

NORTHLAND CAREER CENTER

Kearney School District, Liberty School District, *Liberty, Liberty North*, North Kansas City School District, *North Kansas City, Oak Park, Staley, Winnetonka*, Northland Christian School, Our Savior Christian Academy, Park Hill School District, *Park Hill, Park Hill South*, Platte County School District, Smithville School District, St. Pius X, West Platte School District

Northland Career Center offers both morning and afternoon sessions. Students need to check with their counselor to determine the number of credits needed to graduate and additional courses recommended. Student selection for Northland Career Center is based on successful completion of prerequisites, good school attendance, grade point average, standardized test scores, shadow experience, and an interest in career and technical education. Upon successful completion of a one or two-year course, the student will receive a certificate.

Apprenticeship: After meeting eligibility requirements students may receive advanced placement on the beginning wage scale upon admission to one of several apprenticeship programs.

College Credit: Students may earn college credit from the following 2 and 4 year post-secondary institutions: Culinary Institute of America (CIA), Johnson County Community College (JCCC), Metropolitan Community Colleges (MCC), Missouri Western State University (MWSU), Ranken Technical College (RTC), State Fair Community College (SFCC), and State Technical College of Missouri (STCM). The actual credit varies from program to program. See your counselor for more information.

English Credit: Students will meet as a class with the Language Arts Teacher approximately four times a semester to earn .5 credits per year. Lessons and projects will be geared toward improving English skills that will make students more successful for a future career in that particular program. Therefore, plans will include significant input from course instructors while being aligned with standards from the Common Core.

Math Credit: The math credit (.5 credits per year) will be embedded within the regular schedule of the program. Lessons and projects will be geared toward improving math skills that will make students more successful for a future career in that particular program. Therefore, plans will include significant input from course instructors while being aligned with standards from the Common Core.

Industry Recognized Credential (IRC): Students may earn an industry recognized credential that validates an individual has successfully demonstrated skill competencies in a core set of content and performance standards in a specific set of work-related tasks, single occupational area, or a cluster of related occupational areas. First-year seniors must pass their IRC's to participate in NCC's graduation; other specifications may be listed.

Technical Skill Attainment (TSA): A technical skill assessment measures skill proficiency of Career and Technical Education (CTE) students who are concentrators (a student who has earned three or more sequential credits in any state-approved CTE program grades 9-12) and has completed an approved CTE program.

Students Attending for 2 Years: Students must have at least a "C" or better, meet the attendance and citizenship requirements at NCC and home school their junior year to return for a second year. Students must also have a recommendation from their instructor.

NORTHLAND CAREER CENTER COURSE DESCRIPTIONS

Agricultural Sciences I (This course is offered first period for Platte County & Homeschooled students)

Grade: 9, 10, 11, 12

Credit Earned: Elective

Textbook Lexile Level: 1010L - 1200L (7th grade to 11th grade)

Course Description: This introductory course to agriculture, food, and natural resources enables all students to experience an overview of the fields of agricultural science and natural resources. Students experience hands-on activities, projects, and problems. Students' experiences involve the study of communication, the science of agriculture, plants, animals, natural resources, and agricultural mechanics. While surveying the opportunities available in agriculture and natural resources, students learn to solve problems, conduct research, analyze data, work in teams, and take responsibility for their work, actions, and learning. For example, students work in groups to determine the efficiency and environmental impacts of fuel sources in a practical learning exercise. Students explore career and post-secondary opportunities in each area of the course.

Agricultural Sciences – Plant Systems (Class rotates AM/PM sessions each year). For example, students enrolled as **sophomores/juniors in the AM will stay in the AM class the following year to take Animal Systems. **2021-2022 school year Plant Systems class is offered in the AM.****

Grade: 10, 11, 12

Prerequisites: Algebra I and Basic Science

Textbook Lexile Level: 1010L - 1200L (7th grade to 11th grade)

Credit Earned: Elective

Optional:

