The Northeast Metro 916 Career and Technical Center is located on Century College’s East Campus. Some credits completed by a high school student enrolled at Northeast Metro 916 Career and Technical Center may be applied toward a related college program at Century and other colleges. High school counselors have a complete list of credits and colleges. Students completing a (*certificate program) will gain skills for entry-level jobs in the labor market.

For more information regarding the Northeast Metro 916 Career and Technical Center program offerings, please call 651-415-5537.

Or visit the website at www.nemetro.k12.mn.us/career for more information and details.

HOW TO REGISTER
Students interested in attending courses at Northeast Metro 916 Career and Technical Center must register through their high school counselor at their home school.
COURSE DESCRIPTION

ARTS, COMMUNICATIONS, & INFORMATION SYSTEMS

DESIGN, MEDIA, AND INNOVATION CAREERS
This program is the next step on your pathway to earn a living doing what you love: being creative with technology! Photoshop, illustration, animation, design for mobile devices, and video production are all included. Students gain design skills that can apply to any creative career, along with getting a head start on the computer skills needed in today's creative workplace. Students will leave the class with an online portfolio, business cards, and a unified social media presence. College credits may be earned. This is an optional two year program with different, exciting content each year.

Career Outlook Opportunities:
♦Adobe Illustrator ♦Photoshop ♦Acrobat ♦InDesign ♦HTML and CSS ♦Flash ♦IPad Publishing
♦Graphic, fashion or interior design ♦Photography or videography ♦Architecture ♦Game design ♦Web design ♦Animation and interactive design for mobile devices ♦Advertising and journalism ♦Entrepreneur

COMPUTER HARDWARE/SOFTWARE & GAME DESIGN
The Computer Hardware/Software & Game Design program students will have the experience of working with and physically handling a computer's components (disassembling, reassembling, and installing hardware). Students will also have the chance to work with Microsoft Operating systems (Windows XP Pro, Windows 7, and Open Source Linux).
This is a Course that prepares students for the Comptia A+ Certification Exam that can assist with a job search in the Helpdesk, PC Support Technician, and PC Specialist areas.

The Game Design Program will give students an introduction into basic programming and utilize software to understand game design theory, elements of game design, progression, plotting, and play-testing.

Cisco's Networking curriculum offers the students an introduction into establishing a network in a Home and Small Business. Students will be able to learn and understand the minimum requirements for setting up a network, identifying networking devices, and generating communication within the home or small business environment.

This class is a partial college credit course directed towards Cisco's CCNA Networking Certification.

Career Outlook Opportunities:
♦Helpdesk ♦PC Support Technician ♦PC Specialist areas ♦Entry Level Java Programmer ♦Entry Level Programmer ♦Entry Level Programmer Analyst

AGRICULTURE, FOOD, & NATURAL RESOURCES

ANIMAL SCIENCE
*Certificate earned with four semesters and satisfactory grades.
The Animal Science program has four rotating semester courses: 1) Introduction to Animal Science covers: animal handling and grooming procedures, animal feeding program evaluation and selection, and animal environment sanitization, 2) Animal Health covers: disease, parasite, and non-infectious disease identification and prevention/control methods and Basic Pet First Aid, 3) Anatomy and Physiology covers: Medical terminology and anatomical system identification, and 4) Companion Animals covers: common pet breed care, handling and identification. This is a science-based program in which students care for in-house animals, demonstrate grooming techniques, determine nutritional needs of animals, demonstrate sanitary methods needed in animal environments, identify common animal health issues, identify and describe systems within the body, and explore job possibilities. Students have the opportunity to participate in FFA (student organization). The curriculum addresses the Minnesota Life Science Academic Standards.

