# Rochester City School District

Every student by face and name.
Every school, every classroom. To and through graduation.

## Grading Information

### Letter/Numeric Grade Conversions

| | | | |
|---|---|---|---|
| A+ | Superior (95-100) | C+ | Above Average (75-79) |
| A | Excellent (90-94) | C | Average (70-74) |
| B+ | Very Good (85-89) | D | Below Average (65-69) |
| B | Good (80-84) | F | Failure (Below 65) |

### Grade Point Average

The information below shares the numeric points used to calculate students' Cumulative Weighted Grade Point Average (GPA) and Cumulative Unweighted GPA.

| Grade Achieved | Honors Class | Regents Class | Non-Regents Class |
|---|---|---|---|
| A+ | 6.5 | 5.5 | 4.5 |
| A | 6.0 | 5.0 | 4.0 |
| B+ | 5.5 | 4.5 | 3.5 |
| B | 5.0 | 4.0 | 3.0 |
| C+ | 4.5 | 3.5 | 2.5 |
| C | 4.0 | 3.0 | 2.0 |
| D | 3.0 | 2.0 | 1.0 |
| F | 0 | 0 | 0 |

The Cumulative Weighted GPA is calculated by averaging all of the student's points earned in classes which carry at least one credit toward graduation. Cumulative Weighted GPA takes into consideration the type of course the student takes. The calculation of Cumulative Unweighted GPA is similar to Cumulative Weighted GPA except that it uses the "Non-Regents Class" point scale regardless of the type of class.

### Special Grades

Special Grades are non-numeric grades given to students for specific purposes if a student's circumstances or condition dictates that he/she is eligible to earn the Special Grade. How these grades are calculated in the Summary Grade depend on the Special Grade.

| Special Grade | Description in Legend | How it Affect Grade Calculation |
|---|---|---|
| AUD | Audit | No grade is calculated |

| | | |
|---|---|---|
| INC | Incomplete | Count item as a zero |
| MED | Medical Exemption | Item is ignored in grade calculation |
| NE* | Not Eligible | Item is ignored in grade calculation |
| P | Passing | No grade is calculated |
| ILM | Insufficient Lab Minutes (only used for Regents Science exams) | Count item as zero |

* Students who are enrolled in a class for 10 days or less are eligible to receive “NE” as a marking period grade.

## Homework as Part of the Marking Period Grade

Homework assignments will be used as a means to reinforce, enhance, and/or build upon academic skills that have been taught/ introduced in the classroom. Homework may take on a variety of forms/strategies to reinforce the needed content and study skills. The assignments may be short-term or long-term in length. Not included as homework assignments are term papers, research papers, laboratory reports, portfolios and long-term projects. It is a student’s responsibility to complete homework assignments. It is the teacher’s responsibility to clearly articulate the purpose of homework to students and parents, as well as the weighting system, in writing. It is the parents’ responsibility to support the student in completing assignments and in seeking clarification when necessary. The lack of completion of homework cannot be the sole basis for student failure. Furthermore, homework cannot count for more than 10% of the final average for each marking period.

Homework is an integral component in the learning process. To ensure that an appropriate amount of homework is assigned at the secondary school levels, there should be collaboration among teachers to ensure that students do not receive excessive homework in one area and not enough in others.

## Final Grades

To determine the Final Grade for the school year, the average of the four numerical marking period grades will be calculated. Teachers can elect to include results from cumulative mid- terms or final exams as they see fit. Please note that the decision on how (or if) the final local exam impacts the final grade cannot not be made on a student by student basis. Instead, it must be made on a class by class basis. Additionally, note that the final local exam cannot be a Regents exam. Regents exam scores cannot be weighed in any marking period grade calculation.

## Honor Roll Guidelines Grades 7-12

Recognition for student achievement is an integral part of the educational program. In addition to ongoing classroom-based acknowledgment of improvement and/or achievement, the District Honor Roll guidelines are as follows:

High School - Based on all credit-bearing courses (weighted according to the relative number of meeting times). Three levels:

- Honor Roll with Distinction: The student earns all “A’s” (Marking Period GPA of at least 4.0) in ALL courses (core curricula as well as special subject areas).
- High Honor Roll: The student earns all “A’s” and “B’s” (Marking Period GPA of at least 3.0) in ALL courses (core curricula as well as special subject areas). No “C’s” or below.
- Honor Roll: The student earns a “B” average (Marking Period GPA of at least 3.0) in ALL courses (core curricula as well as special subject areas), with no grades of “D” or below.

(Please note that School Without Walls recognizes students as they progress through successively higher levels.)

# CTE - Career and Technical Education

## Business

**Business**
5012Y – Accounting
1.0 CTE ELECTIVE Credit (Per Executive Director Approval)
Prerequisite:
This course is designed to meet the needs of today's accounting students by bringing the real world of accounting into the classroom. It is a means of assessing the financial health of a company. There would be no way to adequately judge the success of a business without standardized accounting procedures. The accounting equation (assets = liabilities + owners' equity) will be used as the foundation for understanding the basics of accounting and business finance.

**5120S – Personal Finance**
0.5 CTE Elective Credit
Prerequisite:
This course introduces students to the financial world. Students develop financial literacy as they learn about the function of finance in society. They study income and wealth; examine financial institutions; learn how businesses raise capital; and study key investment-related terms and concepts. They also research how innovations have changed the financial services field.

**5061 – Computer Essentials I**
0.5 CTE Elective Credit
Projects and lessons include keyboarding, file management, desktop publishing, and an introduction to the Microsoft Office suite.

**5062 – Computer Essentials II**
.5 CTE Elective Credit
This course builds upon the knowledge and skills developed in Computer Essentials I. Students will perform advanced tasks in the Microsoft Office suite as well as explore interactive media.

**5139 – Career & Financial Management**
.5 /1.0 CTE ELECTIVE Credit
Prerequisite:
This course provides students the opportunity to determine their personal interests and then research what careers they could potentially pursue based on these interests. Students also learn about financial management both on a personal and business level as well.

**5016 – Business Law**
1.0 CTE ELECTIVE Credit
Prerequisite:
Business Law is designed to familiarize students with the American Legal System and how it pertains to the business world. In addition, it will show students how law pertains to commercial and consumer law, as well as contract law. Students will learn about courts and legal procedures, torts and the civil justice system as well as crimes and the criminal justice system. Students will explore how businesses operate in a world where laws of different governments and judicial systems may conflict. Students also need to understand how and why local, city, state and/or federal law must sometimes work in conjunction with international law.

**5073 – Computer Applications**
1.0 CTE Elective Credit
Students will build develop advanced skills in the Microsoft Office suite as well as learn the fundamentals of web design, programming, and advanced presentation skills. Students will practice formatting documents such as resumes and cover letter as well as using formulas and functions in Excel and creating databases which incorporate tables, lookup fields and queries.

**ECO103 – Personal Money Management**
1.0 CTE Elective Credit
A practical course that prepares students with an understanding of financial planning. Topics include credit, loans, investing, and budgeting.

# Public Safety

**9132PS – CPPS Public Safety @ REOC**
2.0 CTE Required Credits
Grade 11 - Required students application and criteria for this program.
This course is an introduction to basic law enforcement, public safety, and fire science with an emphasis in urban emergency situations. In the first year, students explore these professions through a variety of guest lecturers and site visitations. Students select an area of concentration for the second year of the program.

