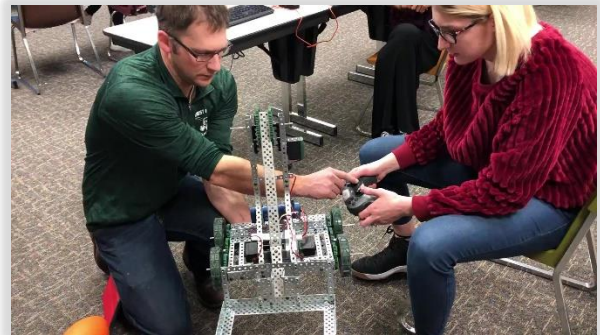


Pathway	OCCUPATIONS RELATING TO THIS CAREER CLUSTER
Engineering & Technology	Aerospace Engineer • Architectural Engineer • Automotive Engineer • CAD Technician • Civil Engineer • Computer Programmer • Electrical Engineer • Mapping Technician • Mining Engineer • Metallurgist • Petroleum Engineer • Survey Technician • Biomedical Engineer • Agricultural Technician • Application Engineer
Science & Mathematics	Anthropologist • Astronomer • Chemist • Geneticist • Ecologist • Environmental Scientist • Geologist • Research Technician • Economist • Analytical Chemist • Meteorologist • Nuclear Chemist/Technician • Statistician • Atmospheric Scientist • Zoologist • Astrophysicist • Quality-Control Scientist

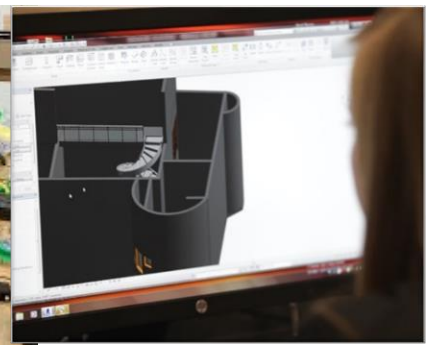
Technology & Engineering Coordinated Plan of Study					
STEM Cluster		Manufacturing Cluster		Health Science Career Cluster	
Engineering & Technology		Manufacturing Production Process Development		Biotechnology Research & Development	
Course Name	Cr	Course Name	Cr	Course Name (Horace)	Cr
Robotics	.5	Metals I and Metals II	.5	PLTW Principals of Biomedical Science (21-22)	1
Into to Engineering	1	Woods 1 and Woods II	.5	PLTW Human Body Systems (22-23)	1
Principle of Engineering	1	Construction Technology	.5	PLTW Medical Interventions (23-24)	1
Drafting & Architecture	.5	Energy in Motion Innovation	.5	Cooperative Work Experience (Internship)	.5 - 4
Cooperative Work Experience	.5 - 4	Robotics	.5		

Is this Pathway for you?

- Are you curious about how things are made or how they work?
- Do you like to interact with all kinds of people?
- Do you enjoy creating, inventing, or imagining new and different ways to do things?
- Do you consider yourself a leader who could be part of a team?
- Are you curious to work in a laboratory?
- Are you interested in technology and its ongoing innovation?
- Have you ever dreamed of owning your own business?
- Do you like to follow directions and use precise detail to complete a task?
- Are you curious how math/science can be applied to build things or solve problems?



Other Electives to Consider for Marketing Pathway Preparation
<p>CTE Electives</p> <p>Aviation I, I, UAV Intro to Agriculture, Plant Science I, II Health Sciences I, II, CNA, Prevention & Care Intro to Coding, Python, Java, AP Java, Mobile Apps Web Design, Advanced Web Design</p> <p>Academic Electives</p> <p>Anatomy/Physiology I & II, AP Physics, Chemistry, Biology Environmental Science, Genetics, Field Biology Statistics, Calculus, AP Calculus, Trigonometry Foreign Language Microeconomics Philosophy & Ethics, Psychology, Sociology Fine Arts</p>