Career Outlook Opportunities:
♦ Veterinary medicine ♦ Nutrition ♦ Grooming ♦ Natural resources ♦ Marine biology ♦ Zoology ♦ Retail/wholesale sales and supplies ♦ Animal husbandry ♦ Animal training ♦ Human healthcare

BUSINESS MANAGEMENT & ADMINISTRATION

ENTERTAINMENT, E-MARKETING, & EVENT PLANNING  (NEW for 14-15)

Learn Tourism, Entertainment and Promotion essentials from an interactive business perspective in this semester long course. Experience event planning and apply marketing skills as it relates to the entertainment, hospitality and tourism industries. Explore careers in hotel management, recreation, music and entertainment, sports and fitness, and marketing. Additional Components of the course will include business law, customer relations, basic accounting, facilities design, and financial planning. College credit may be available.

Career Outlook Opportunities:
♦ Hotel Manager ♦ Recreation Director ♦ Music and Entertainment Coordinator ♦ Sports and Fitness Director ♦ E-Marketer ♦ Travel and Tourism Planner

HEALTH SCIENCE TECHNOLOGY

DENTAL OCCUPATIONS
Grade 12
Fall Start Preferred/Full Year

The Dental Occupations program is highly recommended for students interested in pursuing a career in the dental field. Included in this program are classroom instruction, chair side procedures, laboratory skills, job shadow experience, service projects, college dental clinic, and the opportunity to participate in Health Occupations Students of America (HOSA), a student organization. 10 college credits may be earned.

Career Outlook Opportunities:
♦ Entry-level dental office position ♦ Dental Receptionist ♦ Certified and Licensed Dental Assistant ♦ Orthodontic Dental Assistant ♦ Oral Surgery Dental Assistant ♦ Pedodontic Dental Assistant ♦ Restorative Dental Assistant ♦ Dental Lab Technician ♦ Dental Hygienist ♦ Dental Therapist ♦ Dentist ♦ Dental Office Manager

EMERGENCY MEDICAL TECHNICIAN
Grade 12
**Fall Start Preferred/Full Year**
The Emergency Medical Technician (EMT) program is recommended for high school seniors who have an interest in the medical field. This program is geared toward pre-hospital emergency medical care and is appropriate for students entering the paramedic field, firefighting, law enforcement, and other medical occupations. Students will observe at a Level One trauma center and ride along with various ambulance services. Students will have the opportunity to participate in Health Occupations Students of America (HOSA), a student organization. **Students must be 18 years of age to take the National and State Certification Exam given in May.** College credits may be earned.

**Career Outlook Opportunities:**
♦ Paramedic ♦ Firefighter ♦ Police officer ♦ Public Safety ♦ 911 Dispatcher ♦ Military

**College in the Schools - EMT/Century College - (Option available)**
Century College credit is earned and recorded on a college transcript. Prerequisites include: Accuplacer test and documentation of students' college readiness.

**MEDICAL CAREERS**
**Fall Start Preferred/Full Year**
The Medical Careers program provides an opportunity for exploration of careers related to healthcare. The curriculum includes major components of basic nursing skills related to patient care in hospitals, long-term care facilities, or home care. This program satisfies all requirements to become eligible to take the Minnesota Nursing Assistant/Home Health Aide Competency Exam. Other areas covered are human anatomy and physiology, medical terminology, and healthcare provider CPR. Students will have the opportunity to participate in Health Occupations Students of America (HOSA), a student organization. College credits may be earned. **(Pre-requisite for most nursing programs)**

**Career Outlook Opportunities:**
♦ Nursing Assistant ♦ Home Health Aid ♦ Nurse ♦ Physical therapist ♦ Physician ♦ Medical assistant ♦ Chiropractor ♦ Physician assistant

**HUMAN SERVICES**

**EDUCATION AND HUMAN SERVICES CAREERS**
The Education and Human Services Careers program students will explore career opportunities and training requirements in early childhood education, elementary education, as well as human services. Classes will address basic child development theories, environmental design for various learning spaces, and preparation of healthy foods and prevention of disease in group settings. Violence in contemporary society is addressed through local community, national and international and media sources. Professionalism is a strong emphasis throughout the program with the development of student portfolios. Diversity of potential clients is addressed in the Profiles of Exceptional Persons. The potential for 15 semester college credits and 5 professional certifications may be available

**Career Outlook Opportunities:**
♦ Coach ♦ Early childhood educator ♦ Elderly Care ♦ Elementary school teacher ♦ Special education teacher ♦ Social workers ♦ Probation officer ♦ Parks and recreation coordinator ♦ Personal care attendant ♦ Child protection worker ♦ Nursing home support staff.