**9133CJ – CPPS Criminal Justice @ REOC**
2.0 CTE Required Credits
Grade 12 - Required students application and criteria for this program.
Prerequisite:
This course will cover topics such as methods of criminal investigation, national crime rate statistics, criminal law terms, examining policing in multicultural communities, learning the standards required for police recruitment and retention, responsibilities of specialized units in law enforcement, becoming knowledgeable about police discretion and behavior, learning about advancements in technologies in solving crimes (DNA), crime scene investigations, search and seizure procedures, vehicle searches, physical fitness training, role playing in different scenarios, guest speakers from law enforcement agencies on their responsibilities and legal jurisdictions and equipment used by police officers. Students may also be eligible to sit and take the 8-hour Unarmed Security Guard class towards NYS Security Guard certification. Students also receive training on how to successfully prepare for a civil service exam.

**9134EM – CPPS Emergency Medical Responders / EMT @ REOC**
2.0 CTE Required Credits
Grade 12 - Required students application and criteria for this program.
Prerequisite:
This course is designed for pre-hospital workers who respond to medical and trauma emergencies, and transport the sick and injured to medical treatment Centers. Topics covered include those identified by the New York State Department of Health as minimum knowledge and skill objectives to operate in the pre-hospital environment providing emergency medical care and transporting patients. Successful completion of this course leads to eligibility to take New York State EMT-B Certification Exams.

**9135FF – CPPS Firefighting & Protection @ REOC**
2.0 CTE Required Credits
Grade 12 - Required students application and criteria for this program.
Prerequisite:
A basic survey course of the entire medium of fire protection, fire prevention and fire extinguishment. The application of scientific principles to the studies of fire protection technology and development of career positions in the discipline for the individual are important goals in this course. Students also receive training on how to successfully prepare for a civil service exam.

**9136EC – CPPS Emergency Communications / 911 @ REOC**
2.0 CTE Required Credits
Grade 12 - Required students application and criteria for this program.
Prerequisite:
This program provides students the opportunity to develop knowledge and skills in emergency communication and dispatch. Students participate in APCO training and learn how to respond to emergency communications through 911 simulation. Students also receive training on how to successfully prepare for a civil service exam.

# Computer Science

**2579 – AP Computer Science A**
1.0 ELECTIVE Credit
Prerequisite:
The AP® Computer Science A course is equivalent to the first semester of a college level computer science course. The course involves developing the skills to write programs or part of programs to correctly solve specific problems. AP® Computer Science A also emphasizes the design issues that make programs understandable, adaptable, and when appropriate, reusable. At the same time, the development of useful computer programs and classes is used as a context for introducing other important concepts in computer science, including the development and analysis of algorithms, the development and use of fundamental data structures, and the study of standard algorithms and typical applications. In addition an understanding of the basic hardware and software components of computer systems and the responsible use of these systems are integral parts of the course.

**5063 – Computer Hardware & Support Systems**
1.0 CTE ELECTIVE Credit (East Only)
Prerequisite:
Introduction to Information Technology
This course is set up to provide hands-on instruction in building, troubleshooting, and networking desktop PC's. The class is broken into two parts: Construction familiarizes the student with setting up hardware, installing software, managing system resources, understanding how the parts of a computer system work together, peripherals, connecting to a network, connecting to the Internet and basic PC troubleshooting. Networking continues on by introducing the student to network topologies, network setups such as peer-to-peer and client/server networking, network components, cables and connectors, troubleshooting common TCP/IP Ethernet networks, OSI model and also touches on Wi-Fi and telecommunications networking.

**2501 - Digital Information Technology (Virtual only)**
1.0 CTE ELECTIVE Credit
This virtual course provides you with the foundational skills needed for future careers in a variety of technological fields. You'll explore emerging technologies, digital design, Microsoft Office online applications, operating systems, and much more! Learn your strengths and how they relate to potential career opportunities.

**2502 - Foundations of Programming (Virtual only)**
1.0 CTE ELECTIVE Credit
Learn the skills required to be competitive in today's high-tech workforce. This course covers the fundamentals of programming using the computer language Python. It provides you with the concepts, techniques, and processes associated with computer programming and software development. You'll also explore the vast programming career opportunities available in this high-demand field.

**2503 - Procedural Programming (Virtual only)**
1.0 CTE ELECTIVE Credit
Prerequisite: Foundations of Programming
Do you want to learn higher-level coding skills? This course teaches advanced programming concepts using the computer language Python. You will learn techniques and processes associated with computer programming and software development.

**2507 – Computer Science Principles (Yr)**
1.0 ELECTIVE Credit (P-Tech and Integrated Arts and Technology only)
This course introduces students to the Internet of Everything (IoE). The IOE is the networked connection of people, process, data and things. As more people, data and things come online, we develop processes to harness the vast amounts information being generated by all these connected people and things. The goal of this course is to introduce students to fundamental concepts and technologies that enable the IoE. Students will explore the impact of the Internet of Everything, Explain the interactions between people, process, data, and things that form the Internet of Everything, Configure networked devices and applications to

support a given IoE implementation, Explain the benefits and challenges of the IoE and Explain modeling and prototyping in the IoE. Students will incorporate drag and drop coding during this experience.

**2508 – AP Computer Science A (Virtual)**
1.0 ELECTIVE Credit
Prerequisite: SEE EDUCATIONAL PROGRAM REQUIREMENTS/INFORMATION FOUND ON PAGE 6.
The AP® Computer Science A course is equivalent to the first semester of a college level computer science course. The course involves developing the skills to write programs or part of programs to correctly solve specific problems. AP® Computer Science A also emphasizes the design issues that make programs understandable, adaptable, and when appropriate, reusable. At the same time, the development of useful computer programs and classes is used as a context for introducing other important concepts in computer science, including the development and analysis of algorithms, the development and use of fundamental data structures, and the study of standard algorithms and typical applications. In addition an understanding of the basic hardware and software components of computer systems and the responsible use of these systems are integral parts of the course.

**2675 – Computer Graphics**
1.0 CTE ELECTIVE Credit (Per Executive Director Approval)
Prerequisite:
Computer Graphics is an introduction to design and computer-generated and computer-manipulated images. The student will have hands-on training using computer hardware and software to draw, scan, alter, and reproduce images using the design principles and elements. Activities include logo design, digital photography, computer animation, and digital drawing. Students will encounter both individual and group work. This course will give you the real life experience that businesses are looking for.

**2575 – Computer Programming I**
1.0 CTE ELECTIVE Credit (Per Executive Director Approval)
Prerequisite:
An introduction to computer programming using the computer language Java. Students will learn the process involved in developing and executing computer programs so as to obtain a solution to a specific problem. This process will include problem analysis, algorithm development, code development, and documentation. In addition, students will be able to read, as well as write, good program code

**2575 – Computer Programming I (Virtual only)**
1.0 Math or Science Credit
Prerequisite:
An introduction to the theory and practice of computer programming, the emphasis of this course is on techniques of program development within the object-oriented paradigm. Topics include, but are not limited to:

- control structures
- data types
- error handling
- design cycle
- Math methods
- simple data structures
- basic concepts of software development

**2691 – Virtual Media**
1.0 CTE ELECTIVE Credit (Edison and Wilson only)
Prerequisite:
This course is designed for the individual who is interested in graphics and media creation. Students will use the Adobe Creative Suite (CS3) to work through various forms of animation, original creation, digital manipulation, and production. Students will also be required to write their own scripting sequence as well as know and understand vocabulary specific to the programs.

**2693 – Virtual Media II**
1.0 CTE ELECTIVE Credit
Prerequisite:
The students will explore the Adobe Creative Suite software in greater depth thus expanding their knowledge and skills. In additional software

introduced will be Flash, After Effects and Dreamweaver.

**2531 – Web Design/Maintenance**
1.0 CTE ELECTIVE Credit
Prerequisite:
This course is designed to learn the essential concepts of HTML. All students will begin with a basic Webpage and advance to developing a Web site by page designs, tables, and frames. This class will also cover how to create survey forms and embed multimedia. Students will be introduced to the Dreamweaver software application. Creation of an email address will be necessary.

