



**Northeast Technical High School's mission is to use career exploration and hands-on experiences to provide academic relevancy and promote life-long learning.**

NTHS's courses are designed to help students explore various career clusters. Career Clusters are groupings of occupations/career specialties used as an organizing tool for curriculum design and instruction. Occupations/career specialties are grouped into the Career Clusters based on the fact that they require a set of common knowledge and skills for career success. Career Clusters focus on a blend of technical, academic, and employability knowledge and skills that prepare learners for various occupations/career specialties.

Career Clusters also provide information to help you answer questions when planning for your future. Consider the following questions:

- Is the career a good match with your interests, aptitude, and abilities?
- Is the career a good match with your values and goals?
- Where do you want to live?
- What tasks would you really do on the job?
- What skills and knowledge are needed?
- What level of education is required?
- What kind of working environment would you like?
- What are the working hours?
- Will you travel for the job?
- What is the salary range?
- Does the career have a favorable outlook?

The Northeast Technical High School courses are listed alphabetically by program. The course information also can be found at [www.northeasttechnicalhighschool.k12.sd.us](http://www.northeasttechnicalhighschool.k12.sd.us). For more information on career clusters, see [www.careerclusters.org](http://www.careerclusters.org), your high school career counselor, or Mr. Bert Falak at NTHS.

Most NTHS courses offer a dual credit option. For an updated listing of these dual credit options, please visit the NTHS website or talk with your counselor.

**Policy of Non-Discrimination:**

*It is the policy of the Northeast Technical High School not to discriminate on the basis of sex, race, color, national origin, creed, religion, marital status, status with regard to public assistance, age, or disability in education programs, activities, or employment policies as required by federal and state laws and regulations. Inquiries regarding compliance may be brought to the attention of the Center Director, 1311 Third Avenue Northeast, Watertown, SD 57201 (605-882-6380) or for additional information contact: Director of the Office of Civil Rights, Department of Health, Education & Welfare, Washington, D.C.*

# NTHS Course Summaries

## **NTHS Animal Science**

**Eligibility: 9-12     1 Credit Semester Course     Prerequisite: None**

1. **Students will explore/learn** the basic background & social issues of animal science, anatomy/physiology, nutrition, reproduction, genetics, cuts of meat, and animal health. Students will gain knowledge about different breeds of cattle, pigs, sheep, horses, and goats.
2. **Skills acquired:** basic science and math skills will be used. Confidence in working with animals. Science of animals.
3. **Parents should know:** This is a basic introductory course to large animals. Students will work hands-on with different types of dissections that deal with animals along with taking care of animals. By taking this course, students may participate in FFA.
4. **College Connections:** This course could lead students to various associate and bachelor degrees: Large Animal Production, Vet Assistant, Vet Tech, and Animal Nutritionist.
5. **Career Connections:** Students will make connections to that of animal science specialists: such as Veterinarians, Zoologists, Livestock Producers, A.I. Specialists, and Agriculture Teachers.
6. **Dual Credit:** 3 Technical College credits are available.
7. **Allergy Warning:** Students will be in contact with various types of large and small animals. For safety reasons, students will need to disclose all animal allergies and directly discuss any potential complications before the start of class.

## **NTHS Plant Science**

**Eligibility: 9-12     1 Credit Semester Course     Prerequisite: None**

1. **Students will explore/learn** the basic background of soils, hydroponics, and anatomy/physiology of plants, growing environments, plant reproduction, crop production & harvesting, types of flowers and trees.
2. **Skills acquired:** Students will learn how to grow plants with or without soil and will understand the basics of food production. Students will also learn about irrigation, weed control, plant diseases, and pests.
3. **Parents should know** that students will directly work with plants and learn the science of taking care of them. By taking this course, students may participate in FFA.
4. **College Connections:** This course could lead students to various associate and bachelor degrees: Agronomist, soil specialist, horticulturist, floral designer, landscape designer, crop consultant, and plant engineer.
5. **Career Connections:** Plant Science Specialists, such as Horticulturists, Agronomists, Greenhouse and Nursery Managers, Agriculture Teachers, and Plant Research Specialists
6. **Dual Credit:** 3 Technical College Credits are available.

## **NTHS Wildlife & Fisheries**

**Eligibility: 9-12      1 Credit Semester Course      Prerequisite: None**

1. **Students will explore/learn:** SD species identification, natural resources, soil & land resources, water basics, forestry, and outdoor recreation activities.
2. **Skills acquired:** Students will learn how to identify SD wildlife species, proper habitats for animals, connecting tracks and scat to certain wildlife, make fishing poles, test water quality, and learn safety while having fun doing outdoor recreational activities.
3. **Parents should know** that students will participate in indoor and outdoor activities. Management of SD's wildlife & fisheries is critical to our future economic stability. By taking this course, students may participate in FFA.
4. **College Connections:** This course could lead students to various associate and bachelor degrees: Wildlife management, Natural Resources & Technology (LATC), game warden, park ranger, wildlife biologist, and fish biologist.
5. **Career Connections:** This course will lead students to career(s) in Soil Tech, Water Tech, Natural Resources, Wildlife Biologist, Fish Technicians, Conservation Law Officer, and Zoologist.
6. **Dual Credit:** None
7. **Allergy Warning:** Students will be in contact with various types of large and small animals. For safety reasons, students will need to disclose all animal allergies and directly discuss any potential complications before the start of class.

## **NTHS Companion Animal**

**Eligibility: 9-12      .5 Credit Quarter Course      Prerequisite: None**

1. **Students will explore/learn** small animal breeds, anatomy/physiology, diseases, animal handling, and animal health.
2. **Skills acquired:** Confidence in working with animals, how to care for them, pet expenses, careers dealing with companion animals, and veterinary techniques.
3. **Parents should know:** This is a basic introductory course to small animals. Students will work hands-on with live animals and volunteer at the local humane society. By taking this course, students may participate in FFA.
4. **College Connections:** This course could lead students to various associate and bachelor degrees in Vet Assistant and Vet Tech.
5. **Career Connections:** Veterinarians, Zoologists, Animal Handlers, Agriculture Teachers, and Animal Breeders.
6. **Dual Credit:** None
7. **Allergy Warning:** Students will be in contact with various types of large and small animals. For safety reasons, students will need to disclose all animal allergies and directly discuss any potential complications before the start of class.