North Dakota STEM Related Postsecondary Programs

Pathway	Certificate or Associate's Degree	Bachelor's Degree	Master's Degree or More
Engineering & Technology	<input type="checkbox"/> Architectural Drafting & Estimating Technology (NDSCS) <input type="checkbox"/> Engineering Technology (BSC) <input type="checkbox"/> Land Surveying and Civil Engineering (NDSCS) <input type="checkbox"/> Nanoscience Technology (NDSCS) <input type="checkbox"/> Nuclear Power Technology (BSC) <input type="checkbox"/> Petroleum Engineering Technology (BSC) <input type="checkbox"/> Petroleum Production Technology (BSC, NHSC, WSC) <input type="checkbox"/> Engineering transfer (BSC, CCCC, DCB, NDSCS, NHSC, SBC, TMCC, WSC) <input type="checkbox"/> Robotics, Automation & Mechatronics Technology (NDSCS) <input type="checkbox"/> Simulator Maintenance Technology (LRSC) <input type="checkbox"/> Technical Studies (BSC, NDSCS)	<input type="checkbox"/> Agricultural and Biosystems Engineering (NDSU) <input type="checkbox"/> Chemical Engineering (UND) <input type="checkbox"/> Civil Engineering (NDSU, UND) <input type="checkbox"/> Computer Engineering (NDSU) <input type="checkbox"/> Construction Engineering (NDSU) <input type="checkbox"/> Electrical Engineering (NDSU, UND) <input type="checkbox"/> Engineering Science (UM) <input type="checkbox"/> Geological Engineering (UND) <input type="checkbox"/> Industrial Engineering and Management (NDSU) <input type="checkbox"/> Industrial Technology (UND) <input type="checkbox"/> Manufacturing Engineering (NDSU) <input type="checkbox"/> Mechanical Engineering (NDSU, UJ, UND) <input type="checkbox"/> Petroleum Engineering (UND)	<input type="checkbox"/> Aerospace Sciences (UND) <input type="checkbox"/> Agricultural and Biosystems Engineering (NDSU) <input type="checkbox"/> Chemical Engineering (UND) <input type="checkbox"/> Civil Engineering (NDSU, UND) <input type="checkbox"/> Electrical/Computer Engineering (NDSU, UND) <input type="checkbox"/> Environmental Engineering (NDSU, UND) <input type="checkbox"/> Geological Engineering (UND) <input type="checkbox"/> Industrial Engineering & Management (NDSU) <input type="checkbox"/> Manufacturing Engineering (NDSU) <input type="checkbox"/> Mechanical Engineering (NDSU, UND) <input type="checkbox"/> Software Engineering (NDSU) <input type="checkbox"/> Sustainable Energy Engineering (UND) <input type="checkbox"/> Technology (UND)
	Science & Mathematics	<input type="checkbox"/> Biology transfer (BSC, DCB, TMCC, WSC) <input type="checkbox"/> Biotechnology transfer (NDSCS) <input type="checkbox"/> Chemistry transfer (BSC, DCB, NDSCS, TMCC, WSC) <input type="checkbox"/> Environmental Science Transfer (CCCC, NHSC, TMCC, WSC) <input type="checkbox"/> Environmental Technology (DCB) <input type="checkbox"/> Mathematics transfer (BSC, DCB, NDSCS, NHSC, TMCC, WSC) <input type="checkbox"/> Natural Science transfer (NDSCS, TMCC) <input type="checkbox"/> Pharmacy transfer (WSC) <input type="checkbox"/> Physical Science transfer (NDSCS, WSC) <input type="checkbox"/> Physics transfer (BSC, WSC) <input type="checkbox"/> Science transfer (CCCC, NHSC) <input type="checkbox"/> Tribal Environmental Science (UTTC)	<input type="checkbox"/> Atmospheric Sciences (UND) <input type="checkbox"/> Biochemistry and Molecular Biology (NDSU) <input type="checkbox"/> Biology/Biological Science (DSU, MaSU, MiSU, NDSU, UJ, UM, UND, VCSU) <input type="checkbox"/> Biotechnology (NDSU) <input type="checkbox"/> Botany (NDSU) <input type="checkbox"/> Chemistry (DSU, MaSU, MiSU, NDSU, UJ, UM, UND, VCSU) <input type="checkbox"/> Computer Science (DSU, MiSU, RC, UM, UND) <input type="checkbox"/> Earth Science (MiSU) <input type="checkbox"/> Environmental Science (DSU, NHSC, SBC, UND) <input type="checkbox"/> Forensic Science (UND) <input type="checkbox"/> Geology (MiSU, NDSU, UND) <input type="checkbox"/> Horticulture (NDSU) <input type="checkbox"/> Mathematics (DSU, MaSU, MiSU, NDSU, UJ, UM, UND, VCSU) <input type="checkbox"/> Microbiology (NDSU) <input type="checkbox"/> Molecular and Integrative Biology (UND) <input type="checkbox"/> Physics (NDSU, UND) <input type="checkbox"/> Statistics (NDSU) <input type="checkbox"/> Unmanned Aircraft Systems Operations (UND) <input type="checkbox"/> Zoology (NDSU)



The Technology Student Association is a local, state, and national student organization created to develop skills in science, technology, engineering, and mathematics as well as business education. TSA aims to develop leadership, academic, and business management skills in the workplace among students and leaders within the community. Students currently or previously enrolled in Technology & Engineering courses join TSA and extend their learning and leadership through intra-curricular activities, and competitions. Contact your school's TSA Advisor to get involved.