# Family/Consumer Science

**6013 – Clothing Textile Core**
0.5 CTE ELECTIVE Credit
Prerequisite:
From the earliest history, clothing has been a basic human need. Decisions regarding clothing styles, and the textiles used to create those styles, are basic expressions of each person's unique self. Advances in technology are dramatically expanding apparel and textile choices. Learning how to dress for the workplace is an important skill for students to develop. The fashion industry is an important factor in New York State's economy and students have many textiles and design career pathways to consider. The Clothing and Textiles Core explores clothing history, culture, design principles, equipment, construction, and career pathways as well as current issues of concern to the industry and society in general.

**6022 – Food Nutrition Core**
0.5 CTE ELECTIVE Credit
Prerequisite:
The study of foods and nutrition has seen dramatic change as research evolves linking the preparation and consumption of foods to overall health and wellness. Advances in technology impact the production, processing, packaging and service of foods. Students are exposed to multiple messages designed to influence their perceptions of the importance of food choices in their lives. Because they will provide for the nutritional needs of themselves and others, students need to make informed decisions about food and nutrition now and in their future roles as family, community and career leaders and citizens.

**6023 – Food Prep Nutrition**
0.5 CTE ELECTIVE Credit
Prerequisite: 6022 – Food Nutrition Core
The Food Preparation and Nutrition course is divided into six content topics; History of Food Preparation, Food Preparation for Nutritional Needs, Current Food Issues, Facility Design and Management, Skills and Techniques of Food Preparation and Careers in Food Preparation and Nutrition. Upon completion of the course, the student will have a better understanding of the world of food and how the study of food trends can lead to a career in the field of food preparation and/or nutrition.

**6019 – Parenting**
0.5 CTE ELECTIVE Credit
Prerequisite:
This course will provide students with a broad foundation of the knowledge, skills, and attitudes necessary to promote quality growth and development of children and families in school, community, and workplace settings. Students will develop understanding of the diversity of families and how diversity impacts parenting choices and outcomes. Students will have the opportunity to examine the wide variety of career paths in community and family services, and to identify the knowledge and skills necessary for success within the field. This course invites all students to apply the process skills of communication, leadership, management, and thinking

**6039 – Home and Career Skills 7 & 8**
Students enrolled in Home and Career Skills will learn knowledge and skills that will prepare them to live in an ever-changing society, including topics in health and wellness, nutrition, clothing/textiles, communications, interpersonal relationships, career research, and financial management.

## Trade Electives

**9730 – Automotive Systems I / II Shared-Time Program @ Edison**
2.0 CTE ELECTIVE Credits - Required student application for this program.
Students will learn the fundamentals of measurement, schematic reading, and basic auto repair skills as well as transportation systems, applications of science and math, and customer service

**9731 – Construction Systems I / II Shared-Time Program @ Edison**
2.0 CTE ELECTIVE Credits - Required student application for this program.
Students will learn the fundamentals of measurement, blueprint reading, and basic construction skills along with architectural design, drafting, and local construction/design features and trends

**9851 – Basic Cosmetology @ REOC**
2.0 CTE ELECTIVE Credits - Required student application for this program.
Beginning Cosmetology is the first course of a two-year program.
Students learn the basics of cosmetology, including treating and caring for skin, nails, and hair, along with applied science, customer service, and business skills

**9853 – Advanced Cosmetology @ REOC**
2.0 CTE ELECTIVE Credits - Required student application for this program.
Students develop the skills and techniques necessary to enter a career in cosmetology. At the end of this course, students will take the NYS Cosmetology Board examination. The Cosmetology program accepts new students every other year.

## Hospitality & Tourism

**5190 – Delivering Great Customer Service**
0.5 CTE ELECTIVE Credit (East only)
Prerequisite:
This course introduces students to the concept of service as a critical component of a hospitality or tourism business. Students analyze both good and poor customer service in a variety of contexts and through various methods. Students explore communication skills and strategies, and they use a problem-solving perspective to understand barriers to communication and good service. They learn various means of measuring the quality of service and explore careers that focus on customer service.

**5021 – Culinary Skills Development I**
1.0 CTE ELECTIVE Credit (East only)
Prerequisite: Principles of Hospitality and Tourism Delivering Great Customer Service
An introduction to, and application of, fundamental cooking theories and techniques: Topics to be covered include: Tasting, kitchen equipment, knife skills, classical vegetable cuts, stock production, thickening agents, soup preparation, grand sauces, timing, station organization, palate development, and culinary French terms.

**6021 – Culinary Skills Development II**
2.0 CTE ELECTIVE Credits (East only)
Prerequisite: Culinary Skills Development I
An introduction to the fundamental concepts and techniques of basic protein, starch, and vegetable cookery. Higher development of fundamental cooking theories and techniques from Skill Development I will be continued. Emphasis is placed on the study of ingredients and an introduction to small sauces will be given.
Expanded concepts of time lines and multitasking, station organization, culinary French terms and food costing will continue.

## Teaching and Learning Institute

**9171 – TLI Seminar I**
0.5 CTE ELECTIVE Credit (East only)

Prerequisite:
Students who have enrolled in the program have indicated a career interest in education and leadership. In the 9th grade seminar, students focus on the nature of teaching and learning. They study the different learning styles and learn to identify their own strengths and weaknesses in the classroom. They study organizational skills, peer mediation, cultural and interpersonal awareness, and team building Students visit and observe different elementary school programs in the Rochester City School District. In their observations, TLI students investigate the school's philosophy, special programs, socio-economic background and the ethnicity of the student population. TLI students reflect on what they have seen through participation in activities in the TLI seminar. Each visit is one hour in length; there are four site visits in the 9th grade year.

**9172 – TLII Seminar II**
1.0 CTE ELECTIVE Credit (East only)
Prerequisite: TL I Seminar I
In the 10th grade seminar, students study the issues in education and the organization of schools. Students perform an in depth ethnographic study of their own community, identify the greatest needs of children in our neighborhoods, and create the Ideal School to address the needs of our children. The skills of leading in the classroom are further reinforced by the study of lesson plan writing, community building activities and public speaking. Students visit two different elementary schools during the year and observe a specific teacher through a shadowing experience. Students must take notes during their experiences, but they also assist with simple classroom chores and work with children in small groups. By studying the layout of the classroom and the expected duties and roles of the teacher, students gain an awareness of the responsibilities and the daily routine of the classroom teacher. Each visit is one hour in length; there are eight visits in the 10th grade year.

**9173 – TLIII Seminar III**
1.0 CTE ELECTIVE Credit (East only)
Prerequisite:
The 11th grade seminar has students concentrate on the sociology of education. It's the most theoretical of the seminars, with an emphasis on looking at issues of equity in the current educational system. Students study how race, class, gender, and disability effect education. Through a detailed mock trial and a series of debates, students must show a command of the county's demographics and politics behind education. Another major component of TLI Seminar III is preparation for college. Students become familiar with the application process, prepare for the SAT exam, and visit local colleges. Students return to elementary school classrooms to observe and shadow a different teacher. They focus on the different elements of teaching by identifying the needs of a diverse mix of students and the variety of teaching styles used to address them. Students develop their own educational techniques as they teach one-on-one and work with small groups. Each visit is one hour in length; there are sixteen visits in the 11th grade year.

# Technology, Trades, and Technical

**9037YD - Intro to DMAC – Advertising Design**
.5 CTE ELECTIVE Credit (Edison only)
Grade 10
Prerequisite:
This course is designed to introduce students to design basics, Adobe software, and hardware such as Macintosh computers, digital cameras (still /video) and digital scanner. This course is divided into three units of study: Adobe Photoshop for digital manipulation, Adobe Illustrator for vector based digital illustration and Adobe InDesign for page layout and typography. Students will work using the design procedures while acquiring skills through learning activities with a culminating final project for each unit. This class will build skills needed in ADII and build a foundation for acquiring the CTE diploma for Advertising Design.