## **NTHS Auto 1: Small Engine Mechanics/Intro to Automotive**

**Eligibility: 10-12      1 Credit Semester Course      Prerequisite: None**

1. **Students will learn/explore** general maintenance, repair of small engines, brakes, steering, suspension, tire repair, gasoline engines, and electrical.
2. **Skills Acquired:** Soft skills and business skills associated with the auto industry

3. **Parents should know:** that all students will be trained on all shop equipment, and shop safety and will have to pass all safety tests with a 100%.
4. **College connections:** This course could lead students to various associate degrees: Automotive Technology, Diesel Technology, Custom Paint/Fabrication, Auto body, and High-Performance Engine Machining.
5. **Career Connections:** Auto Service Technician, Diesel Service Technician, Auto Body Technician, High-Performance Engine Technician, and many other related fields.
6. **Dual Credit:** Pending

## **NTHS Auto 2: Maintenance & Light Repair**

**Eligibility: 10-12    1 Credit Semester Course    Prerequisite: None**

1. **Students will learn/explore** general maintenance, vehicles, brakes, steering, suspension, gasoline engines, electrical, heating, air conditioning, scan tools, transmissions, and differentials.
2. **Skills Acquired:** Soft skills and business skills associated with the auto industry
3. **Parents should know:** that all students will be trained on all shop equipment, and shop safety and will have to pass all safety tests with a 100%.
4. **College connections:** This course could lead students to various associate degrees: Automotive Technology, Diesel Technology, Custom Paint/Fabrication, and High-Performance Engine Machining.
5. **Career Connections:** Auto Service Technician, Diesel Service Technician, Auto Body Technician, High-Performance Engine Technician, Auto body, and many other related fields.
6. **Dual Credit:** Pending

## **NTHS Principles of Biomedical Sciences**

**Eligibility: 9-12    1 Credit Semester Course    Prerequisite: None**

1. **Students will explore/learn:** about health conditions, including heart disease, diabetes, blood diseases, high cholesterol, infectious diseases, and organ dissections.
2. **Skills Acquired:** general lab procedures, DNA analysis, how to use a microscope, plating and growing bacteria, and reading medical and autopsy reports.
3. **Parents should know** students will conduct advanced labs that will prepare them for future health care classes.
4. **College Connections:** students will be introduced to many medical and lab procedures they will see in colleges such as Forensic Science labs, DNA analysis labs, and heart disease labs.
5. **Career Connections:** Students take on the role of many healthcare professionals such as Forensic Scientists, Medical Doctors, Medical Lab Scientists, Nurses, and Crime Scene Investigators.
6. **Dual Credit** is offered as science elective credit through several colleges/universities. Credit eligibility is dependent on grade and end-of-course exam..

## **NTHS Human Body Systems**

**Eligibility: 10-12    1 Credit Semester    Course Prerequisite: None**

1. **Students will explore/learn:** how the human body: utilizes food, moves, protects us from disease or injury, and communicates with the outside world.

2. **Skills Acquired:** students will learn about the structure and function of the human body system through hands-on labs. The students will learn to analyze bones, DNA, basic urinalysis, patient symptoms, and microscope slides.
3. **Parents should know** that this is an advanced science class, that will help prepare the student for college while exploring different medical professional careers. In this class, students will get the chance to conduct many tasks that are performed by medical professionals.
4. **College Connections:** This class may help the student who is looking to move on to post-secondary college in the field of, medical doctor, nursing, lab technician, and some specialized medicine .
5. **Career Connections:** students will explore the role of a doctor, nurse, physical therapist, optometrist, surgery, medical lab technician, pharmacist, and radiologist.
6. **Dual Credit** is offered as science elective credit through several colleges/universities. Credit eligibility is dependent on grade and end-of-course exam.

### **NTHS Medical Intervention**

**Eligibility: 11-12    1 Credit Sem Course    Prerequisite: Prin of BioMed or Human Body Systems**

1. **Students will explore/learn:** how to prevent, diagnose, and treat disease. Through real-world cases, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics.
2. **Skills Acquired:** Students practice problem-solving with structured activities and progress of open-ended projects and problems that require them to develop plans, documentation, communication, and other professional skills. Students develop public speaking skills.
3. **Parents should know** that this is an advanced class. Medical Interventions will educate students on proper lab procedures and allow them to explore disease processes. Students will work to problem-solve real-world medical issues.
4. **College Connections:** Students take on the role of biomedical professionals to analyze case information and diagnose and treat patients.
5. **Career Connections:** Students will explore: Immunology, Surgery, Genetics, Pharmacology, Medical Devices, and Diagnostics.
6. **Dual Credit:** is offered as a science elective credit through several colleges/universities. Credit eligibility is dependent on grade and end-of-course exam.

### **NTHS Construction**

(Formerly Residential Construction)

**Eligibility: 10-12    1 Credit Semester Course    Prerequisite: None**

1. **What You'll Learn:** Get ready to dive into the world of construction! This class covers the basics and beyond – from carpentry and tool safety to reading blueprints and getting the hang of construction math. You'll explore framing, electrical work, plumbing, concrete, and even survey techniques. Whether you're a hands-on learner or a future planner, we've got something for you!
2. **Skills You'll Gain:** Not just theory, you'll get to master practical skills that form the building blocks of construction. From using hand and power tools to navigating through safety standards and protocols, we make sure you're well-equipped to step into the field! Parents should know that all students will be trained on all hand, pneumatic, and power tools that are used in class, including ladder and scaffolding safety. Students will have to pass all safety tests with 100%. Students will also take an OSHA 10 safety training program.