- 3 hours of dual credit through State Fair Community College

Course Description: This course provides a foundation of plant systems knowledge and skills. Students will experience various plant systems concepts through exciting “hands-on” activities, projects, and problems. Student experiences will include the study of plant anatomy and physiology, classification, and the fundamentals of production and harvesting. Students will learn how to apply scientific knowledge and skills to use plants effectively for agronomic, forestry, and horticultural industries. Students will discover the value of plant production and its impact on the individual, the local, and the global economy. Students will work on major projects and problems similar to those that plant science specialists, such as horticulturalists, agronomists, greenhouse and nursery managers, and plant research specialists, face in their respective careers. Students will understand specific connections between the course’s lesson and Supervised Agricultural Experience and FFA components of agricultural education programs. Students will improve investigative, experimental and communication skills. This course is intended to build a foundation on the Introduction to Agriculture, Food and Natural Resources course. The course is structured to enable all students to have a variety of experiences that will provide an overview of the plant industries. This course includes the following units of study: · Worlds of Opportunity · Mineral Soils · Soilless Systems · Anatomy and Physiology · Taxonomy · The Growing Environment · Plant Reproduction · Surviving a Harsh Environment · Crop Production and Marketing

Agricultural Sciences – Animal Systems (Class rotates between AM/PM sessions each year). **2021-2022 school year Animal Systems class is offered in the PM.**

Grade: 10,11,12

Prerequisites: Algebra I and Basic Science

Textbook Lexile Level: 1010L - 1200L (7th grade to 11th grade)

Credit Earned: Elective

Optional:

- 3 hours of dual credit through State Fair Community College

Course Description: This course is designed to expose students to agriculture, animal systems, and related career options. Students participating in the **Animal Systems** course will have experiences in various animal science concepts with exciting hands-on activities, projects, and problems. Students' experiences will involve the study of animal anatomy, physiology, behavior, nutrition, reproduction, health, selection, and marketing. For example, students will acquire skills in meeting the nutritional needs of animals while developing balanced, economical rations. Throughout the course, students will consider the perceptions and preferences of individuals within local, regional, and world markets. Students will explore hands-on projects and activities to learn the characteristics of animal science and work on major projects and problems similar to those that animal science specialists, such as veterinarians, zoologists, livestock producers, and industry personnel, face in their respective careers. In addition, students will understand specific connections between animal science lessons and Supervised Agricultural Experience and FFA components that are important for the development of an informed agricultural education student. Students will investigate, experiment, and learn about documenting a project, solving problems, and communicating their solutions to their peers and members of the professional community. This course of study includes: · Background and Social Issues of Animal Science · Anatomy and Physiology · Nutrition · Reproduction · Genetics · Animal Health · Animal Selection

Credit Type Earned: The Missouri Graduation Requirements allow students that have attended a CTE program for two years to utilize their final year of credit as follows: one credit of science or math, one credit of technology or practical art, and one credit of elective.

Agricultural Sciences TSA/IRC: MO Agricultural Skill Knowledge Assessment

(MOASK): Students may be assessed from a number of IRC's:

Agronomy, Dairy Cattle, Dairy Foods, Entomology, Farm Management, Floriculture, Forestry, Horse Evaluation, Livestock Evaluation, Meats Evaluation, Nursery/Landscape, Poultry Evaluation, and Soils Evaluation.

Graduation: First year seniors that pass a TSA or students attending Agricultural Sciences for 2 years and meet the minimum academic and attendance requirements may participate in NCC's graduation.

Aviation Technology I

Grade: 11,12

Prerequisites: Mechanical Aptitude

Text Reading Level: 12th grade

Credit Earned: Elective

Course Description: Instruction will include basic concepts in aircraft blueprints/drawings, avionics, aircraft structure/composition, aircraft sheet metal and welding, aircraft systems and components, safety and human factors. Students will also study the aerodynamics and performance of flying an Unmanned Aircraft in order to earn their remote pilot certificate (21-22 school year UA is offered during the PM session).

Aviation Technology II

Grade: 12

Prerequisites: Successful completion of Aviation Technology I.

Text Reading Level: 12th grade

Credit Earned: Elective

Course Description: This program prepares students for continued education towards an Associate's Degree and/or an Airframe and Powerplant Certification. Students may also enter immediate employment following their two-year program. Internship opportunities their 2nd semester of their senior year are available for qualified candidates. Students will also study the aerodynamics and performance of flying an Unmanned Aircraft in order to earn their remote pilot certificate (21-22 school year UA is offered during the PM session).

Credit Type Earned: The Missouri Graduation Requirements allow students that have attended a CTE program for two years to utilize their final year of credit as follows: 1 credit of science or math, 1 credit of technology, 1 credit of elective.