**COSMETOLOGY**
The Cosmetology I program introduces students to the basic principles of the field, cosmetology sciences and laws, properties of hair and scalp, shampooing, hairstyling and manicuring. **The Cosmetology II (Prerequisite Cosmetology I)** program is hands-on performance with clients in a salon setting. New training and skills learned include chemical texture services, haircutting, hair
coloring, pedicuring and artificial nails. Cosmetology hours accrued in lab performance can be used toward licensure. College credits may be earned in both years of the program.

Career Outlook Opportunities:
♦ Make-up artist ♦ Stylist ♦ Educator ♦ Skin Care Specialist ♦ Hair Colorist ♦ Salon owner ♦ Nail technician/manicurist ♦ Extension/wig specialist ♦ Texture service specialist ♦ Retail specialist

LAW ENFORCEMENT/CRIMINAL JUSTICE
The Law Enforcement/Criminal Justice program explores the institution of police, court and corrections. Areas included are: Constitutional Law, basic patrol procedures, the structure and process of the Criminal Justice process, report writing, Terrorism, CPR and First Aid certification. Teamwork, writing and critical-thinking skills will be developed and refined throughout the course by class discussion, writing exercises, guest speakers and scenarios. College credits may be earned.

Career Outlook Opportunities:
♦ Patrol Officer ♦ Deputy Sheriff ♦ State Patrol ♦ Conservation Officer/DNR ♦ Dispatcher ♦ Investigations support positions within a law enforcement agency ♦ Federal Agencies such as U.S. Marshall, DEA, FBI, Homeland Security ♦ Probation/Correction Officer ♦ Private Corporate Security

College in the Schools - Law/Century College - (Option available)
Century College credit is earned and recorded on a college transcript. Prerequisites include: Accuplacer test and documentation of students’ college readiness.

ENGINEERING, MANUFACTURING & TECHNOLOGY

MAINTENANCE AND ENVIRONMENTAL SERVICES *Certificate Program
The Maintenance and Environmental Services program teaches students the skills necessary for entry-level custodial and cleaning positions including the new “green” cleaning skills demanded by the modern cleaning industry. Students also gain independent-living skills such as kitchen cleaning, doing laundry, and cleaning bathrooms. The Program offers a small class size with differentiated instruction in a hands-on learning environment where students work at their own pace, and have the opportunity to earn a Certificate of Occupational Proficiency.

Career Outlook Opportunities:
Maintenance and janitorial jobs exist in colleges, schools, libraries, hospitals, nursing homes, churches, sporting facilities and personal homes.

CONSTRUCTION OCCUPATIONS
*Students may need to provide their own transportation to the construction site. (Ask in your school office for details.)
The Construction Occupations program is supported by members of the Builders’ Association of the Twin Cities and is available to juniors and seniors of local area high schools. The program exposes students to the many careers involved in the home building industry. Through the construction of a single-family home, built on site, students will learn career assessment, safety, foundations, framing, window and door installation, exterior finish, interior finish, print reading and building codes. In addition, students enrolled in the Construction Occupations program can earn college credits with an articulated Technical College.

Career Outlook Opportunities:
♦ Carpenter ♦ Electrician ♦ Flooring ♦ Roofer ♦ Plumbing ♦ Painter ♦ Cement Mason ♦ General Construction ♦ Architect ♦ Heating & Cooling
**AUTO DISMANTLING  *Certificate Program***
The Auto Dismantling program represents an industry dedicated to the efficient removal and reuse of automotive parts, and the safe disposal of inoperable motor vehicles. The program is designed for students who enjoy hands-on learning while working with tools to disassemble automobiles into their usable parts and components. College credits may be earned.

