

RTTT Career and Technical Education STEM Program Descriptions

Program Title	Aerospace Technologies 8600080
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 aerospace technologies, their effect upon our lives, and the nature of aerospace 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 aviation and aerospace industries.</p> <p>8600580 Aerospace Technologies I 8600680 Aerospace Technologies II 8601780 Aerospace Technologies 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) Engineering 7 G
Industry Certification(s)	Autodesk Certified Associate – Inventor (ADESK024), Autodesk Certified Associate – AutoCAD (ADESK021), FAA Ground School (FEDAA013), FAA Private Pilot (FEDAA011)
Number of Articulated Credits	None.
Implementation Costs	<p>Startup Costs (approximate): \$120,000 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>Recurring Costs (approximate): \$8,000 This includes software lease renewals and replacement consumables.</p>
Recommended Feeder Programs/Course	None currently available