Internship: Aviation Technical Services at KCI Airport

Aviation Technology TSA/IRC: There is no IRC at this time.

Graduation: First year seniors that pass the TSA or students attending for 2 years and meet the minimum academic and attendance requirements may participate in NCC's graduation.

Construction Technology I

Grade: 11, 12

Prerequisites: Ability to read a tape measure, add and subtract fractions and calculate dimensions in feet and inches; work at various heights and lift 25 pounds.

Textbook Lexile Level: 1210L - 1400L (11th grade to 14th grade)

Credit Earned: Elective

Course Description: This program is competency based and teaches skills and theory related to the building trades industry. Areas of study include framing, leveling, blueprint reading, building plans, specifications and codes, footings and foundations, and sheetrock hanging. Each student must pass a safety test to work around hand and power tools. Students are required to provide their own boots and clothing for working in hot and cold weather.

Construction Technology II

Grade: 12

Prerequisites: Successful completion of Construction Technology I

Textbook Lexile Level: 1210L - 1400L (11th grade to 14th grade)

Type of Credit Earned: Elective

Optional:

- 12 hours of articulated college credit is available through MWSU after completing two (2) years at NCC.
- 13 hours of college credit by exam is available through RTC after completing two (2) years at NCC.
- Advanced wage scale placement is available in the Construction Apprenticeship Program.

Course Description: The program provides advanced instruction on the construction of a building which may include areas mentioned in Construction Technology I, as well as, rough framing, grading and measuring lumber, safety, and scaffolding work. Some commercial construction will be introduced including the use of metal studs and the differences in building codes and techniques. The completion of Construction Technology II will provide opportunities for employment in residential or commercial construction.

Credit Type Earned: The Missouri Graduation Requirements allow students that have attended a CTE program for two years to utilize their final year of credit as follows: 1 credit of math, 2 credits of elective.

Construction Technology TSA: TSA or PACT Certification:

Students may be assessed in 2 areas: Academic Carpenter Level I (must have) and OSHA 10 (Additional)

Graduation: First year seniors that pass the TSA or students attending Construction Technology for 2 years and meeting the minimum academic and attendance requirements may participate in NCC's graduation.

CULINARY ARTS I

Grade: 11,12

Prerequisites: Be able to lift 50 pounds from the floor to a table; 9th grade math level; access to the internet from home.

Credit Earned: Elective

Optional:

- Students may earn their ServSafe/Food Handlers License through the National Restaurant Association.

Textbook Lexile Level: 1210L - 1400L (11th grade to 14th grade)

Course Description: The focus of study will be food service terminology, equipment identification and use, knife skills, basic food preparation, sanitation and safety. These skills and knowledge will lead to preparation methods for stocks, soups and sauces. Students will receive hands-on experience through assuming the role of steward (pot/dishwasher) and cooks' helper in the pre-preparation of meals. An understanding of multiplication, division, addition and subtraction of fractions and decimals, percents, and volume and weight measurement is essential.

CULINARY ARTS II

Grade: 12

Prerequisites: Successful completion of Culinary Arts I

Type of Credit Earned: Elective

Optional:

- 7 hours of articulated credit is available through JCCC after completing 2 years and earning the American Culinary Federation Certified Fundamentals Cook or Pastry Cook Certification.
- 3 hours of credit by exam is available through JCCC after completing 2 years of Culinary Arts
- 3 hours of articulated credit is available through The CIA after completing 2 years.

Textbook Lexile Level: 1210L - 1400L (11th grade to 14th grade)

Course Description: Students will continue to gain hands-on experience with the preparation of daily meals consumed by students, staff and guests. Emphasis will be on plate presentations, preparation and timing. Breakfast cookery, vegetables, starches and meats will be the focus of class work. Students will complete a nationally recognized sanitation exam. Successful completion of this course will prepare students for entry-level positions in full-service restaurants, hotels and continued education in a Culinary Apprenticeship program at the post-secondary level.

Credit Type Earned: The Missouri Graduation Requirements allow students that have attended a CTE program for two years to utilize their final year of credit as follows: 1 credit of science or math, 2 credits of elective

Culinary Arts TSA/IRC: American Culinary Federation:

Students may earn the Certified Fundamentals Cook or Pastry Cook. The TSA is the written test and the IRC is the performance test.

