

Across the state there are ten <u>Area Career and Technical Education Centers (CTCs)</u>, providing CTE classes either in person, via ITV or online. Below you will find a catalog of current online courses. Contact information for the Center delivering the course is on the last page.

MIS03 Code	Area CTE Center	Course	
01011	RACTC	Introduction to Agriculture	
	http://ractc.weebly.co m	Grade(s): 9-12 Semester/Duration: Prerequisite(s): None Coordinated Plan of Study: Agricultural Education Description: This applied course is designed to introduce students development as the core foundation of the Agriculture Education student with: basic mechanical theory and skills –principles of eval horse, and dairy animals; soil and plant relationships that affect the include: soils, irrigation, land judging, plants, crop and weed idention nursery, diseases, insects, and chemicals. This applied course introemphasis on technical skills, entrepreneurship, and occupational cagricultural construction, food and fiber science, supervised agricultural construction of equipment, determining a land scientific reasoning applied to real world problems integrating	program. Individual units will familiarize the luation and selection of beef, swine, sheep, he production of food and fiber. Topics may ification, range management, horticulture, boduces students to agricultural sciences with opportunities. Units may also include ultural experiences, and leadership bill of materials. Emphasis is on problem solving
01025	RACTC	Agronomy Science	
	http://ractc.weebly.co m	Grade(s): 10-12 Semester/Duration: Spring Prerequisite(s): None Coordinated Plan of Study: Agricultural Education Description: This course is designed to prepare students for caree This course deals with, classifying living things, cellular biology, get science, soil erosion and land management, managing soil fertility, and physiology, plant propagation, examining plant growth, integr producing oil crops, grain transportation, storage and quality, proceedings of the producing fruits and vegetables. 13024 - Offered as a Science	netics and biotechnology, basic principles of soil, introduction to plant science, plant anatomy rated pest management, producing grain crops, ducing forage crops, producing fiber and sugar
01025	NVACTC www.northvalley.k12.n d.us	Agronomy Science Grade(s): 10-12 Semester/Duration: Spring Prerequisite(s): None Coordinated Plan of Study: Agricultural Education Description: Agronomy is the study of plants and how they relate areas as principles of crop science, field crops, plant anatomy, plan sustainable food and fiber production.	•
01034	NVACTC www.northvalley.k12.n d.us	Ag Sales & Service Grade(s): 10-12 Semester/Duration: Fall Prerequisite(s): None Coordinated Plan of Study: Agricultural Education Description: To provide students with skills necessary for entry in agriculture sales and service. The course deals with business orgar responsibilities, job applications, and interviewing, human relation machines, business accounting, and management skills. Learning a and field experiences. Leadership development and supervised agreet of this course.	nizations, business structures, job ns, marketing, selling, displaying, using business activities are varied with classroom, laboratory,

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01034	RACTC	Agriculture Sales and Service/Marketing	
	http://ractc.weebly.co m	Grade(s): 10-12 Semester/Duration: Fall Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Agricultural Education Description: To provide students with skills necessary for entry into employment or furthering education in agriculture sales and service. The course deals with business organizations, business structures, job responsibilities, job applications, and interviewing, human relations, marketing, selling, displaying, using business machines, business accounting, and management skills. Learning activities are varied with classroom, laboratory, and field experiences. Leadership development and supervised agricultural experience programs are an integral part of this course.	
01035	NVACTC	Agricultural Business Management	
	www.northvalley.k12.n d.us	Grade(s): 10-12 Semester/Duration: Spring Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Agricultural Education Description: A course designed to introduce the students to agribusiness management in the free enterprise system. It includes a study of economic principles, budgeting, recordkeeping, finance, risk management, business law, marketing, and careers in agribusiness. Leadership development and supervised agricultural experience programs are an integral part of this course.	
01045	MRACTC	Mechanics Power Systems	
	https://docs.wixstatic.c om/ugd/f988cf_5a9925 66ab3242fc99a635116 e9e3eda.pdf	Grade(s): 10-12 Semester/Duration: Fall or Spring Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Agricultural Education Description: This Mechanics course offers a study of the operation, maintenance, and repair of small gasoline engines. Instructional topics include but are not limited to the principles of operation of gasoline/diesel engines, tune-up and maintenance procedures, and disassembly, overhaul, and reassembly of gasoline small engines. Instruction may also include the operation of two and four-cycle engines commonly found on lawn mowers, snow blowers, rotary tillers, chainsaws, and other equipment. As time allows, other power systems could be covered (Ag. electricity and machinery). 20-25 hours of hands-on small engine lab experience is required for this course. Students will meet at a selected facility for hands on supervised overhaul/repair and maintenance as a part of this class. Travel to the facility will be the responsibility of the local school.	
01046	GNWACTC	Agricultural Welding and Fabrication	
	http://www.gnwec.k12 .nd.us/programs/caree r_tech_center	Grade(s): 10-12 Semester/Duration: Full Year or Fall or Spring Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Agricultural Education Description: This course provides students in agriculture an opportunity to reinforce and extend understanding of applied mechanical applications. Students will be exposed to mechanical, electrical and thermal power that are associated with the field of agricultural welding. Applied activities develop an understanding and skill development in metal joining and fabrication processes. Instruction will prepare students to select, operate, repair, fabricate and maintain a variety of agricultural machinery and equipment. Processes covered may include: Oxyfuel Cutting/Heating/Welding, Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW), Flux-cored Arc Welding (FCAW), Gas Tungsten Arc Welding (GTAW), Air-carbon Arc Cutting, Plasma Arc Cutting, Safety and Metal Fabrication. In addition, record keeping, communication skills, employability and human relation skills will be covered. Leadership development and Supervised Agricultural Experiences (SAE's) are also integral to this course.	

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01046	MRACTC	Welding & Fabrication
	https://docs.wixstatic.c om/ugd/f988cf 5a9925 66ab3242fc99a635116 e9e3eda.pdf	Grade(s): 10-12 Semester/Duration: Spring Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Agricultural Education Description: The Welding and Fabrication curriculum is designed to develop students' understanding of applied mechanical applications associated with the field of welding. Content includes, but is not limited to, instruction that prepares individuals to select, operate and maintain a variety of welding equipment and related tools. Subject matter may include: Oxy-fuel Cutting, Heating and Welding; Shielded Metal Arc Welding (SMAW); Gas Metal Arc Welding (GMAW) and Plasma Arc Cutting. Safety and Metal Fabrication as well as record keeping, leadership, communications, employability and human relations skills will also be emphasized. 20 -25 hours of hands-on welding lab experience is required for this course. Students will meet at a selected welding lab/facility for hands on supervised welding instruction as a part of this course. Travel to the facility will be the responsibility of the local school.
01053	CCCTEC	Botany/Horticulture/Landscape Design I
	https://www.casscte.co m/domain/1054	Grade(s): 9-12 Semester/Duration: Spring Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Agricultural Education Description: This is a participation-oriented course focusing on the fundamental principles of horticulture. Students will be exposed to a variety of careers and to propagating plants in a greenhouse setting. Students will study Botany/plant science, growing plants, the business of raising and selling plants, and small business management. Hands-on experiences will include computer assisted landscape design, home and business landscaping, commercial greenhouse operation, plant nutrition, landscape beautification, and community involvement. Students will raise a variety of plants as a part of the lab activities. This class will be delivered through video model of on-line coursework, field trips, and lab activities.
01061	RACTC	Livestock Production
	http://ractc.weebly.co m	Grade(s): 10-12 Semester/Duration: Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Agricultural Education Description: This course is designed to prepare students for careers in the field of animal science and production in species including, but not limited to, beef cattle, dairy cattle, swine, sheep, goats, and poultry. The student will demonstrate technical skills relating to the interrelated human, botanical, scientific, and technological dimensions of animal systems and be able to assess the importance of the United States impact on world commodity markets while applying the principles of livestock breeding and nutrition in predicting the impact of current advances in genetics. The student is expected to describe common veterinary procedures and skills, practice proper animal restraint techniques, demonstrate identification techniques, and demonstrate effective management strategies. The student will learn the anatomy and physiology related to nutrition, reproduction, health, and management of domesticated animals while understanding the nutritional requirements of ruminant and non-ruminant animals. The student is expected to discuss feeding practices and feed quality issues, explain animal genetics and reproduction, and research current and emerging technologies in animal reproduction. The student identifies animal pests and diseases and methods of disease control, treatment, and prevention. The student knows the factors impacting commodity prices and costs.

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01061	GNWACTC	Livestock Production
	http://www.gnwec.k12 .nd.us/programs/caree r_tech_center	Grade(s): 11-12 Semester/Duration: Fall or Spring Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Agricultural Education Description: This course is designed to prepare students for careers in the field of animal science and production in species including, but not limited to, beef cattle, dairy cattle, swine, sheep, goats, and poultry. The student will demonstrate technical skills relating to the interrelated human, botanical, scientific, and technological dimensions of animal systems and be able to assess the importance of the United States impact on world commodity markets while applying the principles of livestock breeding and nutrition in predicting the impact of current advances in genetics. The student is expected to describe common veterinary procedures and skills, practice proper animal restraint techniques, demonstrate identification techniques, and demonstrate effective management strategies. The student will learn the anatomy and physiology related to nutrition, reproduction, health, and management of domesticated animals while understanding the nutritional requirements of ruminant and non-ruminant animals. The student is expected to discuss feeding practices and feed quality issues, explain animal genetics and reproduction, and research current and emerging technologies in animal reproduction. The student identifies animal pests and diseases and methods of disease control, treatment, and prevention. The student knows the factors impacting commodity prices and costs.
01067	SRCTC	Introduction to Veterinary Science
	http://www.srctc.k12.n d.us/programs/online- courses/	Grade(s): 10-12 Semester/Duration: 18 Weeks Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Agricultural Education Description: The basic concepts of veterinary medicine are presented. The course focuses on the different body systems of the major systems of the major species of pets and domesticated agricultural animals. Each lesson examines concepts in veterinary medicine to provide the student with a broad understanding of today's field of veterinary science. The final lesson is a career research project, which give students the opportunity to investigate a specific career in veterinary medicine.
01067	RACTC	Vet Science
	http://ractc.weebly.com	Grade(s): 10-12 Semester/Duration: Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Agricultural Education Description: This course is designed to prepare students for careers in the field of animal science by introducing them to veterinary practices as they relate to both large and small animal species. The student will participate in laboratory and field investigations and demonstrate safety by using critical thinking, scientific reasoning, and problem solving to make informed decisions. They will research and describe the history of veterinary medicine, current topics, the importance of animals in society, and the professional ethics and laws that relate to veterinary medicine. The student will learn to explain the human-animal bond and describe the legal aspects of animal welfare. The student will identify anatomical structures and systems of animals and correct terminology while exploring animal management as it relates to animal identification, animal characteristics, and behavioral temperament (i.e. normal behavior compared to sick.) The student will evaluate animal diseases and identifies internal and external parasites and can evaluate an animal's health during a clinical examination while safely operating and maintaining equipment used in veterinary science. The student will also learn to determine nutritional requirements and the importance of nutrition in maintaining a healthy animal. The student will thereby be conscious of procedures, skills, and objectives that are included in the job description of an animal care assistant.