**Career Outlook Opportunities:**
♦ Auto parts sales ♦ Auto dismantling ♦ Inventory control and quality control ♦ Tire mounting and dismounting ♦ Forklift operator ♦ Wire feed welder and oxyacetylene welder ♦ Service Installer

**AUTOMOTIVE TECHNOLOGY**
The Automotive Technology program is a professional training program for high school students interested in pursuing a career in the automotive industry. This is a two year program of study for 11th or 12th grade high school students that teach the basics of Vehicle Maintenance and Light Repair skills sets developed by the National Automotive Technicians Education Foundation (NATEF). Students receive instruction in the most current techniques of inspection, maintenance and repair, in a lab equipped with the latest in service and testing equipment. The goal of the program is to provide students with the necessary educational background to obtain an entry level position at a dealership or an independent repair facility or go on to a college program. The program is certified by the National Automotive Education Foundation (NATEF).

**Career Outlook Opportunities:**
♦ Mechanical engineering ♦ Electrical engineering ♦ Automotive technician ♦ Automotive parts counter ♦ Automotive parts or service manager ♦ Automotive-related small business owner

**DIESEL TRUCKS AND ENGINE TECHNOLOGY**
The Diesel Trucks and Engine Technology program features two full semesters of engine rebuilding and introduction to the exciting field of Heavy Duty Vehicle service and repair. Students prepare for post-secondary education and entry-level jobs while learning skills in a mostly hands-on environment. Students learn about gasoline and diesel engines, turbochargers, Jake Brakes, air brakes, induction systems, cooling and oiling systems, basic mechanical and electrical diagnosing, vehicle inspection procedures, as well as shop operations and job seeking skills. College credits may be earned.

**Career Outlook Opportunities:**
♦ Heavy vehicle and mobile equipment service technician ♦ Truck and diesel engine technician ♦ Commercial vehicle operator ♦ Mechanical engineer ♦ Automotive service technician ♦ Aircraft and avionics equipment service technician ♦ Railroad service technician ♦ Emergency generator technician

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**EXPLORATION AND ENRICHMENT**

**HONORS MENTOR CONNECTION**
*Required: Additional program application and instructor interview must be completed by enrollment deadline.*

This full-year program is an advanced level study for highly motivated, gifted and talented juniors and seniors. Students identify a subject area in arts, science, or social science. After sufficient in-depth individual preparation and research, students identify and are placed with a professional who provides the environment and expertise for the student to pursue challenging study in the field and develop an early professional reputation. Each student develops a project of real value in the field and a professional
portfolio that serves as a product résumé when presented to future employers and college advisors. Honors Mentor Connection supports students seeking Minnesota Scholar of Distinction recognition.

**PRACTICAL ASSESSMENT EXPLORATION SYSTEM (PAES)**

*One Semester, Two Trimesters, or Full Year*

PAES is a hands-on curriculum that offers basic career and life skills in a simulated work environment. Skills relate to almost every type of career, and are taught in a systematic format that helps students become more independent. PAES assesses work behaviors, skills, and interests and results in a comprehensive report once the student finishes the program. This report can be used to develop IEP’s, Transition Goals, and Career Development Plans. In addition to the PAES curriculum, students will also have the opportunity to explore a variety of careers, complete interest inventories, develop a resume, and participate in mock interviews. Being in a simulated work environment, students are paid PAES bucks which they can use in the PAES store. They are taught to report their absences, come to work prepared and professional, and to cooperate with their colleagues and supervisors.

This program is geared towards high school and transition-aged students who are on IEP’s and who are ready to explore and plan for future career opportunities.