Graduation: First year seniors that pass the TSA/IRC or students attending Culinary Arts for 2 years and meet the minimum academic and attendance requirements may participate in NCC's graduation.

DIESEL TECHNOLOGY – Medium/Heavy Duty Truck Systems (Class rotates AM/PM sessions each year). For example, students enrolled as juniors in the AM will stay in the AM class the following year to take Engines and Electrical/Electronic Systems. 2021-2022 school year Medium/Heavy Duty Truck Systems class is offered in the AM

Grade: 11,12

Prerequisites: Mechanical Aptitude

Textbook Lexile Level: 1210L - 1400L (11th grade to 14th grade)

Type of Credit Earned: Elective

Course Description: Instruction includes a study of troubleshooting and tune-up procedures. Powertrains, air and hydraulic brakes, basic hydraulics, steering and suspension systems are included in this course. An introduction to welding and automotive air conditioning basic theory helps round out the students' knowledge.

DIESEL TECHNOLOGY – Engines and Electrical/Electronic Systems (Class rotates AM/PM sessions each year). 2021-2022 school year Engines and Electrical/Electronic Systems class is offered in the PM.

Grade: 11,12

Prerequisites: Mechanical Aptitude

Text Reading Level: 12th grade

Textbook Lexile Level: 1210L - 1400L (11th grade to 14th grade)

Credit Earned: Elective

Course Description: Instruction will include a basic concept of diesel engine theory, general shop safety practices, basic hand tools, common fasteners, shop equipment, precision measuring devices, and identifying, assembling and reassembling component parts. Introduction to various fuel systems, cooling systems, lubricating systems, failure analysis, preventative maintenance and electrical systems are studied and related activities performed.

Credit Type Earned: The Missouri Graduation Requirements allow students that have attended a CTE program for two years to utilize their final year of credit as follows: one credit of science or math, one credit of technology or practical art, one credit of elective.

Diesel Technology TSA/IRC: Automotive Service Excellence Student Certification:

Students must pass 4 assessments or an average score of all four tests; brakes, steering and suspension, engine performance, and electrical.

Graduation: First year seniors that pass the TSA/IRC or students attending Diesel Technology for 2 years and meet the minimum academic and attendance requirements may participate in NCC's graduation.

HEALTH SCIENCES I

Grade: 11,12

Prerequisites: (This is a one or two-year program); must have a Social Security number and pass state criminal background check; must not be on the state employment disqualification list; required to obtain a 2 step TB test on their own and provide documentation of results; hepatitis vaccination is encouraged; purchase uniform and wear scrubs daily in class and for clinicals; knowledge in basic science and positive people skills encouraged. At the end of the first semester there is a written and performance test. Due to the nature of off-site work; behaviors, academics (students must have a "C" average or be

recommended by the instructor to return for the second semester), and attendance policies are strictly followed. Second semester, students attending clinicals at clinical sites must provide their own transportation. Students desiring to earn their Certified Nursing Assistant Certification (CNA) will work/volunteer at a long-term care facility. Students that do not want to earn their CNA can still attend but at the end of the year will have to take a TSA on safety and infection control.

Textbook Lexile Level: 1010L - 1200L (7th grade to 11th grade) Textbook for Nursing Assistants

Textbook Lexile Level: 1210L - 1400L (11th grade to 14th grade) Medical Terminology

Type of Credit Earned: Elective

Course Description: Health Sciences I teaches students basic health care, CPR, anatomy, common disorders and introduction to medical terminology. Students have the opportunity to take the Certified Nursing Assistant state test. The students will also explore a variety of careers in the health field including radiology, physical therapy, veterinary, dietary, respiratory therapy, medical records, dentistry, etc. to enable students to make an informed decision about a career in health care.

Health Science TSA/IRC: Certified Nursing Assistant/CPR/First Aid, OSHA 10, Stop the Bleed

Graduation: Students that have met the academic and attendance requirements and earned their CNA their junior year may participate in NCC's graduation.

HEALTH SCIENCES II (only offered during the PM session)

Grade: 12

Prerequisites: Students must have a Health Sciences I overall GPA of an 80%, average employability grade of 85% or greater, and must have earned their CNA Certification during the 1st year. Students must also meet the attendance requirements by missing 10 days or less (waived days are included) and cannot have an Out-of-School Suspension or more than 2 discipline infractions and/or 3 days of ISS. Students will participate in 6 different medical related internships throughout the year. NCC will work to provide internships related to the student's interest but can not guarantee an exact match.