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01067	NVACTC	Veterinary Science		
	www.northvalley.k12.n d.us	Grade(s): 10-12 Semester/Duration: Fall Credit: .5 Prerequisite(s): None Coordinated Plan of Study: Agricultural Education Description: This course is designed to prepare students for careers in the field of animal science by introducing them to veterinary practices as they relate to both large and small animal species. The student will participate in laboratory and field investigations and demonstrate safety by using critical thinking, scientific reasoning, and problem solving to make informed decisions. They will research and describe the history of veterinary medicine, current topics, the importance of animals in society, and the professional ethics and laws that relate to veterinary medicine. The student will learn to explain the human-animal bond and describe the legal aspects of animal welfare. The student will identify anatomical structures and systems of animals and correct terminology while exploring animal management as it relates to animal identification, animal characteristics, and behavioral temperament (i.e. normal behavior compared to sick.) The student will evaluate animal diseases and identifies internal and external parasites, and can evaluate an animal's health during a clinical examination while safely operating and maintaining equipment used in veterinary science. The student will also learn to determine nutritional requirements and the importance of nutrition in maintaining a healthy animal. The student will thereby be conscious of procedures, skills, and objectives that are included in the job description of an animal		
01068	NVACTC	Food Science & Processing Grade(s): 10-12 Semester/Duration: Full Year Credit: 1		
	www.northvalley.k12.n d.us	Prerequisite(s): None Coordinated Plan of Study: Agricultural Education Description: This course is designed to introduce students to the processing of agricultural products. The course will include the processing of food, fiber, and material product processing for the global economy. Personal communication skills, human relation skills, leadership development skills, and supervised agricultural experiences will be emphasized.		
01082	NVACTC	CASE Principles of Agricultural Science – Plant		
	www.northvalley.k12.n d.us	Grade(s): 10-12 Semester/Duration: Fall Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Agricultural Education Description: Principles of Agricultural Science—Plant is a foundation-level course that will teach students about the form and function of plant systems. Students are immersed in inquiry-based exercises filled with activities, projects and problems to teach them plant concepts through laboratory and practical experiences. Student experiences will include soils, hydroponics, plant anatomy and physiology, taxonomy, growing environments, sexual reproduction, asexual reproduction, insects and diseases, and production and marketing. Classroom and laboratory activities are supplemented through supervised agricultural experiences and FFA programs and activities.		
01995	NVACTC	SAE - Supervised Ag Experience		
	www.northvalley.k12.n d.us	Grade(s): 9-12 Semester/Duration: Credit: 0.25; 0.5; or 1 Prerequisite(s): Completed an Ag Course. Coordinated Plan of Study: Agricultural Education Description: This course provides credit for student agricultural experience exploration. Fulfillment of the standards outlined in the Policy Statement for Supervised Agricultural Experience Programs in agricultural education in North Dakota. See instructor for details.		

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01999	NVACTC	Cooperative Work Experience
	www.northvalley.k12.n d.us	Grade(s): 9-12 Semester/Duration: Credit: 0.25; 0.5; or 1 Prerequisite(s): Completed an Ag Course. Coordinated Plan of Study: Agricultural Education Description: This course provides students with a regularly scheduled, supervised employment opportunity related to agriculture occupations in order to develop and improve work skills. The employment must be preceded by, or concurrent with, classroom instruction related to the work experience, consistent with the student's occupational goals, and related to the Agriculture Education program area. There shall be a training agreement among all partners to the work experience (school, employer, student, and parents/guardians) outlining the expectations of each party. The instructor shall also develop a specific training plan with the employer for each student placed. The training plan shall include provisions for assessment of student progress and for on-site visits by
04080	NIV / A CTC	the instructor during the student's placement.
04080	NVACTC	Principles of Marketing Grade(s): 9-12 Semester/Duration: Spring Credit: 0.5
	www.northvalley.k12.n d.us	Prerequisite(s): None Coordinated Plan of Study: Marketing Education Description: Principles of Marketing is an introductory course that develops student understanding and skills in such areas as business law, communication skills, customer relations, economics, emotional intelligence, financial analysis, human resources management, information management, marketing, operations, professional development, and strategic management. Students acquire knowledge of fundamental business activities and factors affecting business, develop verbal and written communication skills, use information literacy skills, utilize job-seeking strategies, and participate in career planning.
04081	MRACTC	Principles of Finance
	https://docs.wixstatic.c om/ugd/f988cf_5a9925 66ab3242fc99a635116 e9e3eda.pdf	Grade(s): 9-12 Semester/Duration: Fall or Spring Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Marketing Education Description: Principles of Finance expands student understanding of finance. Students develop their knowledge and skills in such areas as business law, communication skills, compliance, customer relations, economics, financial analysis, financial-information management, human resources management, marketing, professional development, and selling. Emphasis is placed on the analysis and purchase of securities and investments, as well as the need for effective customer relationship management and information management in finance. Principles of Finance is an entry level course in The Business Administration Program of Study for Marketing Education.
04111	NVACTC	Entrepreneurship
	www.northvalley.k12.n d.us	Grade(s): 10-12 Semester/Duration: Spring Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Marketing Education Description: To provide opportunity for students to explore self-employment benefits versus risks and to develop specific competence in starting a small business. It covers the characteristics of an entrepreneur, economics and the nature of small business, feasibility study Business Plan Development, type of ownership, location, financing, recordkeeping, management, promotion, legal issues, business protection, and assistance. Entrepreneurship students may participate in the student organization FBLA and DECA.

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NVACTC: RACTC: SVCTC: SRCTC:



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04210	NVACTC www.northvalley.k12.n d.us	Marketing I Grade(s): 10-12 Semester/Duration: Full Year Credit: 1 Prerequisite(s): None Coordinated Plan of Study: Marketing Education Description: This course is designed to develop students understanding and skills in such areas as business law, communication skills, customer relations, economics, emotional intelligence, financial analysis, human resource management, information management, marketing operations, professional development, and strategic management. Students acquire knowledge of fundamental business activities and factors affecting business, develop verbal and written communication skills, use information literacy skills, utilize job-seeking strategies, and participate in career planning. Marketing I students may participate in the student organization FBLA and DECA.
04215	http://www.srctc.k12.nd.us/programs/online-courses/	Marketing Grade(s): 10-12 Semester/Duration: 36 Weeks Credit: 1 Prerequisite(s): None Coordinated Plan of Study: Marketing Education Description: Students who take this course will learn about the field of marketing by exploring a variety of marketing functions such as advertising, management, sales, service, pricing, internet marketing, and careers in marketing. It is designed to help prepare the students for the business world of today and tomorrow.
04235	NVACTC www.northvalley.k12.n d.us	Multimedia Grade(s): 9-12 Semester/Duration: Fall Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Marketing Education Description: Multimedia is designed to allow students to use digital images and videos to create meaningful documentation, production, and presentations. Images, logos, backgrounds, and navigation tools for digital display will be used in multimedia and Internet applications. The topics of image-editing, and planning for multimedia applications will also be discussed. Enhancements include proper format and appropriate use of graphics, animations, and transitions.
04235	https://docs.wixstatic.c om/ugd/f988cf 5a9925 66ab3242fc99a635116 e9e3eda.pdf	Social Media Marketing Grade(s): 9-12 Semester/Duration: Fall or Spring Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Marketing Education Description: Social Media Marketing presents the use of online social networking as a business strategy designed to increase customer loyalty and inquiry conversion. Students will study major social media channels and marketing campaign techniques, and evaluate contemporary and emerging tools in the digital marketplace including social bookmarking and techniques to drive social media traffic. Analyses of social media effectiveness will also be explored. Social Media Marketing is an entry level course in The Business Administration Program of Study for Marketing Education.

