CareerClusters™ PATHWAYS TO COLLEGE & CAREER READINESS
Science, Technology, Engineering & Mathematics

Learning that works for South Dakota CTE

State Approved Courses
Science, Technology, Engineering & Mathematics Programs
School Year 2019-20

	Aviation Pathway	Engineering Pathway		Computer Science Pathway	Robotics Pathway	Energy Pathway
Foundational CTE Courses	Career Exploration (22151) Foundations of Technology (10004^) Employability (22152^) Leadership & Service (22101^) Entrepreneurship (12053)					
Cluster Courses	MS Mechatronics/Robotics (21049) MS Introduction to STEM (21050) PLTW MS Engineering (21000) Introduction to Technology Education (21051)					
Pathway Courses	Aviation (20053) *Aerospace Engineering (21019) *PLTW COURSES	Electronics (17106) Introduction to Engineering (21001) Introduction to Manufacturing (13001) Intro to Drafting & Design (21102) Architectural Drafting & Design (21103) Mechanical Drafting & Design (21106) Bioprocess Engineering (21014)	*Intro to Engineering & Design (21017) *Principles of Engineering (21018) *Digital Electronics (21023) *Civil Engineering & Architecture (21021) *PLTW COURSES	Computer Programming I & II (10152) *Computer Science Essentials (10013) * Computer Science Principles (10015) *PLTW COURSES	Electronics (17106) Engineering Design & Development (21007) Computer Programming I & II (10152) Robotics (21009)	Electronics (17106) Engineering Design & Development (21007) Introduction to Energy/Power (20101) Alternate Energy Systems (21060)
Dual Credit Courses	Visit www.sdmylife.com for a full list of dual credit courses in the STEM Career Cluster.					
Academic Courses	Physical Science (03159^) Biology (03051^) Biology-Advanced Studies (03052) Chemistry (03101^) Geometry (02072^) Trigonometry (02103) Calculus (02121) Physics (03151)					
Capstone Courses	Entrepreneurship Experience (80026) Senior Experience (80019^) Service Learning (22104) Youth Internships (80018^) Youth Apprenticeship (80020)					

^Denotes course is available on the SD Virtual School (http://www.sdvs.k12.sd.us/)