Students must provide their own transportation while on internship.

Textbook Lexile Level: 1210L - 1400L (11th grade to 14th grade)

Type of Credit Earned: Elective

Course Description: Students will report to NCC one day a week for structured learning activities that include career development and planning, discussion, reflection, and research and writing. Students will begin their internship experience starting the third week of school. Students will be responsible for documenting their clinical internship experience hours for their instructor.

Credit Type Earned: The Missouri Graduation Requirements allow students that have attended a CTE program for two years to utilize their final year of credit as follows: 1 credit of science or math, 1 credit of practical art, 1 credit of elective

Graduation: Students that have met the academic and attendance requirements and earned their CNA their junior year may participate in NCC's graduation.

HEATING, COOLING, & CLIMATE CONTROL I

Grade: 11,12

Prerequisites: recommended algebra, physics, drafting, physical science and basic electricity.

Textbook Lexile Level: 1210L - 1400L (11th grade to 14th grade)

Credit Earned: Elective

Course Description: This program provides competency based instruction and teaches skills and theory relating to air conditioning, refrigeration and heating. Topics include occupational safety, hand and special tools, tubing applications, soldering, welding and brazing, basic mechanical refrigeration, EPA regulations, refrigerants, recovery, recycling and reclamation, evacuating, pressurizing, leak testing and charging. Fundamentals of electricity, electrical power, circuits, symbols and diagrams, transformers and relays, thermostats, electric motors, capacitors, troubleshooting ACR system electrical circuits, and ACR wiring diagrams will also be covered. Operation and service of electrical and mechanical components will be applied to commercial and domestic systems. The first part of a two-part program, students will develop entry-level skills for employment in a variety of related fields.

HEATING, COOLING & CLIMATE CONTROL II

Grade: 12

Prerequisites: Successful completion of Heating, Cooling & Climate Control I

Textbook Lexile Level: 1210L - 1400L (11th grade to 14th grade)

Credit Earned: Elective

Optional:

- 12 hours of articulated college credit is available through MWSU after completing two 2 years of HCCC.
- Advanced wage scale placement is also available in the Pipe Fitter Apprenticeship Program.

Course Description: Competency based skills and theory relating to air conditioning, refrigeration and heating will be presented. The ability to diagnose mechanical and electrical failure will be developed, along with extensive use of equipment and troubleshooting of domestic and commercial systems. Domestic refrigerator, freezer and window air conditioner service, including mechanical components and functions, electrical components and control devices, domestic ice maker and window air conditioner service will be covered. Psychrometrics for residential and commercial HVACR, standard and high efficiency gas fired furnaces, electrical heating and cooling systems, heat pumps, customer relations and service operations will be presented. Upon completion the student will have developed skills and competencies for entry level employment in related fields including commercial and residential service, as well as, continued education in the industry field.

Credit Type Earned: The Missouri Graduation Requirements allow students that have attended a CTE program for two years to utilize their final year of credit as follows: 1 credit of science or math, 1 credit of technology, 1 credit of elective

Heating, Cooling, & Climate Control TSA/IRC: H.E.A.T.

Students may earn their Heating, Electrical, Air Conditioning, Technology certification. Students may also earn the EPA (Environmental Protection Agency) and OSHA 10 credential.

Graduation: First year seniors must pass the H.E.A.T Test. Students attending HCCC for 2 years meeting the academic and attendance requirements may participate in NCC's graduation.

INDUSTRIAL WELDING I

Grade: 11

Prerequisites: Ninth grade math level; previous drafting classes desirable

Textbook Lexile Level: 1010L - 1400L (7th grade to 14th grade)

Type of Credit Earned: Elective

Optional:

- 9 hours of dual credit is available through MCC.

- American Welding Society Level 1 Sense Training Certification: GMAW and SMAW processes.
- Course Description: The program covers basic competencies and skills in flame cutting, fusion welding, oxygen-acetylene and shielded metal arc welding on carbon steel. Safety, blueprint reading and terminology are also included to help students gain a foundation for entry-level employment.