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04240	https://docs.wixstatic.c om/ugd/f988cf_5a9925 66ab3242fc99a635116 e9e3eda.pdf	Sports & Entertainment Marketing Grade(s): 10-12 Semester/Duration: Fall or Spring Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Marketing Education Description: This course introduces students to marketing occupations in the area of sports and entertainment. Take a look at the exciting and dynamic field of sports and entertainment marketing. One of the largest industries in the world, sport marketing provides a unique way of looking at the business world. This course will focus on the two main aspects of sports and entertainment marketing: 1) The marketing of sports and entertainment, and 2) The marketing of non-sports products and services through sports. You will discover why companies pay to be associated with a team or entertainer; how to develop ticket plans to fill the seats in the arena; why targeting your marketing efforts is so important; and more. Students also have the opportunity to participation in DECA
04240	NVACTC www.northvalley.k12.n d.us	Sports and Entertainment Marketing Grade(s): 10-12 Semester/Duration: Fall Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Marketing Education Description: To prepare students for marketing occupations in the area of sports and entertainment. Take a look at the exciting and dynamic field of sports and entertainment marketing. One of the largest industries in the world, sports marketing provides a unique way of looking at the business world. This course will focus on the two main aspects of sports and entertainment marketing: 1) The marketing of sports and entertainment, and 2) The marketing of non-sports products and services through sports. You will discover why companies pay to be associated with a team or entertainer; how to develop ticket plans to fill the seats in the arena; why targeting your marketing efforts is so important; and more. Sports and Entertainment Marketing students may participate in the student organization FBLA and DECA.
04240	https://www.devils- lake.k12.nd.us/lactc/	Sports Marketing Grade(s): 11-12 Semester/Duration: Fall or Spring Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Marketing Education Description: Class schedule prevents you from enrolling in Sports Marketing? You now still have the opportunity to take this class! ONLINE Sports & Entertainment Marketing available now! Explore the business of marketing in the area of sports and entertainment businesses. This course will focus on two main aspects of sports and entertainment marketing: 1) The marketing of sports and entertainment 2) The marketing of non-sports products and services through use of sports.
04999	NVACTC www.northvalley.k12.n d.us	Marketing Cooperative Work Experiene Grade(s): 11-12 Semester/Duration: Credit: Up to 2 Prerequisite(s): Completed at least 2 Marketing Credits. Coordinated Plan of Study: Marketing Education Description: This class involves working both inside and outside of the classroom. The outside classroom duties may be done for an area employer. The work may be paid or volunteer, depending on the work agreement. Cooperative Work Experience needs to be approved by Instructor & Center Director. Marketing Co-op students may participate in the student organization FBLA and DECA.

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07032	GFACTC	Nurse Assistant
	0.7.0.0	Grade(s): Semester/Duration: Credit: 0.5
	https://www.gfareactc. org/	Prerequisite(s): Grades 11 - 12 (1/2 Credit, Semester Course) or Instructor Approval. Students must be 16 years of age to complete the Clinical Experience.
		Coordinated Plan of Study: Health Sciences Education Description: The Nurse Assistant Training program offers classroom instruction and clinical practice to those preparing for employment as a certified nursing assistant in a skilled nursing facility, acute care or home health care. This program includes supervised practical training and clinical practice as required by the North Dakota Board of Nursing. Students will have the option to challenge the state CNA board exam to acquire state certification.
07033	RACTC	Health Careers I
		Grade(s): 11-12 Semester/Duration: Full Year Credit: 1
	http://ractc.weebly.co	Prerequisite(s): None
	<u>m</u>	Coordinated Plan of Study: Health Sciences Education Description: The Health Sciences I course is designed to assist students interested in the medical field in determining an occupation that will best suit their capabilities and interests. The students will be given a foundation in areas such as: Medical Terminology, Anatomy and related Disorders, Professional Standards, Safety, Monitoring Body Functions, Disease Prevention, CPR and First Aid Certification, and Introduction to Health Careers. The student will explore careers such as Physical Therapy, Occupational Therapy, Optometry, Radiology, Respiratory Therapy, Medical Records, Dental Careers, Medical Lab, and others. Emphasis on academics, professional development, leadership and organizational skills are integrated into the curriculum.
07033	NVACTC	Health Science I
	www.northvalley.k12.n d.us	Grade(s): 10-12 Semester/Duration: Full Year Credit: 1 Prerequisite(s): None Coordinated Plan of Study: Health Sciences Education Description: This 1 credit section of Health Careers continues to give students the core units of instruction which are related to many health careers. These units include: a. History and Trends of Health Care b. Health Care Systems c. Introduction to Medical Terminology d. Anatomy and Physiology (Basic Structure and Function of the Human Body, Body Planes, Directions, and Cavities, Integumentary System, Skeletal System, Muscular System, Nervous System, Circulatory System, Respiratory System), e. Human Growth and Development f. Computers and Technology in Health Care g. Infection Control h. Introduction to Medical Terminology (Focus is on human anatomy and disorders when anatomy is covered). Students may participate in the student organization HOSA. A student may take Health Science two consecutive years as the curriculum will rotate every other year.
07033	MRACTC	Medical Related Careers I - Online
	https://docs.wixstatic.c om/ugd/f988cf_5a9925 66ab3242fc99a635116 e9e3eda.pdf	Grade(s): 10-12 Semester/Duration: Full Year Credit: 1 Prerequisite(s): None Coordinated Plan of Study: Health Sciences Education Description: Students will explore healthcare principles such as the history of medicine, safety, disease transmission and prevention. Students will also be introduced to various health careers and medical terminology. Three hands-on learning experiences are required and may require travel to alternate locations. Students must successfully complete both semesters of this class including First Aid & CPR/AED Certification for Healthcare Providers. This course and the required certifications are the prerequisite to all other Health Science courses and is offered either on-line or via interactive television.

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07034	RACTC	Prevention/Care of Athletic Injuries
	http://ractc.weebly.co m	Grade(s): 10-12 Semester/Duration: Full Year Credit: 1 Prerequisite(s): None Coordinated Plan of Study: Health Sciences Education Description: Provides the students with a background in athletic training and basic health care. The course emphasizes injury prevention, first responder management daily of athletic injuries and skills to fulfill the activities of daily living. Students will be able to complete the requirements to become a student athletic trainer.
07034	CCCTEC	Prevention/Care of Athletic Injuries
	https://www.casscte.co m/domain/1054	Grade(s): 10-12 Semester/Duration: Spring Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Health Sciences Education Description: Provides the student with a background in athletic training and basic health care. The course emphasizes injury prevention, first responder management daily for athletic injuries and skills to fulfill the activities of daily living. Students will be able in one semester to complete the requirements to become a student athletic trainer.
07035	RACTC	Advanced Health Careers
	http://ractc.weebly.co m	Grade(s): 11-12 Semester/Duration: Full Year Credit: 1 Prerequisite(s): None Coordinated Plan of Study: Health Sciences Education Description: The Advanced Health Careers program has been developed to provide students interests in the medical field an in-depth study of a career of their choice which best suits their capabilities and interests. The program is a competency based individualized curriculum in which the student will learn to balance various aspects of health and wellness, improve self-esteem, and make knowledgeable decisions regarding their career choices. It is a 360-hour program designed for the student who has completed a minimum of 180 hours of Health Careers and plans to further their education in a medical field or plans to seek employment immediately following graduation. A primary component of the Advanced Health Careers course offers in-depth career studies. Students will expand their skills and knowledge in specific areas of interest during clinical rotations in the community. Emphasis on academics, professional development, leadership, and organizational skills are integrated throughout the curriculum.
07035	MRACTC	Medical Related Careers II - Online
	https://docs.wixstatic.c om/ugd/f988cf 5a9925 66ab3242fc99a635116 e9e3eda.pdf	Grade(s): 11-12 Semester/Duration: Full Year Credit: 1 Prerequisite(s): Medical Related Careers I including First Aid & CPR/AED Certification for Healthcare Providers Coordinated Plan of Study: Health Sciences Education Description: This course will expand on the knowledge gained in Medical Related Careers I. Students will have the opportunity to explore various medical careers through research, professional guest speakers, college tours and job shadows. The curriculum is designed to enhance student employability skills and professional medical career readiness. Up to date vaccinations, including influenza and TB test are required per facility policies. Students 18 years or older must have a background check. The student is responsible for necessary vaccinations and transportation to clinical sites

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MIS03 Code	Area CTE Center	Course
07036	SRCTC	Medical Terminology
	http://www.srctc.k12.n d.us/programs/online- courses/	Grade(s): 10-12 Semester/Duration: 36 Weeks Credit: 1 Prerequisite(s): Medical and Health Sciences concurrent or previous enrollment. Coordinated Plan of Study: Health Sciences Education Description: In this on-line course, students will develop skills necessary for decoding of commonly used medical terms. Students will learn the meaning of medical suffixes, prefixes, and word roots. Students will learn terminology associated with the body systems, diseases and disorders of those systems. Students will be expected to use correct spelling and pronunciation of the medical terms that have learned. Students will also learn common medical abbreviations.
07036	GFACTC	Medical Terminology
	https://www.gfareactc. org/	Grade(s): Semester/Duration: Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Health Sciences Education Description: This class is designed to introduce students to the health information technology field. Students will learn prefixes, suffixes and root words for medical terms. This will include meanings, spellings and pronunciations. Emphasis is on building a working medical vocabulary based on body systems. Anatomy and physiology of major organs, pathological conditions, laboratory studies, clinical procedures and abbreviations are studies for each body system. The student will also learn medical terminology as it relates to pathology, diagnostic, surgical, clinical and laboratory procedures, and common abbreviations and acronyms by body systems.
07036	CCCTEC	Medical Terminology
	https://www.casscte.co m/domain/1054	Grade(s): 10-12 Semester/Duration: Spring or Fall Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Health Sciences Education Description: This class is designed to introduce students to the health information technology (Medical Records) field. Students will learn prefixes, suffixes and root words for medical terms. This will include meanings, spellings and pronunciations. Emphasis is on building a working medical vocabulary based on body systems. Anatomy and physiology of major organs, pathological conditions, laboratory studies, clinical procedures and abbreviations are studied for each body system. The student will also learn medical terminology as it relates to pathology, diagnostic, surgical, clinical and laboratory procedures and common abbreviations and acronyms by body systems. Students choosing to participate must complete the NDSCS application process and required \$35 fee.
07036	LACTC	Medical Terminology
	https://www.devils- lake.k12.nd.us/lactc/	Grade(s): 11-12 Semester/Duration: Fall or Spring Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Health Sciences Education Description: Medical terminology and abbreviations are used in all health care occupations and facilities. In order to communicate effectively, health care workers must be familiar with the common terms and abbreviations used. Medical Terminology will interest students who are contemplating entering the health care field as well as students that are consumers of medical services. This course would be very helpful to students considering taking Health Careers or Advanced Health Careers.

