blueprint Reading

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**ORANGE TECHNICAL COLLEGE**

**VALENCIA COLLEGE PROGRAM**

*(Based on Certification)*

**Building Construction Technologies**  
(1050 Hours)

**Construction & Civil Engineering Technology  
A.S. Degree (Up to 9 credits)**

BCN 1272 Construction Blueprint Reading (3 cr.)  
ETD 1031C Intro to the Built Environment (3 cr)  
ETC 1251C Engineering Materials/Processes (3cr.)

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**ORANGE TECHNICAL COLLEGE**

**VALENCIA COLLEGE PROGRAM**

*(Based on Portfolio Assessment or Written Exam)*

**Electricity**  
(1200 Hours)

**Construction & Civil Engineering Technology  
A.S. Degree (6 credits)**

BCN 1272 Construction Blueprint Reading (3)  
MTB 2321C Technical Math (3)

**Articulation Agreement Between  
Valencia College and Orange Technical College  
HVAC/R, Building Construction, Electricity, Computer Aided Drawing and Construction &  
Civil Engineering programs – Page 2**

**ORANGE TECHNICAL  
COLLEGE**

**Computer Aided Drawing &  
Modeling (1200 Hours)**

**VALENCIA COLLEGE PROGRAM**

*(Based on Portfolio Assessment and Certification)*

**Construction & Civil Engineering Technology  
A.S. Degree (9 - 12 credits)**

ETD 1103C Engineering Graphics with CADD (3 credits)

ETD 1340C Advanced CADD (3 credits)

BCN 1272 Construction Blueprint Reading (3 credits)

**(Note:** *BCN 1272 Elective credit in Construction Mgmt. Track*)

**Civil/Surveying Specialization** (Additional 3 credits)

(Additional **3 credits** based on one of the required certification)

\* TAR 2170C Introduction to Architectural Revit (3 credits) **OR**

\*\* ETD 2355C 3-D CADD (3 credits) **OR**

\*\*\* SUR 2390C Introduction to GIS (3 credits) **OR**

\*\*\*\* SUR 2202C Highway Drafting and Route Design (3 credit) **OR**

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**MAXIMUM AWARD OF CREDIT**

This agreement makes it possible for a student to receive up three to twelve (3-12) semester hours of college credit towards the Construction and Civil Engineering Technology Program at Valencia College which is in accordance with commonly accepted good practice in higher education.

**ASSESSMENT AND COURSE EQUIVALENCY**

Valencia and Orange Technical College faculty and staff with responsibility for supervision and coordination of the articulated programs have reviewed and assessed the program curriculum for alignment of learning outcomes and determined that the learning outcomes, performance standards, and assessment procedures meet the college standards for college credit course work.

The following materials were reviewed to align the program learning outcomes and determine the equivalency of the content and course work to be articulated: *(curriculum frameworks, samples of instructional materials, syllabi with learning outcomes, various assignments and assessments, and textbooks).*

**VALIDATION MECHANISM**

The validation mechanism for awarding college credit is based on the following student assessments that are identified for each articulated program: *(portfolio review, special projects, performance-based, industry certifications/licensure, written assessments skills inventory assessments or a combination).*

**Articulation Agreement Between  
Valencia College and Orange Technical College  
HVAC/R, Building Construction, Electricity, Computer Aided Drawing and Construction &  
Civil Engineering programs  
Page 3**

## **TRANSFERRING PROCESS**

To receive college credit for the articulated programs completed at Orange Technical College, transferring students must meet the following requirements:

1. Meet with the Tech Express Coach as part of the Exit process for graduation from Orange Technical College to review and prepare documentation for transition to Valencia College.
2. Apply for admission to Valencia College and meet the College entrance requirements (Tech Express Coaches can assist students with this process).
3. Submit a completed Valencia College application for admission, satisfy the requirements for Degree-Seeking Status, including submission of all official transcripts, and declare a major in the articulated program.
4. Be accepted into Valencia within three years of completing the Orange Technical College program. *(If it's been longer than 3 years, an exception will be considered if the student can demonstrate they have current industry knowledge (i.e. through an employer letter, etc.).*
5. Complete orientation and comply with the appropriate placement, course prerequisites and requirements of the college.
6. Following enrollment at the college, student must meet with the Valencia Student Success Coach to review and verify all of the required documentation that has been submitted, and determine eligibility. *(Students must submit their official transcripts verifying completion of the articulated program, as well as all of the documentation that is required for evaluation of their assessment(s) identified below before the college credit can be awarded).*

### **Required Student Assessments:**

- **Heating, Ventilation, Air-Conditioning/Refrigeration (HVAC/R) 1 & 2**

To have the credit awarded, students must present an acceptable portfolio of work that includes a wiring diagram of motors and controls pertaining to HVAC systems to be assessed and evaluated by the Construction & Civil Engineering Program Chair.

- **Building Construction Technologies**

To have the credit awarded, students must present a current and valid copy of the following certifications:

- BCN 1272 – Construction Blueprint Reading – NCCER Core Curriculum Certification
- ETD 1031C – Introduction to Construction & Drafting – NCCER Core Curriculum Certification
- ETC 1215C – Engineering Materials & Processes – NCCER Construction Technology Certification

**Articulation Agreement Between Valencia College and Orange Technical College  
HVAC/R, Building Construction, Electricity, Computer Aided Drawing and Construction &  
Civil Engineering programs - Page 4**

- **Electricity**

To have the credit awarded, students must present an acceptable portfolio of work which includes photos that document a correctly assembled electric distribution panel; or pass the final exam for BCN 1272 that is approved and evaluated by the Construction & Civil Engineering Program Chair.

- **Computer Aided Drawing and Modeling**

**Credit will be awarded for (ETD 1103C, ETD 1340C, and BCN 1272) – based on the following portfolio review:**

Students must present an acceptable portfolio of work to be assessed and evaluated by the Construction & Civil Engineering Program Chair with demonstrated competencies in the following areas: basic blueprints, lettering, sketching, sections, dimensioning, obliques, isometrics, revolutions, auxiliary views, multi-views, and AutoCAD drawings including an assembly drawing.

- **Additional credit will be awarded based upon the following industry certifications:**

- \* TAR 2170C - Credit will be awarded based upon receiving the AutoDesk - Revit Architecture Certified User Certification.

- \*\* ETD 2355C - Credit will be awarded based upon receiving the Solid Works Certification OR AutoDesk – Inventor Certified User Certification. **Note: ETD2355C is taught using SolidWorks software. Students who desire to pursue the Technical Certificate in Rapid Prototyping are advised that knowledge of SolidWorks is required**

- \*\*\* SUR 2390C - Credit will be awarded based upon receiving the ArcGIS Desktop Associate Certification.

- \*\*\*\* SUR 2202C - Credit will be awarded based upon receiving the Civil 3-D Certification.

7. After verifying the required documentation and evaluating the approved assessments(s), the Valencia Student Success Coach or Program Chair for the articulated program will determine eligibility, and notify the Registrar's Office of acceptable credit to be awarded. *(Credit will be awarded after the drop/add date, and the evaluation process has been completed).*

## **TERMS OF AGREEMENT**

This agreement will be reviewed on an ongoing basis to ensure that it remains current and up-to-date. The Valencia Tech Express Coaches will work collaboratively with the Orange Technical College and Valencia College faculty and staff to stay informed of any curriculum/program changes that may impact this agreement and require it to be modified or terminated. If it is determined that an agreement needs to be modified or terminated due to program changes, both institutions will be notified accordingly.