INDUSTRIAL WELDING II

Grade: 12

Prerequisites: Successful completion of Industrial Welding I

Textbook Lexile Level: 1010L - 1400L (7th grade to 14th grade)

Type of Credit Earned: Elective

Optional:

- Up to 18 hours of Dual Credit is available through MCC – Some may be taken as a junior.
- 12 hours of articulated college credit is available through MWSU after completing 2 years
- 1 hour of college credit by exam is available through MCC after completing 2 years
- 15 hours of college credit by exam is available through RTC after completing 2 years
- American Welding Society Level 1 Sense Training Certification: GMAW, SMAW, FCAW, and GTAW processes.
- Advanced wage scale placement is also available in the Ironworkers Apprenticeship.

Course Description: Competencies and skills in fabrication techniques, advanced shielded metal arc welding, plasma arc cutting and gas tungsten arc welding on carbon steel, aluminum, and stainless steel are covered. Further study of blueprint reading, welding symbols and basic metallurgy will prepare students for the AWS (American Welding Society) certification test which is administered annually.

Credit Type Earned: The Missouri Graduation Requirements allow students that have attended a CTE program for two years to utilize their final year of credit as follows: 1 credit of science or math, 1 credit of technology, 1 credit of elective

Industrial Welding TSA/IRC: National Occupation Competency Testing Institute (NOCTI) written welding exam. Students may earn the American Welding Society Level 1 Sense Training Certification: GMAW, SMAW, FCAW, and GTAW processes.

Graduation: First-year seniors that pass the TSA or students attending Industrial Welding for 2 years and meet the minimum academic and attendance requirements may participate in NCC's graduation.

Industrial Welding One-Year Certificate

Grade: 12

Prerequisites: Same prerequisites as Industrial Welding I

Textbook Lexile Level: 1010L - 1400L (7th grade to 14th grade)

Type of Credit Earned: Elective

Optional:

- 9 hours of dual credit is available through MCC.
- American Welding Society Level I SENSE Training Certification: GMAW and SMAW processes. FCAW and GTAW if time allows.

Course Description: Emphasis will be placed on specific welds, welding symbols, and basic metallurgy related to the needs of the industry at that time. Specific areas of study will be determined between the student and the instructor at the beginning of the school year. First year seniors may concentrate on the areas listed below:

- Complete General Safety based testing i.e., all auxiliary equipment e.g., Iron Worker, Portable Grinder etc., Industrial Welding General and Building Safety Tests, AWS Level I SENSE Module #2 Safety and Health of Welders Test

- Complete performance based demonstration of the safe operation of auxiliary equipment e.g., Iron Worker, Portable Grinder etc.
- Complete performance based testing for OAW i.e., bead on plate with & without filler metal, groove and fillet test plates
- Complete performance based testing for Thermal Cutting Process(es) i.e., OAW & PAC
- Pass Thermal Cutting academic testing i.e., AWS Level I SENSE Module #8 Thermal Cutting Processes
- Complete academic work and performance based demonstration for the safe operation of basic welding processes i.e., GMAW, FCAW, SMAW, GTAW
- Complete performance based testing for at least 2 selected welding processes i.e., GMAW, FCAW, SMAW, GTAW
- Pass selected welding process(es) related academic testing e.g., AWS Level I SENSE Module #4 SMAW, Module #5 GMAW etc.

IT PROFESSIONALS I

Grade: 11, 12

Prerequisites: (This is a one or two-year program); keyboarding or equivalent; "**minimum**" academic levels in 10th grade writing and math; strong aptitude in computer applications, communications and comprehension.

Textbook Lexile Level: 1210L - 1400L (11th grade to 14th grade)

Type of Credit Earned: Elective

Optional:

- 6 hours of college dual credit is available through MCC.

Course Description: First year students will concentrate on Hardware, Software, and Networking. This includes computer repair and troubleshooting PC's and operating systems. Students will work towards earning their PC Pro and A+ Certifications. Students will also cover networking and learn basic Cisco router and switch configurations and protocols. Students have access to work on their skills 24/7 through the "TestOut" website. Due to the rigorous pace and content, it is recommended that students have a strong interest and aptitude in the computer industry, have good study habits, and be able to work independently.

