

Foreign Languages

FRENCH I

1 credit

2400

This course requires no previous knowledge of French. French I teaches the four basic skills: aural comprehension, oral communication, reading, and writing. Emphasis is on aural comprehension, the development of basic speech patterns with correct pronunciation, and reading. Videos of native speakers are used. French structure is learned by completing written exercises, oral drills and by reading stories and short dialogues from French-speaking countries. Basic vocabulary includes family, weather, clothes, food, sports, and travel.

Prerequisite: C or better in English

SPANISH I

1 credit

2550

Spanish I introduce the student to the Five C's of language learning; communication, comparisons, committees, culture and connections. Students begin to develop the four language-learning skills, listening, speaking, reading and writing along with the development of cultural awareness. This is done in a variety of thematic lessons which include describing one's self, likes, dislikes, school, going places and doing things, making and responding to invitations, food, shopping for and describing clothing, vacations and weather.

Prerequisite: C or better in English

FRENCH II

1 credit

2610

French II helps each student attain increased proficiency in the four skills cited in French I. Course objectives include improvement of pronunciation, vocabulary enrichment through readings, and an increased understanding of French structure. Students develop their understanding of France and the culture of French-speaking people throughout the world. Video recordings of native speakers and pronunciations drills are part of the overall presentation.

Open to: 9, 10, 11, 12

Prerequisite: C or better in French I

SPANISH II

1 credit

2760

Spanish II continues to develop the four language-learning skills while continuing to review the themes introduced in Spanish I. New contexts include the home and chores, the human body and health, errands around town, entertainment, food, environmental issues and gift giving.

Open to: 9, 10, 11, 12

Prerequisite: C or better in Spanish I

FRENCH III

1 credit

2820

Those skills learned in French I and II will be strengthened. Emphasis continues on listening and reading skills, coupled with greater understanding of structure, speaking, and writing skills. Students become increasingly aware of the diversity of French culture presented in the dialogue and selected, short, uncomplicated readings.

Open to: 10, 11, 12
Prerequisite: C or better in French II

SPANISH III

1 credit

2970

Spanish III extends the skills and themes from Spanish I and Spanish II. Themes are revisited and amplified. School, daily routine, clothing, diversion, childhood celebrations and personal possessions are some of the topics of the lessons. These are done in the present and past tenses.

Open to: 10, 11, 12
Prerequisite: C or better in Spanish II
or Teacher Recommendation

FRENCH IV

1 credit

3030

Students will complete a detailed review of French structure. The main emphasis of this course is structure, reading, and listening comprehension. The readings are short comments and articles which make students aware of interesting customs in French-speaking countries. Cassettes and videos provide listening and speaking skills. Basic historical background material is introduced.

Open to: 11, 12
Prerequisite: C or better in French III

FRENCH V

1 credit

3060

French V continues to emphasize structures, reading, and listening comprehension. Continued oral proficiency becomes the focus with emphasis on the use of cassettes, short stories, cultural readings, and videos to provide refined pronunciation drills, and intense grammar/culture presentations.

Open to: 12
Prerequisite: C or better in French IV

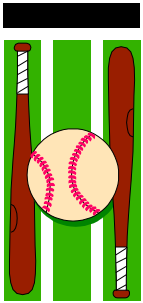
SPANISH IV

1 credit

3270

This course combines a comprehensive review and extension of prior knowledge and skills. Topics covered on this level are entertainment, the future, travel, preparation of food, and nature. More complex grammar structures are introduced and developed such as preterite and imperfect tenses, the conditional, commands and the subjunctive.

Open to: 11, 12
Prerequisite: C or better
in Spanish III



Health/Physical Ed.

PHYSICAL EDUCATION

.25 credit

3400

This course is designed to enhance the student's physical well-being. The co-ed classes consist of units in badminton, bowling, conditioning, fishing, golf, softball, tennis, basketball, track, and volleyball, and an introduction to May Day activities.

Open to: 10, 11, 12
Prerequisite: None

PHYSICAL EDUCATION II

.25 credit

3430

This course emphasizes the teaching of progressive skills in team sports, the development of leisure time sport skills, and physical fitness. Knowledge of rules and fundamentals of each activity as well as personal fitness are a required part of the course.