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**PREREQUISITE**

Students interested in CCCE programs must complete the Northeast Metro 916 Career & Technical Center related program as a prerequisite to CCCE enrollment

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**Century College**

**Concurrent Enrollment**

(CCCE) Model

**CCCE stands for Century College Concurrent Enrollment. These are college credit courses with high school and college students in the same classroom taught by Century College Instructors. The students are expected to follow the Century College Calendar and time schedule. These courses do not follow the regular time block schedules. Exact meeting times and dates will be confirmed in April. High school staff and students will be notified of the schedule when it is established. More program information can be found at www.century.edu then click on the browse courses tab at the top of the page.**

(STUDENTS MUST PROVIDE THEIR OWN TRANSPORTATION)

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**Engineering CAD Technology (ECAD)**

**Introduction to AutoCAD**

Century College Course: ECAD 1070 (3 credits)

Students will learn the fundamental concepts, tools, and commands of the AutoCAD software. AutoCAD knowledge learned includes skills necessary to draw, edit, set up and plot drawings, as well as to display two-dimensional drawings. Students will also learn to identify the components of AutoCAD drawings.

**Prerequisite: High School Drafting**

**Introduction to Inventor**

Century College Course: ECAD 2050 (3 credits)
Students will create, manipulate, edit and render 3D geometry resulting in detail, assembly and pictorial drawings. Inventor software will be used.

**Prerequisite:** ECAD 1070

**How to Make Almost Anything**

**Century College Course: ECAD 1025 (3 credits)**

This course is an introduction to “personal digital fabrication”. It is designed for “garage inventors”, entrepreneurs, artists, or individuals with new business ideas needing to create prototypes. Students will use laser cutters, 3-D printers, vinyl cutters, ShopBot CNC routers, and desktop milling machines to fabricate and test their design projects. The Lab is designed to allow students to explore their interests in a variety of fields including graphic design, art business, computer-assisted design (CAD), physical and natural science, mathematics, and engineering.

**Heating, Ventilation & Air Conditioning Technology (HVAC)**

**Basic Electricity**

*1 lecture day & two hour lab per week*

**Century College Course: FST 1030 (3 credits)**

This course looks at electricity from a practical, not electronics point of view and covers power distribution, Ohm’s Law, circuit layout, electrical terms, motors, schematics, and repairs in both the HVAC and Facilities Systems field.

**Fundamentals of Heating**

**Century College Course: HVAC 1060 (2 credits)**

Students will become familiar with the history of heating. They will acquaint themselves with different types of heating systems and fuels and become familiar with different types of accessories for heating systems and service procedures.

**Prerequisite: Completion or concurrent enrollment in FST 1030**

**Basic Refrigeration I**

*Fall & Spring Semester (quarter one or three)*

**Century College Course: HVAC 1041 (3 credit quarter class)**

This course covers the following basic refrigeration areas: Introduction, pressure temperature relations, refrigeration cycles, systems, compressors, condensers, evaporators, metering devices, controls, and accessories.

**Prerequisite: Completion or concurrent enrollment in FST 1030**

**Information and Telecommunications Technology (ITT)**

**Introduction to Information and Telecommunications Technology**

**Century College Course: ITT 1020 (3 credits)**

This course provides an orientation for students enrolled in the Information and Telecommunication Technology and Microcomputer Support Technology A.A.S. degree programs. This course focuses on terminology and industry IT acronyms associated with data, voice, and multi-media based technologies. Students will investigate career directions and job opportunities with respect to current and emerging industry directions.

**Network Fundamentals (CCNA-1)**
Century College Course: ITT 1031 (3 credits)
This course provides an introduction to the OSI 7 and TCP/IP models used in data communication and computer networks with emphasis on network infrastructure design, configuration, and implementation. This course is the first in a four-course sequence designed to prepare students to take the Cisco Certified Network Associate (CCNA) examination.

Microcomputer Support Technology (MCST)
Prerequisite: Completion of the Northeast Metro 916 Career & Technical Center’s Computer Hardware/Software & Game Design program

Introduction to Computer Forensics
Century College Course: CFIT 2065 (3 credits)
This introductory course presents methods to properly conduct a computer forensics investigation including ethics, tools, procedures and analysis. This aligns with the objectives of the International Association of Computer Investigative Specialists (IACIS) certification. Prerequisite: Consent of instructor.