3. **Safety First:** We prioritize your safety! All students will be trained thoroughly on using hand, pneumatic, and power tools, along with ladder and scaffolding safety. Plus, you need to ace all safety tests with 100% and complete an OSHA 10 safety training program. Your well-being is our top concern!
4. **College Connections:** Thinking about the future? This course can be your gateway to various associate degrees like Building Trades, HVAC, Electrical, Plumbing, and Architectural Drafting. Plus, it opens up paths to four-year Construction Management programs. The first step to building your dream career starts here!
5. **Career Paths:** Dreaming of becoming a carpenter, electrician, plumber, or even an architect? This course introduces you to a variety of fields such as framing, cabinet making, project managing, estimating, concrete, landscaping, HVAC, masonry, and more. The possibilities are endless!
6. **Industry Recognized Credentials:** Stand out with an industry-recognized credential! By the end of the course, you'll earn the OSHA 10-hour Construction Safety and Health Certification, showcasing your commitment to safety and knowledge in the construction field.

## **NTHS Advanced Construction**

(Formerly Residential Construction)

**Eligibility: 10-12    1 Credit Semester Course    Prerequisite: Construction**

1. **Explore & Build:** Ready to take your construction knowledge to the next level? In this advanced course, we'll deepen your skills in carpentry, covering framing, sheet rocking, interior and exterior finishing, electrical work, plumbing, and concrete. It's all about refining what you know and discovering new techniques!
2. **Skills You'll Master:** This isn't just about learning; it's about doing. You'll get hands-on experience and master advanced skills in carpentry and various construction areas. It's time to build on what you know and become a construction pro! Parents should know that all students will be trained on all hand, pneumatic, and power tools that are used in class, including ladder and scaffolding safety.
3. **Safety Training:** Safety is our priority! We ensure all students are trained in using every tool in the class, from hand and pneumatic tools to power tools, along with ladder and scaffolding safety. We're all about making sure you feel confident and secure in every project!
4. **College Connections:** Planning ahead? This course is your stepping stone to associate degrees in Building Trades, HVAC, Electrical, Plumbing, and Architectural Drafting, and it lays the foundation for various four-year Construction Management programs. Your journey to a fulfilling career starts here!
5. **Career Opportunities:** Whether you see yourself as a framing or finish carpenter, electrician, plumber, architect, project manager, project estimator, or working in concrete, landscaping, HVAC, or masonry – this course opens up a world of possibilities in construction and related fields!
6. **Earn College Credits:** Exciting news – this course offers dual credit! You have the opportunity to earn Technical College Credits, giving you a head start on your college journey while still in high school.

## **NTHS Woodworking**

(Formerly Cabinetmaking)

**Eligibility: 9-12**

**1 Credit Semester Course**

**Prerequisite: None**

1. **Students will learn/explore** basic woodworking and finish carpentry, including safety, drafting, materials, estimating, making sturdy wood connections, building projects, adding the finishing touches, and working with a wood lathe. They will put their skills to use by creating their own final project, usually a nightstand, using traditional methods.
2. **Skills acquired:** safety, woodworking techniques, carpentry basics, design and drafting, material selection, estimation, wood joints, project construction, finishing methods, wood lathe work, and problem-solving. These skills equip students with the knowledge and abilities needed for woodworking projects and potential future careers in related fields.
3. **Parents should know** that all students will be trained on all hand tools, power tools, and stationary machines that are used in class and will have to pass all safety tests with 100%. If students wish to keep the final project we ask that they pay for the materials needed to build the project.
4. **College Connections:** This course could lead students to various associate degrees: cabinetmaking, building trades, or any program related to the architecture and construction career cluster, as well as various four-year Construction Management programs.
5. **Career Connections:** Careers in the architecture and construction career cluster. Including cabinetmaking, framing or finish carpenter, architect, project manager, and many other related fields.
6. **Dual Credit:** 1 Technical College Credit is available.

## **NTHS Advanced Woodworking**

(Formerly Advanced Cabinetmaking)

**Eligibility: 10-12**

**1 Credit Semester Course**

**Prerequisite: Woodworking**

1. **Students will learn/explore** advanced machinery operation, sophisticated project design, intricate wood joints, project construction mastery, the art of finishing, and advanced wood lathe projects. A key highlight is the opportunity for students to create a personalized final project, where they can explore cabinet or furniture-related creations using modern automated techniques, allowing for innovative and precise craftsmanship.
2. **Skills acquired:** gain proficiency in advanced woodworking machinery and tools, develop the skills to design intricate and aesthetically pleasing projects, master complex wood joinery techniques for sturdy constructions, excel in precise project construction and learn the art of achieving top-quality finishes. They also acquire expertise in wood lathe work, solving abilities for complex challenges, fostering creativity and innovation in project design, and prioritizing safety and precision throughout their work. These advanced skills prepare students for tackling intricate woodworking projects and pave the way for further studies of careers in woodworking and related industries.
3. **Parents should know:** that all students will be trained on all hand tools, power tools, and stationary machines that are used in class and will have to pass all safety tests with 100%. If students wish to keep the final project we ask that they pay for the materials needed to build the project.
4. **College Connections:** This course could lead students to various associate degrees: Cabinetmaking, building trades, or any program related to the architecture and construction career cluster, as well as various four-year Construction Management programs.