**9019 – Advertising Design I**
2.0 CTE ELECTIVE Credit (Edison only)
Grade 11
Prerequisite: Intro to DMAC
This course is designed for students who have completed Advertising Design I. Students will advance their knowledge of software and design skills they have learned as well as be introduced to three new programs. Students will be introduced to web design, animation and media production. A concentration of both Design theory and prepress and production through project based problem solving, finding design and production solutions for traditional graphic needs. This class will build skills needed in Senior AD as well as acquiring knowledge and credits required for the CTE diploma for Advertising Design.

**9079 – Advertising Design II**
2.0 CTE ELECTIVE Credit (Edison only)
Grade 12
Prerequisite: Advertising Design I
The final course in the Architecture pathway builds on the skills developed throughout the previous year's education. Students enrolled in this course will further enhance their architectural knowledge through participation in job shadowing, internships, and other field related experiences that will offer students the opportunity to see and work with professionals in the field. Students will exit this course with a job application ready portfolio and a knowledgeable idea as to what the next phase of their life will be; post-secondary education, internships, or some other employment opportunity related to the Architectural profession.

**9076 – Advertising Design I (Vanguard)**
1.0 Credit
Prerequisite:
This course is designed to introduce students to the world of graphic design for advertising and branding. The course is presented in three main units of study. Students will navigate the Adobe Creative Suite to explore vector image creation and typography with Adobe Illustrator. Students will learn bit-map based image creation, digital photography, and digital photo manipulation through Adobe Photoshop. Students will learn page layout/design through Adobe InDesign and will learn marketing basics. With these skills, students will complete this course with a professional branding project that utilizes all of their acquired skills from this course.

**9079HCY – Advertising Design II (Vanguard)**
Perquisite:  Advertising Design I
1.0 Credit
This course is designed for students who have completed the Advertising and Design 1 course. Students taking this course will advance their knowledge in the fields of graphic design, branding, and digital illustration through continued work using the Adobe Creative Suite and the study of marketing/branding strategies. Students will engage in real-world design projects based on industry standards and will complete a presentation ready portfolio displaying their best work over two years.

**9046-Graphic Design**
1.0 Credit (Vanguard only)
Perquisite:
This course is designed to give students an introduction to the world of graphic design. In this project-based course, students will explore design basics software through the Adobe Creative Suite

(Adobe Illustrator, Adobe Photoshop). Students will also gain experience in digital photography, drawing, and painting. This course provides an overview of the field of graphic design for students with an interest in the design field.

**8900YC– Intro to Construction and Design – CADD**
.5 CTE ELECTIVE Credit (Edison only)
Grade 10
Prerequisite:
This .5 credit course is designed to equip students to meet the demands of the ever-expanding, interdisciplinary field of architectural design through the introduction of new computer technologies and software, the development of leadership skills, and the explanation of new professional standards, regulations and policies. Students will build skills necessary to understand what is being communicated through drawings and documents and, in turn, convey ideas, duties and tasks to others in a form representing the industry.

**9020 – CADD I / Architecture I**
2.0 CTE ELECTIVE Credit (Edison only)
Grade 11
Prerequisite: Intro to Construction and Design
CADD I students learn the basics of hand drawing, CAD software, and reading construction drawings along with architectural history and interior design theory. Projects include planning residential spaces, budgeting, and presentation skills.

**9382 – CADD II / Architecture II**
2.0 CTE ELECTIVE Credit (Edison only)
Grade 12
Prerequisite: CADD I / Architecture I
Students gain knowledge and skills specific to those needed to enter a career in architecture and construction or prepare a foundation toward a postsecondary degree in architecture, construction science, drafting, interior design, and landscape architecture.

**9930S-BOLT**
.25 Credit (Integrated Arts & Technology only)
Prerequisites: None
Bringing Outstanding Learners Together: BOLT is programs dedicated to helping students achieve their goals of going to college. The BOLT class, held within the regular school day, provides support, academic monitoring, and tutoring. Writing, inquiry, collaboration, and reading, along with tutorials and study skills are the core strategies of the program.

**5075 – Computer Systems**
1.0 CTE ELECTIVE Credit (P-Tech only)
Prerequisite:
Computer Systems provides a hands-on introduction to computer systems, including aspects of servicing, upgrading, and maintaining hardware and software. It's one of the core courses offered by the Academy of Information Technology. Computer Systems walks students through setting up hardware, installing software, connecting to a network, and connecting to the Internet. It guides students through servicing, upgrading, and maintaining process components, memory and storage components, input components and output components.

**6602Y – CTE Foundations @ Edison**
CTE ELECTIVE Credit
Grade 9
Prerequisite:
This course is designed for the freshman student to sample all CTE pathways within the school. The student rotates through each pathway to get an idea of the skills needed to be successful. In their final rotation the student applies for the area of their choice, creating a resume and participating in an interview. The student is also introduced to relevant work force information such as job trends, salary ranges, and educational requirements for employment in the chosen field.

**6519 – Design/Drawing Production**
1.0 CTE ELECTIVE Credit
Prerequisite:
Design and Drawing for Production is a foundational engineering, Technical drawing class. DDP encourages visual problem-solving using a common graphic language to describe forms (objects) in the human-made environment. Students will be given design problems and students will present solutions

through design and drawing problem solving exercises, which will result in the manufacturing of products. Later in the class, students will also learn to use the Autodesk Inventor Professional 2011 software to solve real- world problems.

**9037YA – Intro to DMAC – Digital Music & Audio Production**
.5 CTE ELECTIVE Credit (Edison only)
Grade 10
Prerequisite:
The Digital Music and Audio Production section of Introduction to DMAC will introduce students to fundamental audio production skills.

**9039 – Digital Music and Audio Production I**
2.0 CTE ELECTIVE Credit (Edison only)
Grade 11
Prerequisite: Intro to DMAC
Students enrolled in Digital Music and Audio Production I learn the basics of audio production skills - both technical and performance. Students record and edit a variety of audio, learning about technology including microphones, mixing boards, editing and sound-processing software, and other equipment.

**9045 – Digital Music and Audio Production II**
2.0 CTE ELECTIVE Credit (Edison only)
Grade 12
Prerequisite: Digital Music and Audio Production I
Students in this course are provided with the training and skills to become digital media literate across a wide array of software and hardware applications. Topics covered will include acoustical theory; the physics of sound; music and the brain; artificial intelligence; and computer music, information theory and programming for audio production.

**9037YM – Intro to DMAC – Interactive Media**
.5 CTE ELECTIVE Credit (Edison only)
Grade 10
Prerequisite:
The Interactive Media section of Introduction to DMAC will introduce students to web design, programming, and multimedia production.

**9040 – Interactive Media Design I**
2.0 CTE ELECTIVE Credit (Edison only)
Grade 11
Prerequisite: Intro to DMAC
Interactive Media I covers skills in a variety of interactive media - web design, programming, media production, and client interactions. Interactive Media Design is a practical, introductory course to the world of interactive and digital media design. The focus will be on creating interactive experiences that are both functional and engaging. This will be approached from various points-of-view: design, usability, technique, and entertainment.

**9044 – Interactive Media Design II**
2.0 CTE ELECTIVE Credit (Edison only)
Grade 12
Prerequisite: Interactive Media Design I
Interactive media design program will enable students a relevant combination of skills and knowledge vital to today's workplace. Positions in the fields of gaming, video, production, motion graphics and design include art director, web designer, game designer, video editor, project manager, and multimedia specialists.