Virtual Computing Technology
Century College Course: MCST 1003 (3 credits)
This course will cover the skills needed to effectively design, deploy, and manage virtual computers utilizing a variety of virtual computing technology products that are currently being used in the IT industry. Students work with various virtualization products in order to compare and contrast the features of each product. Students will use functions and utilities, manage security, and deploy both virtual computers and virtual networks.
Prerequisite: MCST 1001 or concurrent enrollment

Supporting Microsoft windows 7 Professional
Century College Course: MCST 1011 (3 credits)
Students will study the skills needed to effectively manage and configure the Windows 7 Professional client operating environment. Topics include how to use functions and utilities, manage user interface properties, manage hardware devices, and installing the Windows 7 Professional operating system. This course will help prepare students for the Microsoft Certified Professional (MCP) industry certification.

Supporting Microsoft Windows Server 2008
Century College Course: MCST 1013 (3 credits)
This course will cover the skills needed to effectively manage the Microsoft Server operating system environment. Students will study how to use functions and utilities, manage program properties, manage hardware devices, and install operating system and applications. This course will help prepare students for the Microsoft Certified Professional (MCP) industry certification.
Prerequisite: MCST1011 or concurrent enrollment

Marketing (MKTG)

Visual Merchandising and Store Planning
Century College Course: MKTG 1020 (3 credits)
This course emphasizes merchandise presentation as a seller’s tool for getting customers and clients “in touch” with branded products and services in conventional retail settings as well as non-traditional venues like grocery stores, special events, and trade shows. Students can expect to apply art principles and elements of design to create store fronts, floor plans, wall elevations, fixture layouts, lighting plans, and select site-appropriate props, mannequins and fixtures.

Recommendation: VCT 1013

Fashion Marketing Essentials
Century College Course: MKTG 1043 (3 credits)
This course focuses on the history and traditions of the global fashion industry – from haute couture design to budget-priced mass market apparel. It offers basic information about fabrication and production processes, and provides selling tools like textile basics, fashion terminology, apparel design elements, and color trends that increase sales and profitability at retail.

Event Production and Marketing
Century College Course: MKTG 1066 (3 credits)
This course provides necessary background for the execution of special events for commercial businesses and not-for-profit community organizations. Effective planning is a dynamic process that begins well in advance of actual production. It includes organizational mission and goal setting, audience targeting, branding, effective marketing communications, sponsorship development, program planning, logistics, risk management, crisis planning, and a variety of other elements that ensure satisfaction for all event stakeholders.

Prosthetic Technician (PRTE)

Introduction to Prosthetics
Century College Course: PRTE 1020 (3 credits)
This course introduces the role of the prosthetic technician and the safety practices and habits required by the profession. Topics include safety practices, prosthetic bench tools and equipment, and the materials and components used to craft prosthetic fabrications.

TIME ARRANGED: Monday-Friday

Visual Communications Technologies (VCT)
Prerequisite completion of the Northeast Metro 916 Career and Technical Center’s Design/Interactive Media program
The Northeast Metro 916 Career and Technical Center Design/Interactive Media program instructor will select the appropriate course below, for the student registering for a Century College Visual Communications Technologies course.

Principles of Digital Communications II
Century College Course: VCT 1019 (3 credits)
This second semester course continues the exploration of the career, technical, and conceptual principles of the visual communications industry that were established in the Career and Tech Center Design and Interactive Media Program. Intermediate projects will be created using more intricate applications, while expanding upon previously learned concepts and techniques. Students will develop and present these projects in a variety of digital formats using an assortment of industry standard applications. Further exploration of the various career paths within the VCT Industry will also be covered as students begin to develop their professional identities.
Intro to Forensics Images
Century College Course: VCT 1047 (3 credits)
This course introduces imaging techniques and skills used in the documentation and presentation of forensic evidence to students in the investigative science field as well as other students who have an interest in forensic imaging. Students will learn how to photograph evidence at crime scenes and in a crime lab environment.

Satellite Programs
*Satellite programs are offered at the sites and times listed.
Students must provide their own transportation to the sites.