5. **Career Connections:** a variety of careers in the architecture and construction career cluster. Including cabinetmaking, framing or finish carpenter, architect, project manager, and many other related fields.
6. **Dual Credit:** 2 Technical College Credits are available

## **NTHS Food and Nutrition**

**Eligibility: 9-12     .5 Credit Quarter Course     Prerequisite: None**

1. **Students will learn/explore** the principles of balanced nutrition, meal planning, and food preparation. This course empowers students to make informed decisions about their diets and fosters a lifelong appreciation for the importance of nutrition in maintaining overall health and well-being. Examples of some of the food students will prepare include: peanut butter cookies, banan crisp, chicken zucchini wraps, and couscous soup.
2. **Skills Acquired:** While cooking students will learn how to follow written directions (recipe) and measuring, as well as teamwork, time management, leadership, communication, problem-solving, and sanitation skills.
3. **Parents should know:** Students will be exposed to a variety of foods and ingredients including peanuts, tree nuts, and flour products. Students are required to pass a kitchen safety test with 100% before stepping into the kitchen. In addition, students will be trained in safe kitchen practices, including knife skills, food safety, and sanitation. Students are also required to have a completed guardian/student-signed allergy form.
4. **College Connections:** This course could lead students to various associate degrees: in culinary arts, pastry and baking, and other related fields. In addition, four-year degrees include food science, hospitality, dietician, family and consumer sciences education, and numerous other possibilities.
5. **Career Connections:** Dietician, food scientist, dairy scientist, sous chef, health inspector, server, front-of-the-house manager, back-of-the-house manager, caterer, and many other related fields.
6. **Allergy Warning:** Given the wide range of food products used, students must disclose any food allergies for their safety. Any potential complications should be discussed directly with the instructor. Your well-being is our priority!

## **NTHS Cooking**

**Eligibility: 9-12     .5 Credit Quarter Course     Prerequisite: None**

1. **Students will learn/explore** essential cooking techniques through classwork and hands-on experiences to create mouthwatering dishes from diverse cuisines, you will develop culinary skills that will last a lifetime. Join us to create tasty recipes while discovering the joy of food preparation and savoring the rewards of your culinary creations. Examples include homemade macaroni, banana chocolate chip muffins, and ratatouille.
2. **Skills Acquired:** In addition to cooking and baking, students will learn teamwork, time management, leadership, communication, problem-solving, and sanitation skills.
3. **Parents should know:** Students will be exposed to a variety of foods and ingredients including peanuts, tree nuts, and flour products. Students are required to pass a kitchen safety test with 100% before stepping into the kitchen. In addition, students will be trained in safe kitchen practices, including knife skills, food safety, and sanitation. Students are also required to have a completed guardian/student-signed allergy form.
4. **College Connections:** This course could lead students to various associate degrees: in culinary arts, pastry and baking, catering, and other related fields. In addition, four-year degrees include food science, hospitability, dietician, family and consumer sciences education, and numerous other possibilities.



5. **Career Connections:** Executive chef, sous chef, health inspector, server, front-of-the-house manager, back-of-the-house manager, food artist, caterer, and many other related fields.
6. **Allergy Warning:** Given the wide range of food products used, students must disclose any food allergies for their safety. Any potential complications should be discussed directly with the instructor. Your well-being is our priority!

## **NTHS Culinary Arts 1**

**Eligibility: 10-12    1 Credit Semester Course    Prerequisite: None**

1. **Students will learn/explore** the exciting world of cooking and culinary arts. Through hands-on cooking labs, students will learn essential kitchen skills culinary techniques, and the art of food presentation. They will also gain a solid foundation in food safety, nutrition, and the creativity to create delicious dishes from scratch.
2. **Skills Acquired:** Beyond culinary arts (following directions, measuring, preparing various dishes) students will acquire essential life skills including teamwork, time management, leadership, communication, multitasking, problem-solving, and sanitation skills.
3. **Parents should know:** Please be aware that students will encounter various foods and ingredients, including peanuts, tree nuts, and flour products. Before entering the kitchen, students must achieve a perfect score on a kitchen safety test. Additionally, they will receive training in safe kitchen practices, covering knife skills, food safety, and sanitation. A signed guardian-student allergy form is also required.
4. **College Connections:** This course opens doors to a range of four-year degree paths, such as food science, dairy science, hospitality, dietetics, family and consumer sciences education, and countless other possibilities. It also paves the way for associate degrees in culinary arts, pastry and baking, catering, and related fields.
5. **Career Connections:** Executive chef, sous chef, food scientist, dairy scientist, hospitality, health inspector, server, front-of-the-house manager, back-of-the-house manager, food artist, caterer, as well as numerous other related fields.
6. **Dual Credit:** No applicable
7. **Industry Recognized Credential:** ServSafe Food Handler
8. **Allergy Warning:** Given the wide range of food products used, students must disclose any food allergies for their safety. Any potential complications should be discussed directly with the instructor. Your well-being is our priority!

## **NTHS Culinary Arts 2**

**Eligibility: 10-12    1 Credit Semester Course    Prerequisite: Any of the Other Three Food Courses**

1. **Students will learn/explore** culinary arts in this engaging high school class where students embark on a journey through the culinary world. Through immersive cooking labs, students will master fundamental kitchen techniques, delve into the nuances of culinary methods, and refine the art of food plating. Alongside honing their cooking prowess, they will develop expertise in food safety, nutritional awareness, and the ability to craft delectable dishes from raw ingredients, setting the stage for a lifelong passion for food and cooking.
2. **Skills Acquired:** Beyond culinary arts (following directions, measuring, preparing various dishes) students will acquire essential life skills that extend beyond the kitchen. This class fosters teamwork, time management, leadership, communication, multitasking, problem-solving, and sanitation skills.
3. **Parents should know** that students will be exposed to a variety of foods and ingredients including peanuts, tree nuts, and flour products. Students are required to pass a kitchen

safety test with 100% before stepping into the kitchen. In addition, students will be trained in safe kitchen practices, including knife skills, food safety, and sanitation. Students are also required to have a completed guardian/student-signed allergy form.

4. **College Connections:** This course opens doors to diverse educational and career pathways. It can pave the way for various four-year degrees, such as food science, dairy science, hospitality, dietetics, family and consumer sciences education, and a multitude of other possibilities. It also offers the opportunity to pursue associate degrees in culinary arts, pastry and baking, catering, and other related fields.
5. **Career Connections:** As students progress, they will discover numerous career opportunities, including roles such as executive chef, sous chef, food scientist, dairy scientist, positions in hospitality, health inspector, front-of-the-house manager, back-of-the-house manager, food artist, catering, and various other related fields.
6. **Dual Credit:** No applicable
7. **Industry Recognized Credential:** ServSafe Food Handler
8. **Allergy Warning:** Given the wide range of food products used, students must disclose any food allergies for their safety. Any potential complications should be discussed directly with the instructor. Your well-being is our priority!