**9037YV – Intro to DMAC - Digital Video Production**
.5 CTE ELECTIVE Credit (Edison only)
Grade 10
Prerequisite:
The Digital Video Production section of Introduction to DMAC will introduce students to scriptwriting, production skills, and media literacy.

**9181 – Media Video I**
2.0 CTE ELECTIVE Credit (Edison only)
Grade 11
Prerequisite: Intro to DMAC
Digital Video Production provides a hands-on introduction to digital video. The course guides students through all phrases of digital video production, including pre-production and planning, executing and managing a video shoot, and editing and post production techniques. Students explore methods of sharing and broadcasting digital videos,

including multiple platform versions, CD's and DVD's, and web delivery.

**9185 – Media Video II**
2.0 CTE ELECTIVE Credit (Edison only)
Grade 12
Prerequisite: Media Video I
Students will explore media forms such as commercials, public service announcements, movie scenes, documentaries, and music videos. Skills learned will include preproduction planning and writing, production, post production, camera techniques, equipment use, video editing and graphics, and sound editing. Additional emphasis in this course will be media literacy and digital citizenship, encouraging students to think critically to analyze current media forms as well as media industry practices.

**3565 – Ophthalmic Dispensing**
1.0 CTE ELECTIVE Credit (East only)
Prerequisite:
This course covers the role and responsibilities of a dispensing optician, preparing them for further studies or employment in the optical fields and is designed to follow Ophthalmic Fabrication. Students will revisit the principles of vision care, the tools required for vision correction, and will manufacture corrective glasses from a doctor's prescription for students in EHS and the RCSD. Doctors will be invited into the classroom to demonstrate techniques and provide experience to students.

**3316 – Ophthalmic Fabrication**
1.0 CTE ELECTIVE Credit (East only)
Prerequisite:
This course covers the role and responsibilities of a fabricating optician, preparing them for further studies or employment in the optical fields. Students will be introduced to the reasons and principles of vision care, the tools required for vision correction, and will, as a culminating assessment, manufacture corrective glasses from a doctor's prescription. This course will involve both lecture and work-time, finishing with a full work- time atmosphere, and will be completed over the course of a single school year. Students will complete a variety of projects to further their knowledge of the optician and the roles they play in the workforce. Local opticians and optometrists will be invited in to discuss their roles in the marketplace and to help motivate and encourage students. Students will be assessed through both formative assessments, where they show they have learned important conceptual information, and summative assessments, where they will demonstrate the skills they have acquired. Students who do not demonstrate successful acquisition and retention of optician skills will not pass the class and are not eligible for Erie Community College credits.

**9072E – Intro to Integrated Technology – Engineering**
.5 CTE ELECTIVE Credit (Edison only)
Grade 10
Prerequisite:
The Engineering section of the Introduction to Integrated Technology class will introduce students to basic Engineering techniques.

**6504S – Intro to Engineering Design (Semester 1)**
1.0 CTE ELECTIVE Credit (Edison only)
Grade 11
Prerequisite: Intro to Integrated Technology
The major focus of the IED course is to expose students to a design process, professional communication and collaboration methods, design ethics, and technical documentation. IED gives students the opportunity to develop skills in research and analysis, teamwork, technical writing, engineering graphics, and problem solving through activity-, project-, and problem-based learning.

**9000 – Principles of Engineering (Semester 2)**
1.0 CTE ELECTIVE Credit (Edison only)
Grade 11
Prerequisite: Intro to Engineering Design
This survey course of engineering exposes students to major concepts they'll encounter in a postsecondary engineering course of study. Students employ engineering and scientific concepts in the solution of engineering design problems. They develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges, documenting their work and

communicating solutions to peers and members of the professional community.

**9746 Mechanical Engineering**
2.0 CTE ELECTIVE Credit (Edison only)
Grade 12
The course is designed to provide a basic understanding of traditional methods of materials processing used in product manufacturing.

**5074 – Principles of Information Technology**
1.0 CTE ELECTIVE Credit (East only)
Prerequisite:
Principles of Information Technology provides an overview of information technology (IT) today. It serves as the foundation for all the course courses offered by the Academy of Information Technology. The course provides students with an introduction to hardware, looking at both peripherals and inside the box. Then, with hands on activities, students explore the most common types of operating systems, software applications, and programming languages. Students learn about the different types of networks and network topology, and set up an email client/server connection.

**6571, 6581 – Technology 7 & 8**
The aim of Technology 7 and 8 is to introduce students to solving problems through the design, development, operation, and maintenance stages of the design process. Students will investigate problems, design possible solutions, plan for implementation, create a solution, evaluate the use of the design cycle, and examine their own attitudes throughout the process.

**2583, 2586 – MYP Technology 7 & 8**
.5 CTE ELECTIVE Credit each (Wilson Foundation and Commencement only)
This course adapts the Technology 7 curriculum and aligns it with the International Baccalaureate MYP Design Brief.

**5079 – City Living- Technological Literacy**
1.0 CTE Elective Credit
This course covers a variety of technological systems, including construction, manufacturing, and energy - both the technical concepts behind them as well as how they affect our lives specifically in Rochester. Currently offered as a hybrid course with coordination by the district's CTE director.

 **2618 – Digital Solutions (Virtual only)**
0.5 CTE ELECTIVE Credit (IAT, ECP, SWW, 58 only)
Prerequisite: Recommendation by School Principal
This course is designed to provide students the opportunity to utilize the Computer Science design cycle to identify and provide solutions to digital problems from a student and/or teacher standpoint. Students will collaborate to investigate problems; plan solutions; create the solutions and finally evaluate/debug the solutions. Students will document their findings, adding to a digital users guide created for peers, as a resource that indexes commonly encountered situations and their solutions. Students will be required to complete and maintain several running projects that address problems and or solutions.

 **2616V – Digital Solutions II (Virtual only - select schools only)**
0.5 CTE ELECTIVE Credit
Prerequisite: Digital Solutions I and employment as IM&T Student Intern
The Digital Solutions 2 course is a hands-on study of technology integration in an educational context and an extension of DS1. Students will be required to assess problem sets throughout the day and define the best approach to addressing or solving those problems. In addition to solving problems for students and teachers, students will be required to complete and maintain several running projects that address problems or solutions in educational technology integration, design/participate in a service project that benefits the community and is related to technology. The course also asks students to have a prior understanding of Chrome OS, Microsoft Windows OS, and Apple OS.

**9027YA – Intro to Integrated Technology - Auto**
0.5 CTE ELECTIVE Credit (Edison only)
Grade 10
Prerequisite:

The Automotive section of the Introduction to Integrated Technology class will introduce students to basic automotive repair and maintenance skills.

**9034 - Automotive Technology I**
2.0 CTE ELECTIVE Credit (Edison only)
Grade 11
Prerequisite: Intro to Integrated Technology
This is an entry level course that prepares students to diagnose, adjust, repair, or replace the mechanical and electrical parts of an automobile. Because of the increasing sophistication of automobile technology, students are trained to use a variety of computerized shop equipment as well as learn traditional repair techniques.

**9016 - Automotive Technology II**
2.0 CTE ELECTIVE Credit (Edison only)
Grade 12
Prerequisite: Automotive Technology I
This course will help students understand how mechanical and electrical systems work through hands-on labs and projects. Knowledge in these automotive systems will prepare students for real life problem solving. This course uses a combination of older technology and the latest tools and equipment available for automotive diagnosis.