WOODBURY HIGH SCHOOL
Exploring Space: The High Frontier (AIR FORCE JUNIOR ROTC PROGRAM):
(7:30 – 8:23AM, 8:35 – 9:28AM and 2:11 – 3:05PM)
Prerequisites: None (Students may sign up for any or all trimesters)
The mission of AFJROTC is to build better citizens for America. To meet this goal, each year the curriculum and Cadet Corps’ extracurricular activities focus on a mix of aeronautics and leadership in combination with school and community service. The curriculum focus will be on astronomy and the exploration of space. We will get an in-depth study of the solar system including the moon, the planets, deep space, the latest advances in space technology and continuing challenges of space. We will look at manned spaceflight including issues that are critical to travel in the upper atmosphere as well as milestones in the exploration of space. AFJROTC imposes NO OBLIGATION to serve in the military upon graduation.

AMERICAN SIGN LANGUAGE & DEAF CULTURE 1
Prerequisites: None 3 trimesters, 3 credits
This is the first course of a sequence in American Sign Language (ASL) and Deaf Culture. We will learn the basics for communication with deaf individuals. This includes receptive and expressive readiness activities, sign vocabulary, basic rules of grammar, sentence structure, fingerspelling, conversational behaviors, and various aspects of Deaf Culture. We’ll feature receptive and expressive sign vocabulary building and conversation.

AMERICAN SIGN LANGUAGE & DEAF CULTURE 2
Prerequisites: American Sign Language & Deaf Culture 1 3 trimesters, 3 credits
An emphasis will be on increasing student’s communication skills in American Sign Language (ASL). Receptive and expressive readiness activities, sign vocabulary, grammatical structure, receptive and expressive fingerspelling and various aspects of the Deaf community are included. Students will also explore career options related to American Sign Language.

AMERICAN SIGN LANGUAGE & DEAF CULTURE 3
Prerequisites: American Sign Language & Deaf Culture 2 3 trimesters, 3 credits
This course increases the emphasis on more challenging and abstract conversational behaviors, narrative skills, and storytelling skills. Receptive and expressive readiness skills, sign vocabulary, grammatical structure, receptive and expressive fingerspelling, and various aspects of Deaf culture and cultural behavior rules will be included in this course.
**MOUNDS VIEW SCHOOL DISTRICT**

**AMERICAN SIGN LANGUAGE PROGRAM** – (Offered at Irondale High School)

**AMERICAN SIGN LANGUAGE I**
During the first level of American Sign Language, the student will develop a foundation of basic vocabulary and basic grammatical structure. Also, the student will be introduced to classifiers, numbers, expressions and emotional variations. Successful completion of the course will allow the student to converse with deaf individuals at the survival level. In addition, the student will be expected to demonstrate understanding of the deaf culture and its relationship to ASL.

**AMERICAN SIGN LANGUAGE II**
**Prerequisite: C- or higher in ASL I**
During the second level of American Sign Language, the student will continue to develop vocabulary and grammatical structure. The student will work on fluency of their receptive and expressive skills in ASL, and they will also work more in depth on classifiers, use of space, expressions, emotional variations, and deaf culture idioms. Successful completion of this course will allow students to converse with deaf individuals at the basic level. In addition, the student is expected to demonstrate understanding of deaf culture and its relationship to ASL.

**AMERICAN SIGN LANGUAGE III**
**Prerequisite: Completion of ASL I and II with a C average**
Students will review and expand upon previously learned topics. Their fluency, accuracy and comprehension will be developed more fully with strong emphasis on non-manual markers. The student will be able to elaborate in American Sign Language in formal and informal social and work situations, develop situational problem solving, and develop further fluency with abstract ideas. The student will study deaf culture and history in more depth and detail. Successful completion of this course will allow students to converse with deaf individuals at an advanced level.

**PROJECT LEAD THE WAY (PLTW) PRE-ENGINEERING PROGRAM** – (Offered at Irondale High School)
This program offers a sequence of courses, when combined with high level math and science skill acquisition, introduces students to the scope, rigor, and discipline of engineering technology prior to entering college.