## **NTHS Health Science Careers**

(Formerly Health Science)

**Eligibility: 11-12    1 Credit Semester Course    Prerequisite: None**

1. **Students will learn/explore** and have an opportunity to get excited about many different healthcare careers available! They will learn the education needed, the degree earned, the skills involved, and what their interest level might be in pursuing a healthcare career. The students will take many Healthcare related tours and have guest speakers come into the classroom. At the end of the semester, they will be able to shadow at the Hospital and work side by side with qualified staff learning about their specific career and the department they work in.
2. **Skills Acquired:** Students will learn many employable skills like how to take blood pressure, count pulses and respirations, use a thermometer, and measure height and weight. They will learn about infection control, sterile techniques used in procedures, safe patient care practices, military time, exploration of electronic medical records, sutures, injections, and work with simulator manikins. We learn all of this and even more!
3. **Parents should know** about the wonderful partnership we have with the Hospital. They allow the Health Science Careers students to shadow staff and their departments after they have learned basic healthcare skills, HIPAA and confidentiality training and taken tours of the departments. Also, the students will become BLS CPR/AED certified while in class. Many post-secondary schools require this for Healthcare related classes.
4. **College Connections:** This class can provide valuable insight into careers within the healthcare field and the post-secondary schools that have programs to fit specific healthcare career choices.
5. **Career Connections:** This class teaches the students many employable skills that may help a student obtain employment in the healthcare field while going to school. The student could work to get certified as a nursing assistant, pharmacy technician, optical assistant, veterinary technician, medical office assistant, etc. Also, after obtaining a degree in any of the healthcare options, job opportunities are vast as there are shortages in many of the healthcare fields.
6. **Dual Credit:** Lake Area Technical College .5 credit for the Basic Life Support CPR/AED
7. **Industry Recognized Credential:** CPR/AED/First Aid certification

## **NTHS Medical Terminology – Healthcare Experience**

(Formerly Advanced Health Science)

**Eligibility: 11-12     1 Credit Semester Course     Prerequisite: Health Science Careers**

1. **Students will learn/explore** the BIG words that professionals in the healthcare field use! Knowing medical terminology and the basic structure and function of the human body is vital to working in healthcare. The medical terminology and medical abbreviations learned in this class may benefit the student in their post-secondary education career choice. Students will also have the option to take the class as a dual credit through LATC. Once they have completed the requirements for the Medical Terminology class, they will be able to participate in a 4-5 week field experience in the healthcare career of their choice. So, instead of the classroom, they will go to a work-based learning experience at the chosen healthcare facility.
2. **Skills Acquired:** Students will gain the ability to fluently use medical terminology appropriately and have more specific knowledge related to the medical field. Correct spelling of medical words is critical to a patient's treatment and diagnosis. The students will blossom in confidence knowing medical terminology and be able to use it while out on their extended healthcare experience
3. **Parents should know** that this class is offered as a dual credit. It is an important skill to learn if going into the healthcare field or even at doctors' appointments.
4. **College Connections:** Knowing medical terminology could help lead a student to a post-secondary education career choice in the field of study for nursing, medical doctor, physician assistant, nurse practitioner, radiology, dentistry, optical careers, veterinary science, therapist, mental health, laboratory, paramedic/EMT, to name a few examples.
5. **Career Connections:** This class may help a student obtain employment in the healthcare field while going to school. The student could work to get certified as a nursing assistant, pharmacist technician, optical assistant, veterinary technician, medical office assistant, etc. Also, after obtaining a degree in any of the healthcare options, job opportunities are vast as there is a projected shortage in many of the healthcare fields.
6. **Dual Credit:** There is dual credit for this class available through Lake Area Technical College (3 credits) MA115. In addition, many universities accept the credit toward their medical terminology class or as an elective.

## **NTHS Human Development-Preschool to School Age**

**Eligibility: 10-12     .5 Credit Quarter Course     Prerequisite: None**

1. **Students will learn/explore** the knowledge of physical, cognitive, emotional, and social development in children in preschool through school age.
2. **Skills acquired:** Interest in working with young children & soft skills
3. **Parents should know** that we will review and follow confidentiality. Students are expected to follow the guidelines for confidentiality when they are out on job shadows and tours. A 10-day shadow will be a part of this class.
4. **College Connections:** Various associate and bachelor degrees: Human Services, Psychology, Sociology, Social Work, Counseling, Elementary Education
5. **Career Connection:** Elementary Teacher, Social Worker, Daycare Provider (In-home or center), Paraprofessional, Head Start Educator
6. **Dual Credit:** Dual credit is offered through Lake Area Technical College (1 credit) however you will need to take both Human Development classes.

## **NTHS Human Development-Early Childhood/Parenting**

**Eligibility: 10-12 .5 Credit Quarter Course Prerequisite: None**

1. **Students will learn/explore** the knowledge of physical, cognitive, emotional, and social development in newborn babies through Preschool age.
2. **Skills acquired:** Interest in working with babies, young children and using their soft skills
3. **Parents should know** that we will review confidentiality and students are expected to follow the guidelines for confidentiality when they are out on job shadows and tours. A 10-day job shadow will be a part of this class.
4. **College Connections:** Various associate and bachelor degrees: Human Services, Psychology, Sociology, Social Work, Counseling, Early Childhood Education
5. **Career Connection:** Preschool/Kindergarten Teacher, Social Worker, Daycare Provider (In-home or Center), Head Start Educator and Birth-3 Programs
6. **Dual Credit:** Dual credit is offered through Lake Area Technical College (1 credit) however you will need to take both Human Development classes