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07036	RACTC	Medical Terminology
	http://ractc.weebly.co m	Grade(s): 10-12 Semester/Duration: Full Year Credit: 1 Prerequisite(s): None Coordinated Plan of Study: Health Sciences Education Description: This class is designed to introduce students to the health information technology field. Students will learn prefixes, suffixes, and root words for medical terms. This will include meanings, spellings and pronunciations. Emphasis is on building a working medical vocabulary based on body systems. Anatomy and physiology of major organs, pathological conditions, laboratory studies, clinical procedures and abbreviations are studied for each body system. The student will also learn medical terminology as it relates to pathology, diagnostics, surgical, clinical and laboratory procedures, and common abbreviations and acronyms by body systems.
07036	SVCTC	Medical Terminology
	http://www.hovc.k12.n d.us/courses.cfm	Grade(s): 10-12 Semester/Duration: Full Year Credit: 0.5 or 1 Prerequisite(s): None Coordinated Plan of Study: Health Sciences Education Description: This class is designed to introduce students to the health information technology field. Students will learn prefixes, suffixes and root words for medical terms. This will include meanings, spellings and pronunciations. Emphasis is on building a working medical vocabulary based on body systems. Anatomy and physiology of major organs, pathological conditions, laboratory studies, clinical procedures and abbreviations are studies for each body system. The student will also learn medical terminology as it relates to pathology, diagnostic, surgical, clinical and laboratory procedures, and common abbreviations and acronyms by body systems.
07036	GNWACTC	Medical Terminology
	http://www.gnwec.k12 .nd.us/programs/caree r_tech_center	Grade(s): 10-12 Semester/Duration: Spring Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Health Sciences Education Description: This class is designed to introduce students to the health information technology field. Students will learn prefixes, suffixes and root words for medical terms. This will include meanings, spellings and pronunciations. Emphasis is on building a working medical vocabulary based on body systems. Anatomy and physiology of major organs, pathological conditions, laboratory studies, clinical procedures and abbreviations are studies for each body system. The student will also learn medical terminology as it relates to pathology, diagnostic, surgical, clinical and laboratory procedures, and common abbreviations and acronyms by body systems.
07036	MRACTC	Medical Terminology
	https://docs.wixstatic.c om/ugd/f988cf_5a9925 66ab3242fc99a635116 e9e3eda.pdf	Grade(s): 11-12 Semester/Duration: Fall or Spring Credit: 0.5 Prerequisite(s): Students must have reached the minimum age of 16 at the start of the course, and meet all criteria/expectations of the Rasmussen College "Early Honors Program" application prior to the start of the course. Coordinated Plan of Study: Health Sciences Education Description: In this course, students will develop skills necessary for decoding of commonly used medical terms including the meaning of medical suffixes, prefixes and word roots. Students will learn terminology associated with body systems, diseases and disorders of those systems. Students will be expected to use correct spelling and pronunciation of medical terms they have learned and will also learn common medical abbreviations. Dual Credit will be provided by Rasmussen College for the successful completion of this course.

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MIS03 Code	Area CTE Center	Course	
07036	GFACTC	Medical Terminology Dual Credit	
	https://www.gfareactc. org/	Grade(s): Semester/Duration: Prerequisite(s): None Coordinated Plan of Study: Health Sciences Education Description: This class is designed to introduce students to th learn prefixes, suffixes and root words for medical terms. This pronunciations. Emphasis is on building a working medical voc physiology of major organs, pathological conditions, laborator studies for each body system. The student will also learn medi diagnostic, surgical, clinical and laboratory procedures, and co systems. Dual Credit Option through Lake Region State College	will include meanings, spellings and cabulary based on body systems. Anatomy and y studies, clinical procedures and abbreviations are ical terminology as it relates to pathology, ommon abbreviations and acronyms by body
07036	NVACTC	Medical Terminology/Advanced Pation	ent Care
/0703 5	www.northvalley.k12.n d.us	Grade(s): 11-12 Semester/Duration: Full Year Prerequisite(s): None Coordinated Plan of Study: Health Sciences Education Description: The Medical Terminology section is the first sem students to the health information technology field. Students medical terms. This will include meanings, spellings and pronu medical vocabulary based on body systems. Anatomy and phy laboratory studies, clinical procedures and abbreviations are selearn medical terminology as it relates to pathology, diagnostic common abbreviations and acronyms by body systems. This cleared is are obtained through Lake Region State College. The Accourse that covers a variety of units related to the health care Abbreviations c. Injection Unit d. Promotion of Safety e. Medic Diagnoses and Care. Students may participate in the student of	rester of this class which is designed to introduce will learn prefixes, suffixes and root words for inciations. Emphasis is on building a working siology of major organs, pathological conditions, tudied for each body system. The student will also c, surgical, clinical and laboratory procedures, and lass can be taken for three college credits. College dvanced Patient Care is the second semester of this field. The units include: a. IV b. Medical cal Math f. Reproductive System g. Nursing Annie
07040	http://www.gnwec.k12 .nd.us/programs/caree r_tech_center	Medical Records Grade(s): 10-12 Semester/Duration: Full Year Prerequisite(s): None Coordinated Plan of Study: Health Sciences Education Description: To prepare students for employment as medical necessary skills including answering the phone, greeting patier filling out insurance forms, handling correspondence, and sche understanding of medical terminology and hospital or clinic prhospital admissions and laboratory services, handling billing and	records clerks. The program covers a wide range of nts, recording, and filing patient medical records, eduling appointments. The student will also gain an rocedures including making arrangements for

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MIS03 Code	Area CTE Center	Course	
07045	RACTC	Emergency Medical Services	
	12.0.0	Grade(s): 10-12 Semester/Duration: Full Year Credit: 1	
	http://ractc.weebly.co	Prerequisite(s): None	
	<u>m</u>	Coordinated Plan of Study: Health Sciences Education	
		Description: Students enrolling in this course will complete training in CPR for Health Care Providers and the	
		National Curriculum Emergency Medical Technician-Basic Course. This course prepares the students to respond	
		to a wide range of emergencies such as heart attacks, auto accidents and diabetic problems. Students will be required to participate in extensive "hands-on" practical sessions using modern prehospital care equipment	
		under the instruction of paramedics from the local paramedic service. Upon completion of the course, students	
		are eligible for ND State licensure testing. The EMS Basic testing including cost will be the responsibility of the	
		student if the student wishes to become an EMT Basic.	
07999	NVACTC	Health Education Supervised Occupational Experience	
		Grade(s): 11-12 Semester/Duration: Credit: 1	
	www.northvalley.k12.n	Prerequisite(s): Completed at least 2 Health Science Credits.	
	<u>d.us</u>	Coordinated Plan of Study: Health Sciences Education	
		Description: This class involves working both inside and outside the classroom. The outside classroom duties	
		may be done for an area employer. The work may be paid or volunteer, depending on the work agreement. Cooperative Work Experience needs to be approved by Instructor & Center Director. Health Science students may	
		participate in the student organization HOSA.	
09025	MRACTC	Independent Living	
	WINACIC	Grade(s): 9-12 Semester/Duration: Fall Credit: 0.5	
	https://docs.wixstatic.c	Prerequisite(s): None	
	om/ugd/f988cf 5a9925	Coordinated Plan of Study: Family and Consumer Sciences	
	66ab3242fc99a635116	Description: For a student who is looking forward to being on his/her own, taking this course will help you avoid	
	e9e3eda.pdf	some common problems. Finding and keeping a job you enjoy, handling your money wisely, securing housing,	
		choosing a roommate, making healthy food decisions, and maintaining your personal possessions are topics covered in this class.	
09026	MRACTC		
03020	IVIKACIC	Child Development	
	111	Grade(s): 9-12 Semester/Duration: Spring Credit: 0.5 Prerequisite(s): None	
	https://docs.wixstatic.c om/ugd/f988cf 5a9925	Coordinated Plan of Study: Family and Consumer Sciences	
	66ab3242fc99a635116	Description: Popular among students who want to learn more about children. This is a great class for anyone	
	e9e3eda.pdf	who expects to become a parent or plans to work with children. By bringing a "flourbaby" to daycare for several	
		days, students experience many realistic aspects of parenting a newborn. Students will put into practice what	
		child development experts know will help children be happy, stay safe, and reach their full potential.	
09130	MRACTC	Parenting	
		Grade(s): 9-12 Semester/Duration: Fall Credit: 0.5	
	https://docs.wixstatic.c	Prerequisite(s): None	
	om/ugd/f988cf_5a9925	Coordinated Plan of Study: Family and Consumer Sciences Description: Designed for both males and females, this course will prepare you for what is probably the most	
	66ab3242fc99a635116	important job you will ever have, that of being a parent. This course will help you develop positive attitudes,	
	e9e3eda.pdf	realistic expectations and effective skills for parenting. Pregnancy, parenting roles of fathers and mothers,	
		financial impact of a child and other parenting concerns are emphasized in this class. You will get to practice	
		being a parent by taking home a "RealCare" computerized baby for a weekend.	