- **Introduction to Engineering** Credit 1.0 *Time to be determined*
  **Prerequisite: None**
  *(It is recommended that students have completed or are concurrently enrolled in Algebra I)*
  Introduction to Engineering is an introductory course, which develops student problem solving skills, with emphasis placed on the concept of developing a 3-D model or solid rendering of an object.

- **Principles of Engineering** Credit 1.0 *Time to be determined*
  **Prerequisite – Introduction to Engineering**
  *(It is recommended that students be concurrently enrolled in Algebra II with Statistics)*
  This course will help students understand the field of engineering/engineering technology and covers various technology systems and manufacturing processes. Using activities, projects and problems, student learn first-hand how engineers and technicians use math, science and technology in an engineering problem-solving process to benefit people.
American Sign Language 1  Full Year  
**Prerequisite:** None  
Students will be exposed to a more diverse and inclusive environment as they learn about deaf culture and gain the ability to communicate with deaf peers and members of the community.

American Sign Language 2  Full Year  
**Prerequisite:** ASL 1  
This course is a continuation of American Sign Language 1. The students will progress in their fluency in American Sign Language and understanding ASL through the addition of new vocabulary classifiers (Mime – Signs), structures and practice.

Aviation and Aerospace  Semester  
**Prerequisite:** None  
This rigorous course will provide the eager student with an introduction to the science of air and space flight and the career opportunities available following this course of study.

Project Lead The Way Engineering CLUSTER  
**Introduction to Engineering Design (PLTW)**  Full Year  
**Prerequisite:** None  
Introduction to Engineering is an introductory course which develops student problem solving skills with emphasis placed on the concept of developing a 3-D model or solid rendering of an object. Students focus on the application of visualization processes and tools provided by the use of Inventor software.

**Principles of Engineering (PLTW)**  Full Year  
**Prerequisite:** Students have completed Introduction to Engineering Design and successfully completed Algebra 1  
This course will help students understand the field of engineering/engineering technology and covers various technology systems and manufacturing processes.

**Biotechnical Engineering (PLTW)**  Full Year  
**Prerequisite:** None  
The major focus of this course is to expose students to the diverse fields of biotechnology including biomedical engineering, molecular genetics, bioprocess engineering, and agricultural and environmental engineering.

**Civil Engineering and Architecture (PLTW)**  Full year  
**Prerequisite:** None  
In the Civil Engineering and Architecture (CEA) course, students learn about various aspects of civil engineering and architecture. Students work in teams and apply what they learn to the design and development of a local property site.

**Digital Electronics (PLTW)**  Full year  
**Prerequisite:** Successfully completed Algebra 1  
Digital Electronics is a course of study in applied digital logic that encompasses the design and application of electronic circuits and devices found in video games, watches, calculators, digital cameras and thousands of other devices.

**Motor Sports Technology**  Full year (12:35 - 1:40 p.m.) *Tentative time  
**Prerequisite:** None  
The growing interest in ATVs, motorcycles, and snowmobiles has created an increasing need to maintain and care for these vehicles. In this course, students will learn about styles and designs of ATVs, motorcycles, and snowmobiles, along with the service and replacement process for defective parts.
ROSEVILLE HIGH SCHOOL

Media Arts (12:20 – 2:40 p.m.)

Do you have an interest in how visual things are produced? Roseville Area High School offers one of the best programs in Media Arts in the country. So what’s Media Arts? It’s the study of how visual things are produced in today’s world. You will learn how to create and design graphics that can be used to create T-Shirts, posters, vinyl decals, stationary, business cards and a wide range of other products. A large part of the program will explore garment printing with screen printing, digital imaging, dye sublimation, heat transfer and more. You will also learn how a printing company operates. Part of Roseville's program involves running an actual business in class where real customers come in to have things produced. Students have an “incentive” program that makes it definitely worth your while to get involved. With the latest and up to date equipment, you are learning in one of the most modern facilities around. We definitely allow you to explore your “visual side”. No artistic talent is required, simply a willingness to learn. College credit is possible for the program and many skills that you can go out with and make money. If you have any questions about the program contact Brian Hoag at 651-635-1698 for additional information. Discover your future in Media Arts!

R11/12/2013