## **NTHS Intro to Human Services**

**Eligibility: 10-12 .5 Credit Quarter Course Prerequisite: None**

1. **Students will learn/explore** many different careers that deal with working with people. Human Services, Law and Public Safety, nonprofit organizations. Students will also explore work skills and life skills.
2. **Skills acquired:** work skills, life skills, soft skills & enjoy working with people
3. **Parents should know** that we will review confidentiality and students are expected to follow the guidelines for confidentiality when they are out on job shadows and tours.
4. **College Connections:** Various associate and bachelor degrees: Human Services, Psychology, Sociology, Social Work, Criminal Justice, and Law Enforcement
5. **Career Connection:** Social Worker, Daycare Provider (In-home or Center), Police Officer, Detective, Jailer, Educator, Counseling and working at a nonprofit organization
6. **Dual Credit:** None

## **NTHS Leadership and Service**

**Eligibility: 11-12 .5 Credit Quarter Course Prerequisite: One-Human Dev or Hum Serv Course**

1. **Students will learn/explore** careers in which they will be working with people. Students will develop skills in employability and identify areas of career interest. They will explore a career of their choice with our five-week field experience program. Students will be evaluated through a service-learning final project after completion of field experience.
2. **Skills acquired:** soft skills, work skills & enjoy working with people
3. **Parents should know** that we will review confidentiality and students are expected to follow the guidelines for confidentiality when they are out on field experience and tours. The instructor will prepare students for a five-week field experience before they start.
4. **College Connections:** Various associate and bachelor degrees: Human Services, Psychology, Sociology, Social Work, Criminal Justice, and Law Enforcement
5. **Career Connection:** Social Worker, Daycare Provider (In-home or Center), Police Officer, Detective, Jailer, Educator, Counseling and working at a nonprofit organization
6. **Dual Credit:** None

## **NTHS Machine Tool**

**Eligibility: 10-12    1 Credit Semester Course    Prerequisite: None**

1. **Students will learn/explore:** This hands-on course will cover the basics of machining processes, safety protocols, and essential skills needed to operate machine tools effectively.
2. **Skills acquired:** Machine Shop operations, Tool Safety procedures, blueprint reading, Basic mathematics, and Soft Skills.
3. **Parents should know** that all students will be trained on all machines and tools that are used in class and will have to pass all safety tests with 100%.
4. **College Connections:** This course could lead students to various associate degrees: Precision Machining, Computer-Aided Design (CAD), and Robotics, as well as various four-year Engineering programs.
5. **Career Connections:** Machinist, Tool Maker, Engineering, Computer-Aided Design, Computer Aided Machining, Quality Assurance
6. **Dual Credit:** 2 Technical College Credits are available.

## **NTHS Advanced Machine Tool**

**Eligibility: 10-12    1 Credit Semester Course    Prerequisite: Machine Tool**

1. **Students will learn/explore:** this class covers various topics related to the design, operation, programming, and maintenance of advanced machining equipment.
2. **Skills acquired:** Shop operations, Safety procedures, blueprint reading, Basic mathematics, Soft Skills, Basic CNC operations, M & G coding, Machining Career pathways.
3. **Parents should know** that all students will be trained on all machines and tools that are used in class and will have to pass all safety tests with 100%.
4. **College Connections:** This course could lead students to various associate degrees: Precision Machining, Computer-Aided Design (CAD), and Robotics, as well as various four-year Engineering programs.
5. **Career Connections:** Machinist, Tool Maker, Engineering, Computer-Aided Design, Computer Aided Machining, Quality Assurance
6. **Dual Credit:** 2 Technical College Credits are available

## **NTHS Introduction to Engineering**

**Eligibility: 9-12    1 Credit Semester Course    Prerequisite: Algebra I**

1. **Students will learn/explore:** Students are introduced to the Design process, applying engineering standards to identify and design solutions to a variety of real problems. They work both individually and in teams to develop and document designs using Engineering Notebooks and 3D modeling software.
2. **Skills acquired:** Design Process, Sketching and Technical Drawing, Computer-Aided Design (CAD), 3D Printing, Precision Measurement, Prototyping, Problem-Solving, Project Management, and Engineering Careers
3. **Parents should know:** Students will be taken outside of their comfort zone with design challenges that will be primarily hands-on project-based learning.
4. **College Connections:** This course could lead students to an associates degree in Robotics, Electronics and Drafting or bachelor's degrees in Aerospace, Agricultural, Biomedical, Chemical, Civil, Computer, Electrical, Electronics, Environmental, Health and Safety, Industrial, Materials, Marine, and Ocean, Mechanical, Mining, and Geological, Nuclear, and Petroleum Engineering.

5. **Career Connections:** This class ties into careers in every area of engineering and design. Fabrication, Drafters, Architects, Production Technicians, and a variety of engineering careers (as listed above).
6. **Dual Credit** Technical College or University credits are available.

## **NTHS Principles of Engineering**

**Eligibility: 9-12    1 Credit Semester Course    Prerequisite: Algebra I**

1. **Students will learn/explore:** Students are introduced to the design process, applying engineering standards to identify and design solutions to a variety of real problems. They work both individually and in teams to develop and document design solutions using engineering notebooks and prototyping materials.
2. **Skills acquired:** Problem-Solving, Teamwork and Collaboration, Engineering Design Process, Mathematics and Physics, Prototyping, Critical Thinking, and Documentation
3. **Parents should know:** Students will be taken outside of their comfort zone with design challenges that will be primarily hands-on project-based learning.
4. **College Connections:** This course could lead students to an associate degree in Robotics, or bachelor's degrees in Aerospace, Agricultural, Biomedical, Chemical, Civil, Computer, Electrical, Electronics, Environmental, Health and Safety, Industrial, Materials, Marine, and Ocean, Mechanical, Mining, and Geological, Nuclear, and Petroleum Engineering
5. **Career Connections:** Robotic Technicians, or a variety of engineering careers (as listed above.).
6. **Dual Credit:** Technical College or University Credits are available.