**8900YC – Intro to Construction and Design – Carpentry**
.5 CTE ELECTIVE Credit (Edison only)
Grade 10
Prerequisite:
This .5 credit course is designed to provide students with a hands-on approach to understanding and appreciating the fundamentals of carpentry, specifically as it applies to residential and commercial framing. This course will deliver an emphasis on work site safety and an introduction to the field of construction in terms of employment and further educational possibilities. Students completing this course will attain knowledge and skills development of rough framing tools and machinery through “hands on” applications such as building outdoor sheds and other structures.

**9031 - Carpentry I**
2.0 CTE ELECTIVE Credit (Edison only)
Grade 11
Prerequisite: Intro to Construction and Design
Carpentry II is a two-credit, full year course that provides students with a hands-on approach to understanding and appreciating the fundamentals of carpentry, specifically as it applies to residential and commercial framing. This course will deliver an emphasis on work site safety and an introduction to the field of construction in terms of employment and further educational possibilities. Students completing this course will possess attain knowledge and skills development of rough framing tools and machinery through “hands on” applications such as building outdoor shed and other structures.

**9012 – Carpentry II**
2.0 CTE ELECTIVE Credit (Edison only)
Grade 12
Prerequisite: Carpentry I
Carpentry II is a two-credit, full year course that provides students with a hands-on approach to understanding and becoming proficient in fundamental stages of carpentry, specifically as it applies to residential and commercial framing. Students in this course will be involved in community-oriented projects, with opportunities for co-ops such as the Get Ready For Life program.

**8900YE – Intro to Construction and Design - Electrical**
0 .5 CTE ELECTIVE Credit (Edison only)
Grade 10
Prerequisite:
This .5 credit course that is designed to provide students with a hands-on approach to understanding and appreciating the fundamentals of the electrical industry, specifically as it applies to residential construction. From a general understanding of what electricity is and how it works, the student will develop a skills and knowledge to successfully conduct residential installations. They will also become familiar with the National Electrical Code requirements.

**9035 – Electrical I**
2.0 CTE ELECTIVE Credit (Edison only)

Grade 11
Prerequisite: Intro to Construction and Design
This is the second course in a sequence courses that prepares individuals to apply technical knowledge and skills to assemble, install, operate, maintain, and repair electrically energized systems, such as residential, commercial, industrial electric- power systems wiring, controls, and electrical distribution panels. Instruction includes training in the use of advanced technology test equipment.

**9092 – Electrical II**
2.0 CTE ELECTIVE Credit (Edison only)
Grade 12
Prerequisite: Electrical I
Students have the basic understanding of the electrical industry, so electrical concepts and theory are reviewed. The National Electrical Code (NEC) is reviewed in greater detail along with commercial wiring practices. Installation, print layout, troubleshooting, and maintaining electrical systems and equipment are also key areas to be taught. At the end of this year the student should be ready for direct employment or post-secondary education.

**8911 – Food Service/Café**
1.0 CTE ELECTIVE Credit (Edison only)
Prerequisite:
Our Work Experience Program teaches students appropriate work habits and skills for employment in the food service trade, focusing on food safety and sanitation, equipment safety, cooking skills, food production, inventory management, and ordering. Emphasis on accurate measurement and knowledge of food ingredients, an understanding of culinary vocabulary, Recognition of mental, social, emotional aspects of good health and the impact of one's diet on it and application of the knowledge of food choices to plan a balanced diet. This course covers instruction in the foundations of culinary arts, including food theory, demonstrations and hands-on cooking. Students will engage in various food preparation techniques and will sample and sell their culinary creations. This particular program is designed to prepare High School students for the world of work in the restaurant/hospitality industry.

**9027YMF – Intro to Integrated Technology - Manufacturing**
0.5 CTE ELECTIVE Credit (Edison only)
Grade 10
Prerequisite:
The Manufacturing section of the Introduction to Integrated Technology class will introduce students to basic manufacturing techniques.

**9028 – Manufacturing Technology I**
2.0 CTE ELECTIVE Credit (Edison only)
Grade 11
Prerequisite: Intro to Integrated Technology
This is an entry level course that provides students with hands on practical machining skills as well as theory to support these skills. Students will gain knowledge through entertaining lectures, hands on demos, exciting projects, and the latest CAD (Computer Aided Design) software. Through the creation of self-made blue prints, practical hands on learning and machining theory, students will be prepared to apply skills learned to various machining scenarios.

**9017 – Manufacturing Technology II**
2.0 CTE ELECTIVE Credit (Edison only)
Grade 12
Prerequisite: Manufacturing Technology I
A technical study of the theory, equipment and application of machine tool and metal removal processes. In addition to understanding machining methods, the economics and comparison between machining methods are stressed. Processes covered are turning, milling, drilling, broaching, abrasive machining, finishing, numerical control as well as electrical and chemical machining. Theory is applied through actual machine operation in laboratory. Students will design their own projects using advanced CAD/CAM software, set-up and operate CNC equipment, and apply math and science principles.

**9027YMT – Intro to Integrated Technology – Metals / Welding**
0.5 CTE ELECTIVE Credit (Edison only)
Grade 10
Prerequisite:

The Metals section of the Introduction to Integrated Technology class will introduce students to basic metalworking and welding techniques.

**9741 – Metals / Welding I**
2.0 CTE ELECTIVE Credit (Edison only)
Grade 11
Prerequisite: Intro to Integrated Technology
The metals course encompasses the basics and fundamentals of common skills spanning a variety of metals occupations. These basic skills include safety, mathematics, hand tools, power tools, and blueprint reading. These skills are seen as minimally essential to the accomplishment of all subsequent, more advanced objectives in the metals curriculum.

**9742 – Metals / Welding II**
2.0 CTE ELECTIVE Credit (Edison only)
Grade 12
Prerequisite: Metals I
Students gain knowledge and skills specific to those needed to enter a career in metal working or welding. Students will apply their skills to create sculptures and fabricate class projects.

**8900YM – Intro to Construction and Design - Masonry**
.5 CTE ELECTIVE Credit (Edison only)
Grade 10
Prerequisite:
The Masonry section of the Introduction to Construction and Design course will introduce students to basic masonry techniques.

**9029 – Masonry I**
2.0 CTE ELECTIVE Credit (Edison only)
Grade 11
Prerequisite: Intro to Construction and Design
Students will be exposed to such areas as job layout, mortar composition, and wall construction using brick, block, stone and concrete. This will be accomplished through class assignments, class discussion and practical application of skills learned in the major units of study which include: shop and job safety, blueprint reading, transit operation, masonry tools and equipment, general construction procedures, brick, block, stone, concrete construction, footings, and cost estimation of time, material, and labor.

**9022 – Masonry II**
2.0 CTE ELECTIVE Credits (Edison only)
Grade 12
Prerequisite: Masonry I
This is the culminating class offered for Masonry. This course teaches essentials of good workmanship, knowledge of bond patterns, concrete work, tile work, arches, steps and fireplace construction. Job safety, blue print reading, principles of building construction, and estimating are covered. Specialized materials and techniques as well as project planning and supervision are stressed. Projects are used to guide the student through actual masonry construction procedures. Students will receive all necessary masonry related instruction to be successful in

- Co-op opportunities
- NYS apprenticeship programs
- Union / Non-Union work force
- Contributing citizens in society
- Skills USA Competition

# Work Based Learning

**9152 Diversified Co-op (Cooperative Career & Technical Education Work Experience Program)**
0.5 - 2.0 CTE ELECTIVE Credits (East, Edison, Integrated Arts & Technology, and Rochester Early College only)
This is a work-based learning program for students age 16 and above consisting of 150 to 600 hours of paid, school-supervised work experience, supported by related in-school instruction. Co-op is a partnership that links school, community and business/industry to provide a real-world environment in which students have the opportunity to apply, and thereby augment, the knowledge and skills obtained in the classroom.
This program must be registered with the New York State Education Department, and must be coordinated by a certified CTE teacher who possesses Career Development Extension 8982.