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MIS03 Code	Area CTE Center	Course
09131	LACTC	Food Prep
	https://www.devils- lake.k12.nd.us/lactc/	Grade(s): 10-12 Semester/Duration: Fall Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Family and Consumer Sciences Description: Food Prep is an introductory course for students to gain experience working in a professional kitchen environment and using professional small wares and equipment, while learning the principles of baking and pastry. Emphasis is placed on techniques and technology used in the foods industry. Students will learn safety and sanitation competencies, quantity food preparation and conversions, food storage requirements, and weights and measures. Objectives will focus on practical application of skills and competencies while preparing a variety of baked goods.
09131	https://www.devils-lake.k12.nd.us/lactc/	Food Production, Management and Services Grade(s): 11-12 Semester/Duration: Spring Credit: Prerequisite(s): None Coordinated Plan of Study: Family and Consumer Sciences Description: Experiences in this course are designed to help students become aware of career opportunities and competencies required in the occupational area of food production, management, and services. Emphasis in this course is given to food production, management, and services; sanitation and safety; nutrition as related to food service; serving of food, use of food service equipment and menu planning. Upon completion of this course, a student should have gained entry level skills needed for employment.
09132	https://docs.wixstatic.c om/ugd/f988cf 5a9925 66ab3242fc99a635116 e9e3eda.pdf	Family Living Grade(s): 9-12 Semester/Duration: Spring Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Family and Consumer Sciences Description: Every one of us is a part of a family and each family is different. Many students will be forming their own new families before too long. This course is about how families function and they have changed over time. The value of healthy families, not only to the individual family members but to society as a whole, is the primary focus of this class. Learn what contributes to a stable and meaningful family.
10094	MRACTC https://docs.wixstatic.c om/ugd/f988cf 5a9925	Foundations of Engineering I Grade(s): Semester/Duration: Fall Credit: 0.5 Prerequisite(s): Successful completion of STEM Seminar I or II Coordinated Plan of Study: Technology and Engineering
	66ab3242fc99a635116 e9e3eda.pdf	Description: Would you prefer to learn by doing? Do you like to build things? In this class, students will complete design challenges while researching better solutions, designing 3D models and actual models, testing and evaluating products. Some possible hand's-on projects include developing and designing a wind turbine, solar car, CO2 dragster, a mousetrap car, and a glider. This course consists of two separate learning units, each nine weeks in length: Energy and Power Technologies and Transportation Technologies. STEM careers and safety will also be explored. This course can be alternatively coded as ½ science credit (13045).

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MIS03 Code	Area CTE Center	Course
10610	MRACTC	STEM Seminar I
	https://docs.wixstatic.c om/ugd/f988cf 5a9925 66ab3242fc99a635116 e9e3eda.pdf	Grade(s): 9-12 Semester/Duration: Fall Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Technology and Engineering Description: STEM SEMINAR is a project-based course in which students use Science, Technology, Engineering and Math to solve real world problems. Students will design projects such as bridges, assistive-reach devices, simple motors, parachutes, etc. Students will use common, everyday materials to design prototypes of products that help people in the real world. STEM focuses on the basics of the Engineering Design Process. There are no textbooks, quizzes, or tests. All grading will be based on the effort in the creation of a product, participation in discussion, and use of the engineering design process. STEM careers will also be explored. This course can be alternatively coded as ½ science credit, (13150) or ½ math credit (11170)
10610	MRACTC	STEM Seminar II
	https://docs.wixstatic.c om/ugd/f988cf_5a9925 66ab3242fc99a635116 e9e3eda.pdf	Grade(s): 9-12 Semester/Duration: Spring Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Technology and Engineering Description: STEM SEMINAR is a project-based course in which students use Science, Technology, Engineering and Math to solve real world problems. Students will design projects such as bridges, assistive-reach devices, simple motors, parachutes, etc. Students will use common, everyday materials to design prototypes of products that help people in the real world. STEM focuses on the basics of the Engineering Design Process. There are no textbooks, quizzes, or tests. All grading will be based on the effort in the creation of a product, participation in discussion, and use of the engineering design process. STEM careers will also be explored. This course can be alternatively coded as ½ science credit, (13150) or ½ math credit (11170).
14010	RACTC	Accounting I
	http://ractc.weebly.co m	Grade(s): 9-12 Semester/Duration: Fall Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Business Education Description: Students will learn the fundamentals of accounting principles that include: terminology, accounting cycle, basic concepts, financial statements, roles of accountants and ethics in accounting. Simulation packets are often integrated in the course.
14010	NVACTC	Accounting I/II
/1401 1	www.northvalley.k12.n d.us	Grade(s): 10-12 Semester/Duration: Credit: 1 Prerequisite(s): None Coordinated Plan of Study: Business Education Description: Accounting I: Students will learn the fundamentals of Accounting principles that include: terminology, accounting cycle, basic concepts, financial statements, roles of accountants and ethics in accounting. A manual simulation packet is integrated in the course. Accounting II: Students will continue learning the fundamental concepts of Accounting. Topics covered include terminology, accounting cycle, basic concepts, financial statements, roles of accountants and ethics in accounting. An automated simulation packet is integrated in the course. Accounting students may participate in the student organization FBLA and DECA.
14011	RACTC	Accounting II
	http://ractc.weebly.co m	Grade(s): 9-12 Semester/Duration: Spring Credit: 0.5 Prerequisite(s): Accounting I Coordinated Plan of Study: Business Education Description: Students will continue learning the fundamental concepts of Accounting. Topics covered include terminology, accounting cycle, basic concepts, financial statements, roles of accountants and ethics in accounting.

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RACTC: SVCTC: SRCTC:



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MIS03 Code	Area CTE Center	Course
14012	RACTC	Accounting III
	http://ractc.weebly.co m	Grade(s): 10-12 Semester/Duration: Credit: 0.5 Prerequisite(s): Accounting I and Accounting II Coordinated Plan of Study: Business Education Description: Students will acquire a more thorough, in-depth knowledge of accounting procedures and techniques utilized in solving business problems and making financial decisions. Students will develop skills in analyzing and interpreting financial information common to businesses. A contemporary business simulation set that lets the student put accounting skills into practice is often included.
14012	NVACTC	Accounting III/IV
/1401		Grade(s): 11-12 Semester/Duration: Credit: 1
3	www.northvalley.k12.n d.us	Prerequisite(s): Accounting I and Accounting II Coordinated Plan of Study: Business Education Description: Accounting III: Students will acquire a more thorough, in-depth knowledge of accounting procedures and techniques utilized in solving business problems and making financial decisions. Students will develop skills in analyzing and interpreting financial information common to businesses. A contemporary automated business simulation set that lets the students put accounting skills into practice is included. Accounting IV: Students will continue to develop skills in analyzing and interpreting information common to corporate forms of organization, preparing formal statements and supporting schedules, and using inventory and budgetary control systems. Higher level corporate, managerial and cost accounting concepts are presented in this course. A contemporary automated simulation set that lets the student put accounting skills into practice is included. Accounting students may participate in the student organization FBLA and DECA.
14013	RACTC	Accounting IV
	http://ractc.weebly.co m	Grade(s): 10-12 Semester/Duration: Credit: 0.5 Prerequisite(s): Accounting I, Accounting II and Accounting III Coordinated Plan of Study: Business Education Description: Students will continue to develop skills in analyzing and interpreting information common to corporate forms of organization, preparing formal statements and supporting schedules, and using inventory and budgetary control systems. Higher level corporate, managerial and cost accounting concepts are presented in this course. A contemporary business simulation set that lets the student put accounting skills into practice is often included.
14022	GFACTC	Web Design
	https://www.gfareactc. org/	Grade(s): Semester/Duration: Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Business Education Description: Web Design introduces students to software for creating and maintaining web pages. The students will focus on the overall production processes with particular emphasis on design elements involving layout, navigation, and interactivity. Careers in web design are explored.
14028	RACTC	Communication Technologies
	http://ractc.weebly.co m	Grade(s): 9-12 Semester/Duration: Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Business Education Description: Students will study the history of the Internet, Internet safety and etiquette, appropriate research techniques, online communication, video conferencing, social networking, network security, and a study of e-business.

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MIS03 Code	Area CTE Center		Course	
14090	RACTC	Business Law		
	http://ractc.weebly.co m	of laws, the difference bet	be introduced to the fundamental backgroween criminal and civil law, and our present concerning contracts, sales, consumers, pr	Credit: 0.5 ound of the development and enforcement nt court system and how it works. Topics to operty, computers, family, environment,
14095	LACTC	Personal Finance		
	https://www.devils- lake.k12.nd.us/lactc/	Description: This course i management, budgeting,	Semester/Duration: Fall or Spring dy: Marketing Education; Business Education is to help students become financially responsional goal attainment, insurance, and intion daily with their own lives utilizing the N	onsible. Students will learn skills in money avestments. Students will learn and apply
14096	LACTC	Word Processin	g	
	https://www.devils- lake.k12.nd.us/lactc/	•	I develop productivity with efficient timesa se includes instruction and practice in docu	
14098	LACTC	Graphic Design		
	https://www.devils- lake.k12.nd.us/lactc/	and text, may have been o	ing catalog, magazine, brochure, DVD cove created by a graphic designer. This course v dents will learn the general design principle	
14099	RACTC	Multimedia		
	http://ractc.weebly.co m		I use digital images and videos to create me	Credit: 0.5 eaningful documentation, production, and digital display will be used in multimedia and

