

RTTT Career and Technical Education STEM Program Descriptions

Program Title	Power and Energy Technology 8601300
CTE Courses and Descriptions	<p>This three-course, project-based program provides students with a foundation of knowledge and technically oriented experiences in the study of power and energy technologies, their effect upon our lives, and the nature of energy resources, engineering design, and problem-solving techniques and methodologies. The content and activities also support building safety, teamwork, and leadership skills. This program focuses on transferable skills and stresses understanding and demonstration of the technological tools, machines, instruments, materials, processes and systems in the power and energy industry.</p> <p>8601310 Power & Energy Technology I 8601320 Power & Energy Technology II 8601330 Power & Energy Technology III</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>
Integrated Core Course(s)	Algebra
Teacher Certification(s)	Technology Education (TECH ED)
Industry Certification(s)	Autodesk Certified Associate – Inventor (ADESK024)
Number of Articulated Credits	None
Implementation Costs	<p>Startup Costs (approximate): \$165,000 This is a turnkey 20-seat estimate and includes computers, software, peripheral equipment, furniture, course-specific equipment, and textbooks. This estimate does not include any instructional technology items such as smart boards, computer projection devices, etc.</p> <p>Recurring Costs (approximate): \$15,000 This includes software lease renewals and replacement consumables.</p>
Recommended Feeder Programs/Course	None currently available