## **NTHS Civil Engineering and Architectural Engineering**

**Eligibility: 10-12    1 Credit Sem Course    Prerequisite: Algebra I**

1. **Students will learn/explore** Students will use the design process and apply engineering standards to identify and design solutions to complex real problems that are associated with residential, commercial, and civil projects. They work both individually and in teams to develop and document design solutions using engineering notebooks, prototyping materials, and 3D architectural design software.
2. **Skills Acquired:** Problem-Solving, Critical Thinking, Architectural Design, Blueprint Reading, Engineering Principles, Project Planning, Drafting and CAD (Computer-Aided Design), Site Planning, Teamwork, and Surveying
3. **Parents should know:** Students will be taken outside of their comfort zone with design challenges that will be primarily hands-on project-based learning.
4. **College Connections:** This course could lead students to an associate degree in Robotics, or bachelor's degrees in Aerospace, Agricultural, Biomedical, Chemical, Civil, Computer, Electrical, Electronics, Environmental, Health and Safety, Industrial, Materials, Marine, Ocean, Mechanical, Mining, Geological, Nuclear, and Petroleum Engineering.
5. **Career Connections:** This class ties into careers in every area of design. Carpenters, Interior Design, Fabrication, Drafters, Architects, Production Technicians, and a variety of engineering careers (as listed above).
6. **Dual Credit** University Credits are available.

## **NTHS Digital Electronics**

**Eligibility: 10-12 1 Credit Sem Course Prerequisite: Algebra I**

1. **Students will learn/explore:** Students will use the design process and apply engineering standards to identify and design solutions to complex real problems that are associated with electrical circuits in a DC environment. They work both individually and in teams to develop and document design solutions using engineering notebooks and electronic components.
2. **Skills acquired:** Problem-Solving, Critical Thinking, Digital Circuit Design, Logic Gates, Troubleshooting Electronics, Soldering, Circuit Simulation and Analysis, Use of Test and Measurement Equipment (oscilloscopes, multimeters, etc.), Hands-on Experience with Electronics Components (resistors, capacitors, transistors, etc.), Documentation and Technical Drawing Skills, Teamwork and Collaboration in Engineering Projects.
3. **Parents should know:** Students will be taken outside of their comfort zone with design challenges that will be primarily hands-on project-based learning.
4. **College Connections:** This course could lead students to associate degrees in Robotics, Energy Operations, Energy Technology, Electronic Systems Technology, or bachelor's degrees in Computer Science, Information Technology, Physics or any of the following engineering fields; Aerospace, Electrical, Computer, Electronics, Robotics, Renewable Energy, Telecommunications, Industrial, Automation and Control, or Software Engineering
5. **Career Connections:** Robotic Technicians, Electrical Technicians, or a variety of computer-related or engineering careers (as listed above.).
6. **Dual Credit:** Technical College or University Credits are available.

## **NTHS Welding**

**Eligibility: 10-12 1 Credit Semester Course Prerequisite: None**

1. **Students will learn/ explore** stick (SMAW) and tig (TGAW) welding. Students will learn the basics of these processes, emphasizing safety, equipment operation, and hands-on skills development. They will also learn applied math, measuring, and troubleshooting welding equipment.
2. **Skills acquired:** Students shall be able to weld Gas Tungsten Arc Welding(Tig Welding), Shielded Metal Arc welding(Stick Welding), and troubleshoot all basic welder problems.
3. **Parents should know:** All students shall have safety training and training on all equipment and hand tools. Students will pass a safety test with a score of 100%.
4. **College Connections:** This course could lead to various associate degrees in welding, Business Management, and Sales, and some bachelor's degrees in Metallurgy, inspectors, and educating areas.
5. **Career Connections:** Welding manufacturing, personal business, teaching, sales, repair, and many more.
6. **Dual Credit:** 4 Technical College credits are available

## **NTHS Advanced Welding**

**Eligibility: 10-12 1 Credit Semester Course Prerequisite: Welding**

1. **Students will learn/ explore** wire feed welding also known as MIG welding (Metal Inert Gas). Students will learn the basics of this versatile welding process, covering safety measures, equipment operation, blueprint reading, welding symbols, applied math, and troubleshooting of welding equipment.

2. **Skills acquired:** Students shall be able to weld Mig along with blueprint reading, welding symbols, and troubleshooting all basic welder problems.
3. **Parents should know:** All students shall have safety training and training on all equipment and hand tools. Students will pass a safety test with a score of 100%.
4. **College Connections:** This course could lead to various associate degrees in welding, Business Management, and Sales, and some bachelor's degrees in Metallurgy, inspectors, and educating areas.
5. **Career Connections:** Welding manufacturing, personal business, teaching, sales, repair, and many more.
6. **Dual Credit:** 4.5 Technical College credits are available

## **NTHS Exploratory Courses**

### **NTHS Business Tech**

**Eligibility: 9-10 .5 Credit Quarter Course Prerequisite: None**

Get ready to embark on an exhilarating journey through the dynamic world of business and technology with our NTHS Business Tech Odyssey course! Whether you're a budding entrepreneur, a future finance wizard, or simply curious about the corporate landscape, this course is your passport to discovering a world of career possibilities that are as exciting as they are diverse.

**1. Students Explore Your Options:** Venture into a captivating exploration of careers spanning Finance, Government and Public Administration, Business, Management & Administration, Marketing, Sales & Service, Arts, A/V Tech, and Communications. Discover the incredible breadth of opportunities that await you!

**2. Hands-On Hustle:** Leave the textbooks behind and roll up your sleeves! Dive into a world of hands-on projects that will empower you with basic business and technology skills. Build confidence as you work on projects directly related to careers in the diverse clusters we explore.

**3. Parents' Perspective:** This course is your child's gateway to a multitude of career paths. It offers a taste of diverse professions, giving them the chance to explore different avenues before diving into more specialized classes at Northeast Technical High School.

**4. College Aspirations:** Dream big and set your sights on post-secondary education. Identify pathways that lead to degrees in fields like Political Science, Finance, Public Administration, Business Administration & Management, and Human Resources Management. Your future is bright!