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MIS03 Code	Area CTE Center	Course	
14999	NVACTC	Business Ed Cooperative Work Experience	
	www.northvalley.k12.n d.us	Grade(s): 11-12 Semester/Duration: Credit: 1 Prerequisite(s): Must have completed at least 2 Business. Ed. Credits Coordinated Plan of Study: Business Education Description: This class involves working both inside and outside of the classroom. The outside classroom duties may be done for an area employer. The work may be paid or volunteer, depending on the work agreement. Cooperative Work Experience needs to be approved by Instructor & Center Director. Business Ed. students may participate in the student organization FBLA and DECA.	
17032	NVACTC	Introduction to Auto Technology	
	www.northvalley.k12.n d.us	Grade(s): 10-12 Semester/Duration: Credit: 1 Prerequisite(s): None Coordinated Plan of Study: Trade, Industry & Technical Education Description: This is a one-hour introductory course in Auto Technology. The Auto Maintenance and Light Repair Technology program begins with an orientation to the eight areas of NATEF standardized programming; Suspension and Steering, Brakes, Electrical/Electronic Systems, Heating and Air Conditioning and Engine Performance. This course will also explore the various careers in the Automotive industry. Auto Technology is a sequential course and this course is a suggested prerequisite to Automotive Technology.	
17037	NVACTC	Auto Technology	
	www.northvalley.k12.n d.us	Grade(s): 10-12 Semester/Duration: Full Year Credit: 2 Prerequisite(s): None Coordinated Plan of Study: Trade, Industry & Technical Education Description: Over a two-year period Auto Tech covers safety and tools, engine service, suspension and steering, brakes, drive train, HVAC, electrical and engine performance. Auto technology students may participate in the student organization SkillsUSA. (Credits: 2 per year)	
17045	NVACTC	Commercial Drivers License (CDL)	
	www.northvalley.k12.n d.us	Grade(s): 12 Semester/Duration: Full Year Credit: 1 Prerequisite(s): None Coordinated Plan of Study: Trade, Industry & Technical Education Description: The focus of this class is to give the students an understanding of what is needed to obtain the CDL certification. You will start with the basics and move up to the finer points of the trade. Topics include required CDL Manual subjects such as General Knowledge, Air Brakes, and Combination Vehicle, as well as Tanker, Doubles/Triples, and Hazmat endorsements. Also covered are hours of service, weight and balance, vehicle out-of-service regulations, and National Safety Council professional truck driver DDC. At the end of the year students should have the skills needed to obtain a CDL permit and begin to work on the skills needed to pass the CDL drivers test. Students need to be 18 to obtain the CDL permit and to earn the CDL license	
17072	SVCTC	Commercial Art	
	http://www.hovc.k12.n d.us/courses.cfm	Grade(s): 10-12 Semester/Duration: Full Year Credit: 1 Prerequisite(s): None Coordinated Plan of Study: Trade, Industry & Technical Education Description: This program will provide students with an introduction to graphic design with an emphasis on fundamentals and the design process. Studies will include: design elements, design principles, typography, photography and digital enhancement and manipulation. Student will be utilizing Photoshop and Corel Draw computer programs.	

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MIS03 Code	Area CTE Center	Course	
17072	MRACTC	Graphic Design & Photography I	
	https://docs.wixstatic.c om/ugd/f988cf 5a9925 66ab3242fc99a635116 e9e3eda.pdf	Grade(s): 10-12 Semester/Duration: Full Year Credit: 1 Prerequisite(s): None Coordinated Plan of Study: Trade, Industry & Technical Education Description: This course will introduce students to the skills needed in graphic design. Students will be exposed to photography, scanning, the elements and principles of design, effective thumb-nailing and typography. This course will address how artwork and photographic images can be used in commercial design. Students will create a digital portfolio for their artwork and they will be introduced to the following Adobe Creative Cloud Software: InDesign, Photoshop and Illustrator. Units will be based on the Print Ed competencies and the ND Graphic Communications Education Content Standards for introduction to Graphic Communications and Advertising Design.	
17072	GFACTC	Introduction to Graphic Arts	
	https://www.gfareactc. org/	Grade(s): Semester/Duration: Credit: 1 Prerequisite(s): None Coordinated Plan of Study: Trade, Industry & Technical Education Description: This course will introduce students to the skills needed in graphic design. Students will be exposed to the elements and principles of design, effective thumb-nailing and typography. This course will address how artwork and photographic images can be used in commercial design. Students will create a digital portfolio for their projects. Units will be based on the Print Ed competencies and the ND Graphic Communications Education Contact Standards for Introduction to Graphic Communications and Advertising Design.	
17130	NVACTC	Drafting for Construction	
	www.northvalley.k12.n d.us	Grade(s): 10-12 Semester/Duration: Full Year Credit: 1 Prerequisite(s): None Coordinated Plan of Study: Trade, Industry & Technical Education Description: This is a two-part course. The first semester involves the fundamental concepts of drafting. Emphasis will be placed on mechanical and architectural drafting. The second semester is devoted to Computer-Aided Drafting and Design. The CADD system takes the student through commands from as simple as drawing a line to as complex as 3-dimensional geometric forms. Drafting students may participate in the student organization SkillsUSA.	
17131	NVACTC	Advanced Drafting for Construction	
	www.northvalley.k12.n d.us	Grade(s): 11-12 Semester/Duration: Full Year Credit: 1 Prerequisite(s): None Coordinated Plan of Study: Trade, Industry & Technical Education Description: Learn advanced drafting techniques including 3-D drawing using AutoCAD. Students will work on specialized projects. Drafting students may participate in the student organization SkillsUSA.	
17150	GNWACTC	Electronics Technology I	
	http://www.gnwec.k12 .nd.us/programs/caree r_tech_center	Grade(s): 10-12 Semester/Duration: Fall or Spring Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Trade, Industry & Technical Education Description: Electronics Technology I will provide students with a working knowledge of Direct Current (DC) and Alternation Current (AC) theory and application. Integrated math and physic concepts will be provided to support the understanding of DC and AC circuitry. Electronics Technology I is a prerequisite course to Electronics Technology II. Dual Credit through Williston State College as TECH 101.	

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MIS03 Code	Area CTE Center	Course		
17151	GNWACTC	Electronics Technology II		
		Grade(s): 10-12 Semester/Duration: Spring Credit: 0.5		
	http://www.gnwec.k12	Prerequisite(s): Electronics Technology I		
	.nd.us/programs/caree	Coordinated Plan of Study: trade, Industry & Technical Education		
	<u>r_tech_center</u>	Description: Electronics Technology II continues skill development using solid state technology such as diodes,		
		transistors, integrated circuits, optoelectronic devices, digital electronics, power supplies and amplifiers. Additional topics that will be included are communication, instrumentation, lasers, security systems and		
		electronic systems technology. Articulation with college electronics programs is available. Electronics Technology		
		Il is a prerequisite to Electronics Technology III. Dual Credit through Williston State College as TECH 105.		
17236	NVACTC	Welding Technology		
/1723		Grade(s): 10-12 Semester/Duration: Credit: 1 or 2		
7	www.northvalley.k12.n	Prerequisite(s): None		
′	d.us	Coordinated Plan of Study: Trade, Industry & Technical Education		
		Description: Students learn the various welding processes: Oxy-Fuel weld and cutting, Shielded metal arc weld		
		(Stick), Gas metal arc weld and Flux core arc weld (wire feed), Gas tungsten arc weld (Tig), Plasma arc cutting, and		
		Air arc gouging. General shop safety and theory of each weld process along with blueprint reading, weld symbols, weld joints and positions, and properties of metals are studied. Students completing required standards will be		
		eligible to test for A.W.S. entry level weld certification. Welding students may participate in the student		
		organization SkillsUSA.		
17410	GNWACTC	Exploration of Oil Industry Careers		
		Grade(s): 10-12 Semester/Duration: Fall Credit: 1		
	http://www.gnwec.k12	Prerequisite(s): None		
	.nd.us/programs/caree	Coordinated Plan of Study: Trade, Industry & Technical Education		
	<u>r_tech_center</u>	Description: This is a beginning course for students interested in exploring petroleum industry careers. The		
		course introduces students to oil industry occupations and the occupations concerned with oil production from exploration to refining, including aptitude and interest. The course will cover the processes involved in		
		exploration for oil and gas, obtaining mineral rights, and getting the oil from the ground to the pipeline. Dual		
		Credit through Williston State College as PTLO 101.		
17812	MRACTC	Aviation Technology I		
		Grade(s): 11-12 Semester/Duration: Full Year Credit: 1		
	https://docs.wixstatic.c	Prerequisite(s): None		
	om/ugd/f988cf_5a9925	Coordinated Plan of Study: Trade, Industry & Technical Education Description: This is the entry level course to prepare students for employment in the aviation industry. The		
	66ab3242fc99a635116 e9e3eda.pdf	course covers fundamentals of flight, flight operations, aviation weather, performance and navigation. The course		
	esesedu.pdi	also explores careers in air traffic control, flight dispatching and airport management. Units of instruction include:		
		safety of flight, airport layout, aeronautical charts, radar, radio procedures, airplane power plant, aerodynamics,		
		weather patterns and hazards. Emphasis on applied academics in math and science are integrated throughout the curriculum along with decision-making principles as it applies to flight-related factors		
17813	MRACTC	Aviation Technology II		
-, 515	MINACIC	Grade(s): 12 Semester/Duration: Full Year Credit: 1		
	https://docs.wixstatic.c	Prerequisite(s): Aviation I		
	om/ugd/f988cf 5a9925	Coordinated Plan of Study: Trade, Industry & Technical Education		
	66ab3242fc99a635116	Description: Students will be preparing to pass the Federal Aviation Administration (FAA) private pilot written		
	e9e3eda.pdf	exam. This course will cover advanced flight topics as well as expanding topics covered in Aviation I to an		
		advanced level. An Introduction to Unmanned Aircraft Systems (UAS) will also be included.		