IT PROFESSIONALS II

Grade: 12

Prerequisites: Successful completion of IT Professionals I

Textbook Lexile Level: 1210L - 1400L (11th grade to 14th grade)

Type of Credit Earned: Elective

Optional:

- Up to 17 hours of college dual credit is available through MCC – Some may be taken as a junior
- 12 hours of articulated college credit is available through MWSU after completing 2 years at NCC.
- 6 hours of articulated college credit may be earned through STCM after completing 2 years.
- 29 hours of college credit by exam is available through RTC after completing 2 years of IT Professionals.

Course Description: Second-year students will learn advanced networking with servers, routing, and switching configurations for Local Area Networks and Wide Area Networks. These students are working toward their Routing and Switching Certification. Students will have enough knowledge to be prepared for two-thirds of the CCNA Certification. Students that qualify, may participate in an internship at Cerner four days a week. Students have access to work on their skills 24/7 through the "TestOut" website.

Credit Type Earned: The Missouri Graduation Requirements allow students that have attended a CTE program for two years to utilize their final year of credit as follows: 1 credit of math, 1 credit of technology, 1 credit of elective

IT Professionals TSA/IRC: PC Pro:

Students may earn a certification in IT Fundamentals, TestOut, PC Pro, Routing and Switching. Network+

Graduation: First year seniors that pass the TSA or students attending IT Professionals for 2 years and meet the minimum academic and attendance requirements may participate in NCC's graduation.

Law Enforcement/Crime Scene Investigation I

Grade: 11, 12

Prerequisites: Must be a student with a good high school disciplinary record and an interest in science and a general understanding of algebra/geometry concepts. Students must have an interest in law and the social rule.

Textbook Lexile Level: 1010L - 1200L (7th grade to 11th grade) Criminal Justice in America

Textbook Lexile Level: 1210L - 1400L (11th grade to 14th grade) Forensic Science

Type of Credit Earned: Elective

Course Description: LE/CSI provides an introduction to the criminal justice system with emphasis on crime scene investigation. Topics covered are crime scene investigation and traffic crash reconstruction, professional ethics and leadership, US Constitutional Law, **Police Sciences** and Missouri Criminal Code. The class is designed for those interested in pursuing careers in law, public safety, corrections, security, and crime scene investigation.

Law Enforcement/Crime Scene Investigation II

Grade: 12

Prerequisites: Successful completion of LE/CSI I

Textbook Lexile Level: 1010L - 1200L (7th grade to 11th grade) Criminal Justice in America

Textbook Lexile Level: 1210L - 1400L (11th grade to 14th grade) Forensic Science

Type of Credit Earned: Elective and 1 transcribed unit of Criminal Justice – As a Social Studies credit

Optional: 5 hours of college articulated credit is available through MCC after completing 2 years of LE/CSI.

Course Description: LE/CSI II provides second-year students with a more in depth understanding of the criminal justice system and how it is applied to the everyday work force with an emphasis on criminal Justice. Students will learn US Constitutional Law and its applications to the criminal justice system as a social rule.

Credit Type Earned: The Missouri Graduation Requirements allow students that have attended a CTE program for two years to utilize their final year of credit as follows: 1 credit of science or math, 1 credit of elective, 1 transcribed unit of Criminal Justice – As a Social Studies credit.

Law Enforcement/Crime Scene Investigation TSA/IRC: The Missouri Peace Officer Association Exam.

Graduation: First-year seniors must pass the TSA to participate in NCC's graduation. Students attending CSI for two years and meeting the academic and attendance requirements may participate in NCC's graduation.

KC Tech Academy I

Grade: 11, 12

Prerequisites: Ninth grade math level, mechanical aptitude

Textbook Lexile Level: 1250L - 1570L (12th grade to 14th grade)

Type of Credit Earned: Elective

Optional: 10 hours of college dual credit is available through MCC

Course Description: This program allows students to earn dual credit towards an Associate's Degree and/or certification in a variety of areas related to the manufacturing industry (For example; CAD, CNC, HVAC, Industrial Electrical, Industrial Maintenance, Major Appliance Technology, Millwright, Welding and more). Cutting edge technology has changed the way products are manufactured in the United States and abroad. These changes have increased the need for specialized careers in the development and maintenance of the computers/machines that produce the goods we use on a daily basis.

