

Coordinated Plans of Study for the North Dakota Career and Technical Education or Academic Scholarships

Technology & Engineering Education					
Science, Technology, Engineering & Mathematics Career Cluster			Manufacturing Career Cluster		
Course Code	Description	No. of Credits	Course Code	Description	No. of Credits
10510	Invention & Innovation	½ or 1	10510	Invention & Innovation	½ or 1
10515	Technological Systems	½ or 1	10515	Technological Systems	½ or 1
Engineering & Technology			Manufacturing Production Process Development		
Course Code	Description	No. of Credits	Course Code	Description	No. of Credits
10094	Foundations of Technology	½ or 1	10093	*Applying Technology	½ or 2
10096	Technology & Society	½ or 1	10111	*Construction Technology	½ or 1
10338	Advanced Design Applications	½ or 1	10121	*Manufacturing Technology	½ or 1
10339	Advanced Technological Applications	½ or 1	10251	*Communication Technology	½ or 1
10410	Technological Design	½ or 1	10259	*Design/Drafting	½ or 1
10411	*Robotics Engineering	½ or 1	10260	*3D Modeling & Design	½ or 1
10415	Engineering Design	½ or 1	10331	*Energy & Transportation Technology	½ or 1
10511	**PLTW Introduction to Engineering Design	½ or 1	10411	*Robotics Engineering	½ or 1
10512	**PLTW Digital Electronics	½ to 1	10999	Cooperative Work Experience	½ or 1
10513	**PLTW Principles of Engineering	½ or 1			
10514	**PLTW Civil Engineering and Architecture	½ or 1			
10518	**PLTW Environmental Sustainability	½ or 1			
10610	STEM Seminar	½ or 1			
10520	**PLTW Engineering Essentials	½ or 1			
10519	**PLTW Engineering Design and Development	½ or 1			
10999	Cooperative Work Experience	½ or 1			
Must complete at least 2 credits			Must complete at least 2 credits		

Technology & Engineering Education					
Information Technology Career Cluster			Health Science Career Cluster		
Course Code	Description	No. of Credits	Course Code	Course Code	Description
10510	Invention and Innovation	½ or 1	10510		Invention and Innovation
10515	Technological Systems	½ or 1	10515		Technological Systems
Programming and Software Development			Biotechnology Research & Development		
Course Code	Description	No. of Credits	Course Code	Description	No. of Credits
10820	**PLTW Cybersecurity	½ or 1	10710	*Biomedical Technology	½ or 1
10810	**PLTW Computer Science Essentials	½ or 1	10730	**PLTW Principles of Biomedical Science	½ or 1
10815	**PLTW Computer Science Principles	½ or 1	10732	**PLTW Human Body Systems	½ or 1
10999	Cooperative Work Experience	½ or 1	10734	**PLTW Medical Interventions	½ or 1
			10999	Cooperative Work Experience	½ or 1
Must complete at least 2 credits			Must complete at least 2 credits		

*No CTE Recommended Curriculum Available

**PLTW Endorsement required to teach this course