**9153 – General Education Work Experience (GEWEP)**
0.5 – 2.0 CTE ELECTIVE Credit
This is a work-based learning program for students age 16 and above, consisting of 150 to 600 hours of paid, school-supervised work experience, supported by related in-school instruction. This program must be registered with the New York State Education Department, and must be coordinated by a teacher or school counselor who possesses the Career Awareness Extension 8981 or the Career Development Extension 8982

**9153 Community-Based Work Programs (no credit - Edison only)**
Community- Based Work Programs, designed specifically for students with disabilities, ages 14 and older, to participate in work-based learning programs. These work experiences, can be paid or unpaid, help students to identify their career interests, assess their employability skills and develop the skills and attitudes necessary for employment.

**9132 – Career Exploration Internship Program/CEIP**
0.5 - 1.0 CTE ELECTIVE Credits
The Career Exploration Internship Program (CEIP) is a school-business partnership initiative that provides high school students, age 14 and above, the opportunity to learn firsthand about the skills and education requirements necessary for the career areas in which they have an interest. The CEIP offers unpaid career exploration experiences in the business setting. The focus is on hands-on career exploration rather than on skill development. This program must be registered with the New York State Education Department, and must be coordinated by a certified CTE teacher who possesses Career Development Extension 8982

# School-Specific CTE Programs and Courses

All Pathways at Edison Career and Technology High School

## Automotive, Manufacturing, and Engineering Pathway at Edison Career and Technology High School

**Automotive Technology Program**

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|---|---|---|---|---|
| Introduction to Integrated Technology - Automotive Tech | .5 | 9027YA | 470604 | The Automotive section of the Introduction to Integrated Technology class will introduce students to basic automotive repair and maintenance skills. |
| Automotive Tech I | 2 | 9034 | 470604 | This is an entry level course that prepares students to diagnose, adjust, repair, or replace the mechanical and electrical parts of an automobile. Because of the increasing sophistication of the automobile technology, students are trained to use a variety of computerized shop equipment as well as learn traditional repair techniques. |
| Automotive Tech II | 2 | 9016 | 470604 | This course will help students understand how mechanical and electrical systems work through hands-on labs and projects. Knowledge in these automotive systems will prepare students for real life problem solving. This course uses a combination of older technology and the latest tools and equipment available for automotive diagnosis. |

**Advanced Manufacturing Program**

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| Introduction to Integrated Technology - Manufacturing | .5 | 9027YMF | 150613 | The Manufacturing section of the Introduction to Integrated Technology class will introduce students to basic manufacturing techniques. |
| Manufacturing Tech I | 2 | 9028 | 150613 | Manufacturing I students will learn the basics of the machining process and develop a basic understanding of CAD/CAM software, CNC machining, and additive manufacturing. |
| Manufacturing Tech II | 2 | 9017 | 150613 | Students enrolled in Manufacturing Tech II will learn advanced techniques in manufacturing. Students will design their own projects using advanced CAD/CAM software, set-up and operate CNC equipment, and apply math and science principles. |

**Metals/Welding Program**

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| Introduction to Integrated Technology - Metals | .5 | 9027YMT | 480511 | The Metals section of the Introduction to Integrated Technology class will introduce students to basic metalworking and welding techniques. |
| Metals / Welding I | 2 | 9741 | 480511 | This is an entry level course to develop metalworking skills. Students will learn and practice basic welding skills, learn the science behind welding, and use sheet metalworking tools. |
| Metals / Welding II | 2 | 9742 | 480511 | Students gain knowledge and skills specific to those needed to enter a career in metal working or welding. Students will apply their skills to create sculptures and fabricate class projects. |

**Engineering Technology Program**

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| Introduction to Integrated Technology - Engineering. | .5 | 9027E | 150000 | The Engineering section of the Introduction to Integrated Technology class will introduce students to basic Engineering techniques. |
| Introduction. To Engineering Design | 1 | 6504Y | 150000 | This foundation course in engineering introduces students to the design process, technical drawing, and 3D modeling. |
| Principles of Engineering | 1 | 9000 | 150000 | This survey course of engineering exposes students to major concepts they'll encounter in a postsecondary engineering course of study. Students employ engineering and scientific concepts in the solution of engineering design problems. |
| Manufacturing Engineering | 1 | TBD by Registrar | 150000 | The course is designed to provide a basic understanding of traditional methods of materials processing used in product manufacturing. |
| Optics | 1 | TBD | TBD | The Optical Technology Program prepares students to work in optical activities, such as testing, quality control, and production. It provides a background in optics using the eye as a detector. |

# Construction and Design Pathway at Edison Career and Technical High School

**CADD Program**

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| Introduction to Construction and Design - CADD | .5 | 8900YD | 151303 | The CADD section of the Introduction to Construction and Design course will introduce students to basic Computer Aided Design and Drawing. |
| CADD I | 2 | 9029 | 151303 | CADD I students learn the basics of hand drawing, CAD software, and reading construction drawings along with architectural history and interior design theory. Projects include planning residential spaces, budgeting, and presentation skills. |
| CADD II | 2 | 9382 | 151303 | Students gain knowledge and skills specific to those needed to enter a career in architecture and construction or prepare a foundation toward a postsecondary degree in architecture, construction science, drafting, interior design, and landscape architecture. |

**Carpentry Program**

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| Introduction to Construction and Design - Carpentry | .5 | 8900YC | 460201 | The Carpentry section of the Introduction to Construction and Design course will introduce students to basic carpentry techniques. |
| Carpentry I | 2 | 9031 | 460201 | Carpentry I is a two-credit, full year course that provides students with a hands-on approach to understanding and appreciating the fundamentals of carpentry, specifically as it applies to residential and commercial framing. |
| Carpentry II | 2 | 9012 | 460201 | Carpentry II is a two-credit, full year course that provides students with a hands-on approach to understanding and becoming proficient in fundamental stages of carpentry, specifically as it applies to residential and commercial framing. |

**Electrical Program**

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| Introduction to Construction and Design - Electrical | .5 | 8900YE | 460302 | The Electrical section of the Introduction to Construction and Design course will introduce students to basic residential wiring and electrical theory. |
| Electrical I | 2 | 9035 | 460302 | This is the second course in a sequence courses that prepares individuals to apply technical knowledge and skills to assemble, install, operate, maintain, and repair electrically energized systems, such as residential, commercial, industrial electric- power systems wiring, controls, and electrical distribution panels. |
| Electrical II | 2 | 9092 | 460302 | Students have the basic understanding of the electrical industry, so electrical concepts and theory are reviewed. The National Electrical Code (NEC) is reviewed in greater detail along with commercial wiring practices. Installation, print layout, troubleshooting, and maintaining electrical systems and equipment are also key areas to be taught. |

**Masonry Program**

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| Introduction to Construction and Design - Masonry | .5 | 8900YM | 460101 | The Masonry section of the Introduction to Construction and Design course will introduce students to basic masonry techniques. |
| Masonry I | 2 | 9092 | 460101 | Students will be exposed to such areas as job layout, mortar composition, and wall construction using brick, block, stone and concrete. |
| Masonry II | 2 | 9022 | 460101 | This is the culminating class offered for Masonry. This course teaches essentials of good workmanship, knowledge of bond patterns, concrete work, tile work, arches, steps and fireplace construction. Job safety, blue print reading, principles of building construction, and estimating are covered. |