KC Tech Academy II

Grade: 12

Prerequisites: Successful completion of Production Technologies I

Textbook Lexile Level: 1250L - 1570L (12th grade to 14th grade)

Type of Credit Earned: Elective

Optional: Up to 24 hours of college dual credit is available through MCC – Some may be taken as a junior

Course Description: Second-year curriculum will continue to focus on cutting edge technology in the manufacturing industry. Students will go more in-depth into the processes and controls of CNC equipment, electrical concepts, thermodynamics, robotics, and lean manufacturing to name a few. Students may earn their Certified Production Technician Certification and OSHA 10 Certification.

Credit Type Earned: The Missouri Graduation Requirements allow students that have attended a CTE program for two years to utilize their final year of credit as follows: 1 credit of science or math, 1 credit of technology, 1 credit of elective

KC Tech Academy TSA/IRC: Manufacturing Skill Standards Council:

Certified Production Technician Certification and OSHA 10 Certification

Graduation: First-year seniors must pass the IRC to participate in NCC's graduation. Students attending Production Technologies for two years and meeting the academic and attendance requirements may participate in NCC's graduation.

Teaching Professions I

Grade: 11

Prerequisites: Must have a Social Security number; background check through Family Care Registry. In order to work off-site, it is highly recommended that students have their own transportation. Due to the nature of off-site work; behaviors, academics (students must have a "C" average or recommendation from the instructor to return at second semester), and attendance policies are strictly followed.

Textbook Lexile Level: 1210L - 1400L (11th grade to 14th grade)

Type of Credit Earned: Elective

Optional: 4 hours of Dual Credit is available through MWSU.

Course Description: This course off-site training and observation of students at licensed child care centers, preschools, and local public schools through the 8th grade. First year students will be placed at an observation site close to NCC. Students can earn 169 hours of observation time. Activities will include lesson planning and implementation coursework including: child development, Foundational Elements of Teaching, Professional Educator Responsibilities, Instructional Design & Delivery, Data Analysis, CPR & First Aid training, employability skills, assessments, and behavior management.

Teaching Professions II

Grade: 12

Prerequisites: Successful completion of Teaching Professions I

Textbook Lexile Level: 1210L - 1400L (11th grade to 14th grade)

Type of Credit Earned: Elective

Optional: Up to 6 hour of college Dual Credit is available through MWSU – Some hours may be taken as a junior.

Course Description: Second-year students continue to gain a greater depth of child development, Foundational Elements of Teaching, Professional Educator Responsibilities, Instructional Design & Delivery, Data Analysis, CPR & First Aid training, employability skills, assessments, and behavior management. Students learn to teach, utilize lesson plans, develop curriculum, and classroom management skills. Students must complete their off-sight training at preschools and/or local public schools through the 8th grade. 312 hours of observation time may be earned. Completion of the 2 year program offers students the opportunity to earn their Child Development Associate Credential or their Youth Development Credential, which requires 480 observation hours. The Child Development Associate Certification allows students to be lead teachers at the preschool level. Only students meeting competency, behavior, and attendance requirements may participate in a volunteer or paid internship.

Credit Type Earned: The Missouri Graduation Requirements allow students that have attended a CTE program for two years to utilize their final year of credit as follows: 1 credit of math, 2 credits of electives

Teaching Professions TSA/IRC: Youth Development Certificate, Child Development Associate Credential or the American Association of Family Consumer Sciences Education Fundamentals Assessment. Students may earn either certificate/credential

Graduation: First year seniors must pass the TSA and second year students must meet the academic and attendance requirements to participate in NCC's graduation.

Teaching Professions One-Year Certificate

Grade: 12

Prerequisites: Same prerequisites as Teaching Professionals I

Type of Credit Earned: Elective

Optional: Up to 4 hours of college Dual Credit is available through MWSU

Textbook Lexile Level: 1210L - 1400L (11th grade to 14th grade)

Course Description:

This course offers off-sight training and observation of students at licensed child care centers, preschools, and local public schools through the 8th grade First year seniors may earn a one-year certificate if they meet the following qualifications:

- TP Professional Resource Collection portfolio assignments are completed for work-based experience grade level
- Work-based experience hours completed with timesheets completed and verified by cooperating teacher
- No less than 480 work-based experience hours documented
- Recommendation from cooperating teacher on file with TP instructor
- Passing score on the Technical Skill Assessment
- Acceptable site observation by third party