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MIS03 Code	Area CTE Center	Course	
17999	NVACTC	Auto Cooperative Work Experience	
	www.northvalley.k12.n d.us	Grade(s): 11-12 Semester/Duration: Credit: 1 or 2 Prerequisite(s): Completed at least 2 Auto Credits. Coordinated Plan of Study: Trade, Industry & Technical Education Description: This class involves working both inside and outside of the classroom. The outside classroom duties may be done for an area employer. The work may be paid or volunteer, depending on the work agreement. Cooperative Work Experience needs to be approved by Instructor & Center Director.	
17999	NVACTC	Construction Cooperative Work Experience	
	www.northvalley.k12.n d.us	Grade(s): 11-12 Prerequisite(s): Completed at least 2 Construction Credits. Coordinated Plan of Study: Trade, Industry & Technical Education Description: This class involves working both inside and outside of the classroom. The outside classroom duties may be done for an area employer. The work may be paid or volunteer, depending on the work agreement. Cooperative Work Experience needs to be approved by Instructor & Center Director.	
17999	NVACTC	Welding Cooperative Work Experience	
	www.northvalley.k12.n d.us	Grade(s): 11-12 Semester/Duration: Credit: Up to 2 Prerequisite(s): Completed at least 2 Welding Credits. Coordinated Plan of Study: Agricultural Education Description: This class involves working both inside and outside of the classroom. The outside classroom duties may be done for an area employer. The work may be paid or volunteer, depending on the work agreement. Cooperative Work Experience needs to be approved by Instructor & Center Director.	
27101	MRACTC	Introduction to Information Technology	
	https://docs.wixstatic.c om/ugd/f988cf_5a9925 66ab3242fc99a635116 e9e3eda.pdf	Grade(s): 9-12 Semester/Duration: Fall Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Information Technology Description: This exploratory level course provides an exposure to careers and issues in Information Technology. Units prepare students for the industry recognized "Internet and Computing Core Certification" (IC3). This globally recognized certification provides students with the foundation of knowledge needed to excel in fields that involve computers and the Internet. The IC3 Global Standard 3 reflects the most relevant skills for school and business today including: Computing Fundamentals, Key Applications, and Living Online.	
27120	CCCTEC	Intro to Coding & Gaming	
	https://www.casscte.co m/domain/1054	Grade(s): 9-12 Semester/Duration: Spring or Fall Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Information Technology Description: The course will provide students with a foundation for understanding programming languages. Fundamentals of logic, design, coding, structures, and controls will be applied through a game-like environment, such as Scratch, GameSalad or emerging programs. Careers in coding and programming are explored. Students will experience project-based learning, teamwork, problem-solving, and increase communication.	

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27120	https://docs.wixstatic.c om/ugd/f988cf 5a9925 66ab3242fc99a635116	Introduction to Programming/Coding Grade(s): 10-12 Semester/Duration: Fall Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Information Technology Description: This course will provide students with a solid base for understanding the main concepts of
	e9e3eda.pdf	programming languages. Students will be introduced to the Visual Basic Programming language and complete projects utilizing programming concepts, variables, constants, decision structures and looping structures.
27120	GFACTC	Programming Essentials
	https://www.gfareactc. org/	Grade(s): Semester/Duration: Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Information Technology Description: Basic programming concepts are presented which are transferable to other programming languages. Foundational concepts and fundamentals of computer programming including logic, design, coding, structure, and controls are addressed. Careers in programming are explored and students are provided with opportunities to increase their communication, teamwork, and critical thinking skills. Business projects are used to show how programming skills are used in the business world.
27122	MRACTC	Coding with Visual Basics - Programming Essentials
	https://docs.wixstatic.c om/ugd/f988cf_5a9925 66ab3242fc99a635116 e9e3eda.pdf	Grade(s): 10-12 Semester/Duration: Spring Credit: Prerequisite(s): None Coordinated Plan of Study: Information Technology Description: This course is an online hands-on course in computer programming using visual basic. The students will develop good problem solving and programming skills while performing several hands-on labs and assignments including gaming. Topics covered include; procedures, mathematical and business functions, arrays and structures, color, sound, and graphics, creating classes, using files, sorting and searching. Dual credit is available through BSC.
27122	GFACTC	Programming Essentials II
	https://www.gfareactc. org/	Grade(s): Semester/Duration: Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Information Technology Description: Advanced programming concepts are presented which are transferable to other programming languages. Foundational concepts and fundamentals of computer programming including logic, design, coding, structure, and controls are addressed. Dual Credit Option through Lake Region State College.
27124	MRACTC	Programming in C++
	https://docs.wixstatic.c om/ugd/f988cf_5a9925 66ab3242fc99a635116 e9e3eda.pdf	Grade(s): 10-12 Semester/Duration: Fall Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Information Technology Description: The Programming in C++ course teaches the basics of C++ programming coding language, as well as the fundamental concepts and techniques used in object-oriented programming. The course begins with the universal basics, without relying on object concepts, and then gradually extends to advanced concepts that are encountered using the objective approach. Students will be able to use the syntax, semantics, and basic data types of the C++ language, understand the principles of the object-oriented model and its implementation in the C++ language and resolve typical implementation problems using standard C++ language libraries.

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MIS03 Code	Area CTE Center	Course	
27125	CCCTEC	Computer Programming I - Java	
		Grade(s): 10-12 Semester/Duration: Fall Credit: 0.5	
	https://www.casscte.co	Prerequisite(s): Intro to Coding & Gaming	
	m/domain/1054	Coordinated Plan of Study: Information Technology Description: This course provides an introduction to the field of Computer Science, including design and coding	
		principles. By studying case studies and designing graphical user interfaces, students will learn the principles of	
		object-oriented programming, define classes, instantiate objects, and write methods. Students will also work with	
		algorithms which make logical decisions and iterate.	
27127	CCCTEC	AP Computer Programming	
		Grade(s): 10-12 Semester/Duration: Spring Credit: 0.5	
	https://www.casscte.co	Prerequisite(s): C or above in Computer Programming I	
	m/domain/1054	Coordinated Plan of Study: Information Technology Description: Students will study abstract classes, arrays, lists, and advanced concepts of graphical user	
		interfaces. Main topics also include sequences, searches, input and output streams. This course, together with	
		the first semester, will prepare students to take the AP exam in Computer Science if they wish.	
27128	CCCTEC	Mobile App Development & Security	
		Grade(s): 10-12 Semester/Duration: Fall or Spring Credit: 0.5	
	https://www.casscte.co	Prerequisite(s): Intro to Coding & Gaming or Computer Programming I - Java	
	m/domain/1054	Coordinated Plan of Study: Information Technology	
		Description: Students use mobile technology to solve everyday problems for their community so why not task them to develop one? In this course students will learn the basics of the app system and software development	
		cycle. They will also learn about code modification and additional basic app coding skills, including the topics of	
		variables, simple data types, conditional programming constructs, and simple library classes. The course also	
		provides a foundation for the design, implementation, and management of database systems. Teams will have	
27170	CVCTC	the opportunity to participate in the Verizon App Challenge.	
2/1/0	SVCTC	Fundamentals of Web Design (Microsoft Expressions Web 2)	
	h.u	Grade(s): 9-12 Semester/Duration: Full Year Credit: 1	
	http://www.hovc.k12.n d.us/courses.cfm	Prerequisite(s): None Coordinated Plan of Study: Information Technology	
	<u>u.us/courses.cm</u>	Description: Introduction to Web Development; is an introductory semester long course in the planning,	
		interviewing design and development of a web site. Students will learn how to design, develop and maintain	
		content within Dreamweaver. They will learn ways to add typical interface components and how to use Fireworks	
		for creating optimal images for the Web. You will learn how to organize and manage your prototypes and how to easily organize Web pages and layers.	
27170	RACTC	Web Page Design	
		Grade(s): 9-12 Semester/Duration: Credit: 0.5	
	http://ractc.weebly.co	Prerequisite(s): None	
	<u>m</u>	Coordinated Plan of Study: Information Technology	
		Description: The Web Design course is an introductory standards-based course on Web Design. The course	
		includes learning experiences in basic HTML, modern web features including Cascading Style Sheets (CSS) and interactivity, web standards and accessibility, creation of web media, and planning, development, publishing, and	
		evaluation of web sites. The course is based upon the ISTE's National Educational Technology Standards for	
		Students (NET-S), 21st Century Skills, and the ACM Model Curriculum for K-12 Computer Science.	

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27219	http://www.hovc.k12.nd.us/courses.cfm	Computer Hardware and Operating Systems Grade(s): 10-12 Semester/Duration: Full Year Credit: 1 Prerequisite(s): None Coordinated Plan of Study: Information Technology Description: This course is designed to teach students how to install, maintain and upgrade personal computer hardware and operating system software. Students will be tasked to diagnose, troubleshoot and repair issues involving personal computers, laptops, printers and software. Completion of the year-long course will help prepare students to take the Industry-level COMPTIA A+ exams. Homework is occasional. Reading level is				
27219	GFACTC	IT Essentials - Hardware & Operating Systems				
	https://www.gfareactc. org/	Grade(s): Semester/Duration: Credit: 1 Prerequisite(s): None Coordinated Plan of Study: Information Technology Description: This course presents an in-depth exposure to computer hardware and operating systems. Students will learn the functions of hardware and software components as well as best practices within computer maintenance and troubleshooting issues. Class activities include assembling a computer, installing operating systems and software, and configuring networking issues. This course is designed to prepare students for industry certification opportunities.				
27219	MRACTC	IT Essentials - PC Hardware & Operating Systems				
	https://docs.wixstatic.c om/ugd/f988cf 5a9925 66ab3242fc99a635116 e9e3eda.pdf	Grade(s): Semester/Duration: Spring Credit: Prerequisite(s): Introduction to Information Technology (27101) Coordinated Plan of Study: Information Technology Description: This course presents an in-depth exposure to computer hardware and operating systems. Students learn how hardware and software components work as well as suggested best practices in maintenance and safety issues. Through hands-on activities and labs, students learn how to physically take apart, assemble, and configure a computer, install operating systems and software, and troubleshoot hardware and software problems. In addition, an introduction to networking is included. This course prepares students for Comp TIA's "A+" certification and/or Comp TIA's "IT Fundamentals" certification exams. Dual Credit is available through BSC – for grades 10-12.				
27265	CCCTEC	Cisco I - Intro to Networks				
	https://www.casscte.co m/domain/1054	Grade(s): 10-12 Semester/Duration: Fall Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Information Technology Description: This is the first level of a four-part series on computer networking. Participants will learn about current and emerging networking technology. The course will cover safety, networking terminology and protocols, network standards, LAN's, WAN's, the OSI model, cabling, router configuration, topologies, IP addressing, and other general networking information. Students will learn the principles of both wired and wireless networks Students will complete labs both using virtual software and physical hardware. The goal is for participants completing levels 1-4 to be prepared to take the industry certification exam and become a Certified Cisco Networking Associate (CCNA).				