# Digital Media Art and Communication Pathway at Edison Career and Technical High School

**Advertising Design Program**

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| Introduction to DMAC - Advertising Design | .5 | 9037YD | 500409 | The Advertising Design section of Introduction to DMAC will introduce students to client interaction skills, photography, digital imaging, and layout. |
| Advertising Design I | 2 | 9019 | 500409 | Students will advance their knowledge of software and design skills they have learned as well as be introduced to three new programs. Students will be introduced to web design, animation and media production. A concentration of both Design theory and prepress and production through project based problem solving, finding design and production solutions for traditional graphic needs. |
| Advertising Design II | 2 | 9079 | 500409 | The final course in the Architecture pathway builds on the skills developed throughout the previous year's education. Students enrolled in this course will further enhance their architectural knowledge through participation in job shadowing, internships, and other field related experiences that will offer students the opportunity to see and work with professionals in the field. |

**Digital Music and Audio Production Program**

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| Introduction to DMAC - Digital Music and Audio Production | .5 | 9037YA | 100203 | The Digital Music and Audio Production section of Introduction to DMAC will introduce students to fundamental audio production skills. |
| Digital Music and Audio Production I | 2 | 9039 | 100203 | Students enrolled in Digital Music and Audio Production I learn the basics of audio production skills - both technical and performance. Students record and edit a variety of audio, learning about technology including microphones, mixing boards, editing and sound-processing software, and other equipment. |
| Digital Music and Audio Production II | 2 | 9045 | 100203 | Students in this course are provided with the training and skills to become digital media literate across a wide array of software and hardware applications. |

**Digital Video Production Program**

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| Introduction to DMAC - Digital Video Production | .5 | 9037YV | 090799 | The Digital Video Production section of Introduction to DMAC will introduce students to scriptwriting, production skills, and media literacy. |
| Media Video I | 2 | 9181 | 090799 | Students in Media Video I learn a variety of video pre-production, production, and post-production skills in both studio and field settings. Students use industry-standard equipment to create news packages, newscasts, and other productions. Scripting and storyboarding are also covered. |
| Media Video 2 | 2 | 9185 | 090799 | Students in Media Video II build upon skills learned in Media Video I to produce advanced video projects, including news programming, entertainment, and documentaries. |

**Interactive Media Program**

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| Introduction to DMAC - Interactive Media | .5 | 9037YM | 500102 | The Interactive Media section of Introduction to DMAC will introduce students to web design, programming, and multimedia production. |
| Interactive Media I | 2 | 9019 | 500102 | Interactive Media I covers skills in a variety of interactive media - web design, programming, media production, and client interactions. |
| Interactive Media II | 2 | 9040 | 500102 | Interactive media design program will enable students a relevant combination of skills and knowledge vital to today's workplace. Positions in the fields of gaming, video, production, motion graphics and design include art director, web designer, game designer, video editor, project manager, and multimedia specialists. |

**NYSAA Careers Program at Edison Career and Technology High School**

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| Exploratory Careers | 1 | 9004YW | 489999 | This course provides students in the NYSAA program an opportunity to explore their own interests and a variety of career opportunities. |
| Automotive Careers I / II / III | 2 | 8914YW<br>8915YW<br>8916YW | 479999 | In the Automotive Careers courses, NYSAA students develop skills in a variety of jobs that relate to the automotive detailing, maintenance, and repair industry. |
| Building & Grounds Careers I / II / III | 2 | 1713YW<br>1714YW<br>1715YW | 010699 | In the Building & Grounds courses, NYSAA students develop skills that relate to careers in greenhouses, landscaping, light construction, and grounds keeping. |
| Construction Careers I / II / III | 2 | 9011YW<br>9012YW<br>9013YW | 469999 | In Construction Careers courses, NYSAA students develop a variety of construction skills. |
| Food Careers I / II / III | 2 | 8911YW<br>8912YW<br>8913YW | 120599 | In Food Careers courses, NYSAA students prepare and serve a variety of food as well as learn the importance of customer service, sanitation, and hospitality. |
| Media Careers I / II / III | 2 | 9007YW<br>9008YW<br>9009YW | 109999 | In Media Careers courses, NYSAA students prepare, produce, and distribute a variety of projects for clubs, classes, and other clients. |

**Pathways to Technology Early College High School (P-TECH)**

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| Computer Systems | 1 | 5075 | 111099 | The goal of this course is to introduce students to computer hardware and software, as well as operating systems, networking concepts, mobile devices, IT security, and troubleshooting. These skills will assist students in developing the skills necessary to work as a technician in the field of IT. |
| Practical Computer Literacy | 1 | 5078 | 111099 | This course is designed for persons with no experience using a computer. Focus will be on personal computers (PC) using the Microsoft Windows operating system, but other operating systems will be discussed. Upon successful completion of this course, students should be able to execute basic commands for creating, saving, deleting and locating files on a PC, prepare and print documents in Microsoft Word, design and set up a spreadsheet with basic functions and graphs using Microsoft Excel, identify major components of a computer system, operate a computer in a network environment, work with e-mail, use an Internet browser, communicate effectively with computer personnel, and understand and use appropriate terminology, especially as it relates to purchasing and operating a PC. This is a hands-on course. Several major projects will be assigned to be completed outside of class time. Students are not required to own a computer |
| Computer Science Principles (Yr) | 1 | 2507 | 111099 | This course introduces students to the Internet of Everything (IoE). The IOE is the networked connection of people, process, data and things. As more people, data and things come online, we develop processes to harness the vast amounts information being generated by all these connected people and things. The goal of this course is to introduce students to fundamental concepts and technologies that enable the IoE. Students will explore the impact of the Internet of Everything, Explain the interactions between people, process, data, and things that form the Internet of Everything, Configure networked devices and applications to support a given IoE implementation, Explain the benefits and challenges of the IoE and Explain modeling and prototyping in the IoE. Students will incorporate drag and drop coding during this experience. |

**Entrepreneurship Program at Rochester Early College International High School**

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|---|---|---|---|---|
| Introduction to Business MCC | 1 | BUS104 | 520701 | This course focuses on the fundamentals of businesses including organizational structures, fiscal aspects, human resources, governmental factors, and ethics. |
| Microsoft Office MCC *Available to other Schools | 1 | CRC125 | 520701 | This course provides a college-level introduction to the Microsoft Access Suite. Students complete a variety of rigorous projects in Word, Excel, Access, and PowerPoint. |
| Personal Money Management | 1 | ECO103 | 520701 | A practical course that prepares students with an understanding of financial planning. Topics include credit, loans, investing, and budgeting. |
| Entrepreneurship | 1 | BUS110 | 520701 | This small business course is designed for those interested in learning how to start and manage a small business. Students will learn the nature of small business in today's economy and entrepreneurs in context of the free enterprise system. |

**International Baccalaureate IB and MYP Program at Wilson Foundation and Wilson Commencement**

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| Technology 7 MYP | .5 | 2583 | 159999 | This course adapts the Technology 7 curriculum and aligns it with the International Baccalaureate MYP Design Brief. |
| Technology 8 MYP | .5 | 2586 | 159999 | This course adapts the Technology 8 curriculum and aligns it with the International Baccalaureate MYP Design Brief. |
| MYP Computer Tech 10 | 1 | 2666 | 119999 | An introduction to computer programming using the computer language Java. Students will learn the process involved in developing and executing computer programs so as to obtain a solution to a specific problem. This process will include problem analysis, algorithm development, code development, and documentation. In addition, students will be able to read, as well as write, good program code. |
| IB IT Global Society SL I | 1 | 1539 | 119999 | Computer Science is regarded as an experimental science, alongside biology, chemistry, design technology, physics and environmental systems and societies – and sits in the Group 4 list of subjects. The IB Computer Science courses are a rigorous and practical problem-solving discipline. These courses are designed for the individual who is interested in pursuing the IB Diploma.. |
| IB IT Global Society SL II | 1 | 1549 | 119999 | |