

## RTTT Career and Technical Education STEM Program Descriptions

<b>Program Title</b>	<b>Drafting/Illustrative Design Technology 8600800</b>
<b>CTE Courses and Descriptions</b>	<p>This three-course, project-based program provides students with a foundation of knowledge and technically oriented experiences in the study of drafting and illustrative design technologies and their use in the fields of engineering. The content and activities also includes problem-solving techniques and methodologies, teamwork, and leadership skills. This program focuses on transferable skills and stresses understanding and demonstration of the technological tools, processes and drafting/illustrative design systems employed in the fields of engineering.</p> <p><b>8600810 Drafting/Illustrative Design Technology I</b>  <b>8600820 Drafting/Illustrative Design Technology II</b>  <b>8600830 Drafting/Illustrative Design Technology III</b></p> <p>Students completing the program are encouraged to complete the Advanced Applications in Technology program (8601900), a capstone opportunity to develop a school-based project from "vision" to "reality". Working in teams, students design, engineer, manufacture, construct, test, redesign, test again; and then produce a finished "project". This involves applying both technical and academic knowledge and skills to be successful.</p>
<b>Integrated Core Course(s)</b>	Geometry
<b>Teacher Certification(s)</b>	Technology Education (TEC ED 1 @2) Engineering (ENG 7 G) Drafting (DRAFTING @7 G) Graphic Arts (GRAPH ARTS @4) General Shop (GEN SHOP @4)
<b>Industry Certification(s)</b>	ADDA Drafter Certification (AMDDA001) Autodesk Certified Associate - AutoCAD (ADESK016) Autodesk Certified Associate - AutoCAD Architecture (ADESK017) Autodesk Certified Associate - AutoCAD Civil 3D (ADESK018) Autodesk Certified Professional - AutoCAD Architecture (ADESK022) Autodesk Certified Professional - Revit Architecture (ADESK025) Certified Solidworks Associate (CSWA) (SOLID001) Certified Solidworks Professional (CSWP) (SOLID002) Chief Architect User Certification (CARCH001)
<b>Number of Articulated Credits</b>	None.
<b>Implementation Costs</b>	<p><b>Startup Costs (approximate): \$120,000</b>            This is a turnkey 20-seat estimate and includes computers, software, peripheral equipment, furniture, course-specific equipment, textbooks, and training for one teacher. This estimate does not include any instructional technology items such as smart boards, computer projection devices, etc.</p> <p><b>Recurring Costs (approximate): \$8,000</b>            This includes software lease renewals and replacement consumables.</p>
<b>Recommended Feeder Programs/Course</b>	None currently available