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27265	SVCTC	Introduction to Networking Grade(s): 10-12 Semester/Duration: Full Year Credit: 1 Prerequisite(s): None Coordinated Plan of Study: Information Technology Description: Students learn about Cisco-brand networking equipment such as routers and switches, Local Area Network configuration and will participate in hands-on labs to increase their skill level. Students will receive instruction on how to configure Cisco networking devises for use on a LAN or WAN. Completion of the two semesters of CCNA1 and CCNA 2 will help prepare students to take the Industry-level CISCO Intro 640-821 and ICND 640-811 exams. Homework is frequently. Reading level is post-secondary (technical). Curriculum is web based.				
	http://www.hovc.k12.n d.us/courses.cfm					
27265	GFACTC	Networking Essentials				
	https://www.gfareactc. org/	Grade(s): Semester/Duration: Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Information Technology Description: Networking Essentials covers basic networking concepts within the context of home and small business networks. Through interactive, multimedia content, lab activities, and multi-industry case studies, this course introduces students to networking careers and prepares them for further study.				
27266	GNWACTC	CCNA Introduction to Networks				
	http://www.gnwec.k12 .nd.us/programs/caree r_tech_center	Grade(s): 10-12 Semester/Duration: Fall Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Information Technology Description: CCNA Introduction to Networks is the first of the four courses leading to the CCNA industry certification. This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the course. Students will be able to build simple LANs, perform basic configuration for routers and switches, and implement IP addressing schemes. Dual Credit through Williston State College as CIS 164.				
27266	Cisco II - Routing & Switching Essentials					
	https://www.casscte.co m/domain/1054	Grade(s): 10-12 Semester/Duration: Credit: 0.5 Prerequisite(s): Cisco I Coordinated Plan of Study: Information Technology Description: This is the second level of a four-part series on computer networking. Successful completion of this class will earn ½ of a high school credit. Participants will review what they learned in level I and continue to learn more advanced computer networking skills. Following a review of the basic concept, participants will concentrate on router configuration and LAN switching. Beginning network management principles will be learned.				
27267	CCNA Introduction to Networks					
http://www.gnwec.k12 .nd.us/programs/caree r tech center Prerequisite(s): CCNA Introduction to Not Coordinated Plan of Study: Information Description: CCNA Routing and Switching certification. This course describes the arch small network. By the end of this course, st and resolve common issues with RIPv1, RIF routing in both IPv4 and IPv6 networks. Stu		Grade(s): 10-12 Semester/Duration: Spring Credit: 0.5 Prerequisite(s): CCNA Introduction to Networks Coordinated Plan of Study: Information Technology Description: CCNA Routing and Switching Essentials is the second of four courses that leads to the CCNA industry certification. This course describes the architecture, components, and operations of routers and switches in a small network. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with RIPv1, RIPng, single-area and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks. Students completing this course can choose to complete the CCENT industry certification. Dual Credit through Williston State College as CIS 165.				

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27267	CCCTEC	Cisco III - Scaling Networks				
	https://www.casscte.co	Grade(s): 11-12 Semester/Duration: Credit: 0.5 Prerequisite(s): Cisco & Cisco				
	m/domain/1054	Coordinated Plan of Study: Information Technology Description: This is the third of the four-part series on computer networking. Successful completion of this class will earn ½ of a high school credit. Participants will engage in a review of basic networking principles including the OSI model, networking media, configuration and advanced LAN switching. Participants will demonstrate their knowledge and skill by designing a network.				
27280	MRACTC	Cybersecurity				
	https://docs.wixstatic.c om/ugd/f988cf 5a9925	Grade(s): 9-12 Semester/Duration: Fall or Spring Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Information Technology				
	66ab3242fc99a635116 e9e3eda.pdf	Description: Cybersecurity is becoming a major concern for any business that uses the Internet for any part of their business. This course will introduce students to best practices businesses use to protect their information as well as techniques individuals can use to protect themselves using social media. Identification of cybercrime, security principles, technologies and security principles to defend networks will be covered and build skills and knowledge for students to pursue careers in cybersecurity. Dual credit is available through BSC – for grades 10-12.				
27280	GFACTC	Cybersecurity Essentials				
	https://www.gfareactc. org/	Grade(s): Semester/Duration: Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Information Technology Description: The Cybersecurity Essentials course develops basic understanding of information and network security. The course introduces students to characteristics of cybercrime, security principles, technologies, and procedures to defend networks.				
27280	GNWACTC	Introduction to Cybersecurity				
	http://www.gnwec.k12 .nd.us/programs/caree	Grade(s): 10-12 Semester/Duration: Spring Credit: 0.5 Prerequisite(s): None Coordinated Plan of Study: Information Technology				
	<u>r tech center</u>	Description: Introduction to Cybersecurity covers trends in cybersecurity and career opportunities. Course modules will define cybersecurity, explain why it's important, and introduce products and processes used to secure data. Students will also explore why cybersecurity is critical in business and medical industries, how hackers use unsuspecting individuals to propagate malware, and why cybersecurity is a growing profession. Dual Credit through Williston State College as CIS 299.				
27280	SVCTC	Introduction to Cybersecurity				
	1 // 1 1 1 1 1 1 1	Grade(s): 10-12 Semester/Duration: Fall Credit: 0.5				
	http://www.hovc.k12.n d.us/courses.cfm	Prerequisite(s): None Coordinated Plan of Study: Information Technology Description: This course covers trends in cybersecurity and career opportunities available in this field. Cybersecurity refers to the people, products, and processes that protect electronic data from those with malicious intent. The course will explain why cybersecurity is important and how it is used to secure data.				

CCCTEC: Cass County Career and Technical Education Center GFACTC: Grand Forks Area Career and Technology Center GNWACTC: Great Northwest Area Career and Technical Center Lake Area Career and Technology Center

LACTC: Lake Area Career and Technology Center
MRACTC: Missouri River Area Career and Technology Center



Across the state there are ten <u>Area Career and Technical Education Centers (CTCs)</u>, providing CTE classes either in person, via ITV or online. Below you will find a catalog of current online courses. Contact information for the Center delivering the course is on the last page.

MIS03 Code	Code Area CTE Center Course						
27400	RACTC	Geographic Information Systems (GIS)					
	http://ractc.weebly.co m	Grade(s): 10-12 Prerequisite(s): None Coordinated Plan of S	Semester/Duration: Spring tudy: Information Technology	Credit: 0.5			
		Description: Students will have the opportunity to gather technical skills in the areas of geographic informat systems, remote sensing, and global positioning systems. Students will learn the basic ESRI AcrView interface the context of local and global problems. They will gain experience in the use of global positional system (GPS) units to gather authentic data and will be able to overlay their collected data on aerial photographs and satel					

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North Dakota Department of Career and Technical Education Area Career and Technology Centers

Cass County Career and Technical Education Center, CCCTEC

Center Director: Denise Jonas

Address: 207 Main Ave W, West Fargo, ND 58078

E-Mail: DJONAS@west-fargo.k12.nd.us Phone: 701-499-1008 Fax:

Website: https://www.casscte.com

Grand Forks Area Career and Technology Center, GFACTC

Center Director: Eric Ripley

Address: 2400 47th Ave S, Grand Forks, ND 58201

E-Mail: gfactc@mygfschools.org Phone: 701-787-4872 Fax: 701-787-4351

Website: https://www.gfareactc.org/

Great Northwest Area Career and Technical Center, GNWACTC

Center Director: Kim Murphy

Address: PO Box 1964; 222 University Dr, Williston, ND 58802

E-Mail: Kim.Murphy@k12.nd.us Phone: 701-609-5681 Fax: 701-774-3532

Website: http://www.gnwec.k12.nd.us/

James Valley Area Career and Technology Center (no online/ITV Courses), JVACTC

Center Director: John Lynch

Address: 910 12th Ave NE, Jamestown, ND 58401

E-Mail: John.Lynchjr@k12.nd.us Phone: 701-252-8841 Fax: 701-252-3646

Website: https://www.jamestown.k12.nd.us/james-valley-ctc

Lake Area Career and Technology Center, LACTC

Center Director: Christa Brodina

Address: 205 16th St NW, Devils Lake, ND 58301

E-Mail: christa.brodina@dlschools.org Phone: 701-662-7650 Fax: 701-662-7658

Website:

http://www.edlinesites.net/pages/Devils Lake High School/LACTC/1115773665503001746/Home

Missouri River Area Career and Technical Center, MRACTC

Center Director: Dale Hoerauf

Address: 128 Soo Line Dr - Suite 102, Bismarck, ND 58501

E-Mail: dale_hoerauf@bismarckschools.org Phone: 701-751-4041 Fax: 701-751-4043

Website: https://www.mrecnd.org/mractc

North Valley Career and Technology Center, NVACTC

Center Director: Mike Hanson

Address: 1540 School Rd, Grafton, ND 58237

Website: https://www.northvalleyctc.org/



North Dakota Department of Career and Technical Education Area Career and Technology Centers

Roughrider Area Career and Technology Center, RACTC

Center Director: Kevin Nelson

Address: 402 4th St W, Dickinson, ND 58601

E-Mail: kevin.nelson@k12.nd.us Phone: 701-471-2647 Fax:

Website: http://ractc.weebly.com/

Sheyenne Valley Area Career and Technology Center, SVCTC

Center Director: Jeff Bopp

Address: 801 Valley Ave SE, Valley City, ND 58072

E-Mail: jeff.bopp@k12.nd.us Phone: 701-845-0256 Fax: 701-845-0003

Website: http://www.sheyennevalleyctc.k12.nd.us/

Southeast Region Career and Technolgy Center, SRCTC

Center Director: Dan Rood

Address: 2101 9th St N, Wahpeton, ND 58075

E-Mail: dan.rood@k12.nd.us Phone: 701-642-8701 Fax: 701-642-3811

Website: http://www.srctc.k12.nd.us/