**5. Connect with Industry Pros:** Ever wondered what it's like to run a business or work in the corporate world? Wonder no more! Connect with local businesses through exciting tours and engaging guest speakers who bring real-world experience to the forefront.

**6. Unlock Your Potential:** While dual credit is not offered, consider this course your springboard to success. Acquire the skills, knowledge, and inspiration needed to confidently pursue a career in the business and tech domains.

Join us on a Business Tech Odyssey where learning is an adventure, innovation is encouraged, and your inner entrepreneur is set free! Get ready for a course that's not just educational but incredibly FUN. It's time to chart your course toward a future filled with boundless opportunities in the ever-evolving world of business and technology!



## **NTHS Science Tech**

**Eligibility: 9-10 .5 Credit Quarter Course Prerequisite: None**

Are you ready for an exhilarating adventure into the exciting realms of science and technology? Welcome to the most thrilling exploration course you'll ever experience: Journey Through the World of Science and Technology at NTHS!

**1. Students Discover Your Passion:** Open the doors to a world of endless possibilities as you delve into diverse career clusters such as Health Science, STEM, Agriculture, Food, and Natural Resources. We're here to help you uncover your passion!

**2. Hands-On Adventures:** Forget textbooks and lectures! Get your hands dirty with a range of captivating hands-on projects that will make you feel like a scientist, engineer, or tech whiz. You'll be experimenting, creating, and innovating from day one.

**3. Parents' Perspective:** This course is the ultimate exploration journey! Your child will get a taste of a wide variety of exciting career paths, allowing them to test the waters before diving into more in-depth classes at Northeast Technical High School.

**4. College Dreams:** Dream big! We'll help you identify the post-secondary paths that lead to thrilling degrees in fields like Chemistry, Biology, Environmental Science, Mathematics, Physics, Public Health, Agriculture, and Natural Resources. Your future is full of promise!

**5. Connect with the Pros:** Ever wondered what it's like to work in the real world of science and technology? Wonder no more! Meet professionals from the community through eye-opening tours and enlightening guest speakers who have firsthand experience in the career clusters we explore.

**6. Earn Your Stripes:** While there's no dual credit offered, consider this course your passport to the exciting journey ahead. You'll gain the knowledge and inspiration needed to set your sights on a career path that's as thrilling as it is rewarding. Join us on a thrilling Journey Through the World of Science and Technology, where curiosity is celebrated, hands-on exploration is the norm, and your future is full of limitless potential. Get ready for a course that's not just educational but downright FUN! Buckle up for the adventure of a lifetime, and let's embark on this extraordinary voyage together!

## **NTHS Working with People**

**Eligibility: 9-10 .5 Credit Quarter Course Prerequisite: None**

Welcome to Working with People, the course that proves working with people is not just a career—it's an adventure! If you've ever wondered what it's like to make a difference in the lives of others, explore diverse career paths, or just want to have some serious fun while learning, you're in the right place.

**1. Dive into Diverse Fields:** Join us as we dive headfirst into a world of careers in Human Services, Education & Training, Hospitality & Tourism, Law, Public Safety, Corrections & Security. Discover the exciting array of jobs that revolve around working with people!

**2. Developing Skills:** Say goodbye to boring lectures! Get ready for hands-on projects that will equip you with the basic skills needed for careers that involve making a positive impact on individuals and communities. It's about rolling up your sleeves and making a real difference.

**3. Parents' Perspective:** This course is an exploration extravaganza! Parents, rest assured that your child will get a taste of a wide variety of careers, helping them explore their passions before deciding on more specialized classes at Northeast Technical High School.

**4. College Dreams:** Dream big with post-secondary education options. Identify pathways leading to associate and bachelor's degrees in fields such as Corrections, Law, Education, Hospitality, Public Health, and Health Services. Your future is filled with endless possibilities!

**5. Connect with Changemakers:** Ever wondered what it takes to be a hero in your community? Find out by connecting with local businesses, going on eye-opening tours, and listening to inspiring guest speakers who bring real-world experience to our classroom.

**6. Double the Fun:** While dual credit isn't on the menu, consider this course your launchpad to success. You'll gain the skills, insights, and inspiration needed to embark on a fulfilling career journey working with people.

## **NTHS Careers that Build**

**Eligibility: 9-10     .5 Credit Quarter Course     Prerequisite: None**

Welcome to Careers that Build, where we'll unlock the secrets to your future dream career! If you've ever wondered how to turn your passions into a paycheck, explore cool job options, or simply want to have a blast while learning, this course is your golden ticket.

**1. Explore Cool Careers:** Join us on a journey through the awesome world of Architecture & Construction, Manufacturing, Information Technology, Transportation, and Distribution & Logistics. It's like a backstage pass to the coolest careers around!

**2. Hands-On Hustle:** Forget boring textbooks! Get ready to roll up your sleeves and dive into hands-on projects that will teach you the basics of these awesome careers. You'll be building, creating, and inventing your way to success!

**3. Parents, Listen Up:** This course is like an amusement park of career exploration! Parents, rest easy knowing that your kid will get to test-drive a bunch of different careers before deciding which ones they love most at Northeast Technical High School.

**4. College Clues:** Dream big about college! Find out which associate, and bachelor's degrees can lead to dream jobs in fields like Architecture, Design, Construction, Construction Management, Manufacturing, Information Technology, and Transportation. The sky's the limit!

**5. Connect with the Pros:** Ever wondered what it's like to work in the real world? Get the inside scoop by connecting with local businesses, going on cool field trips, and meeting awesome guest speakers who've been there and done that.

**6. Double the Fun:** While we can't offer dual credit just yet, think of this course as your ticket to success. You'll gain the skills, knowledge, and inspiration needed to chase your dream job with confidence.

Join us for a journey through Dream Jobs 101, where we'll turn your passions into a paycheck and make learning seriously awesome. Get ready for a course that's not just educational but a total blast! It's time to build your future and have a ton of fun along the way. Are you in?