Open to: 10, 11, 12
Prerequisite: Phys. Education I

HEALTH

.5 credit

3490

This course is designed to increase awareness of health and wellness with identification of major health risks to teens and young adults today. Risk factors are identified and prevention is emphasized. Early detection and treatment of disease is encouraged. Areas covered include, but are not limited to: personal care, digestion and elimination, cardiovascular and respiratory health, exercise, rest, and recreation, infectious diseases including STDs and AIDs, non-infectious diseases, food and nutrition, self-esteem, managing stress, preventing violence, first aid and CPR. Emphasis is placed on decision making and encourages taking responsibility for health decisions.

Open to: 11, 12
Prerequisite: None



Marine Corps

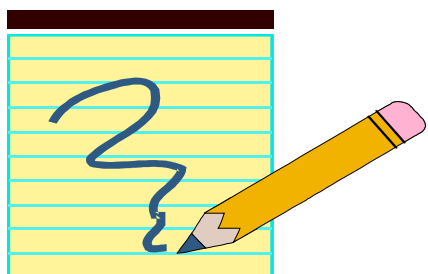
Marine Corps JROTC I	1 credit	4850
Marine Corps JROTC II	1 credit	4860
Marine Corps JROTC III	1 credit	4870
Marine Corps JROTC IV	1 credit	4880

The Marine Corps Junior Reserve officer Training Corps is designed to provide four years of progressive instruction to instill discipline and self-confidence in students. The goal is to make each student a respectful citizen in the community.

Some of the subjects covered are Marine and Military History, Physical Fitness, Drill and Ceremonies, Public Speaking, Maintaining a good appearance, Marksmanship Training, Maps and Compass, First Aid, Leadership Traits and Principles and many more.

East High School MJROTC Drill and rifle Teams are recognized as one of the finest teams on the East Coast. All equipment and uniforms are furnished. There is **no military obligation**. Every year in the program students are earning military rank which carry to any service should they choose to enter later.

Open to: 9, 10, 11, 12,
Prerequisite: Progression must start at level one



Mathematics

ALGEBRA I

1 credit

4220

A course focusing on the development of fundamental algebraic skills and reasoning. Students will use patterns, relations and functions to model, represent and analyze problem situations that involve variable quantities.

Open to: 9, 10

GEOMETRY

1 credit

4350

A course emphasizing the development of geometric concepts – primarily, Euclidian plane geometry. Students will identify, classify, compare and analyze characteristics, properties and relationships of one, two and three dimensional geometric figures and objects and will use spatial reasoning, properties of geometric objects, and transformations to analyze mathematical situations and solve problems.

Open to: (9 with recom.) 10
Prerequisite: Algebra I

HONORS GEOMETRY

1 credit

4360

An accelerated Geometry course for the honors student. Problem solving techniques will be stressed as related constructions, analytic coordinate geometry, trigonometry and proofs.

Open to: 9,10,11,12
Prerequisite: Honors Algebra I in 8th
Alg I or Teacher/Counselor Rec.

ALGEBRA II-TRIGONOMETRY

1 credit

4390

A higher-level algebra course that continues the development of algebraic skills and reasoning with advanced topics in trigonometric functions, and coordinate geometry.

Open to: 10, 11, 12
Prerequisite: Alg I and Geom

HONORS ALGEBRA II – TRIGONOMETRY

1 credit

4370

An accelerated Algebra II course for the student highly competent in algebraic techniques. In addition to all the Algebra II topics, students will study trigonometric functions, their properties and applications.

Open to : 10,11,12
Prerequisite: Alg I, and Geom
Teacher Recommendation

PRE-CALCULUS

1 credit

4560

A course designed to prepare the student for the study of Calculus or the first year of college mathematics. Students will study advanced topics in algebraic, logarithmic, exponential, and trigonometric functions and will explore series, sequences and limits.

Open to: 11,12
Prerequisite: Hon. Geometry,
Algebra II-Trig. with A or B or
Teacher Recommendation

Introductory Analysis

1 credit

4440

A course designed to prepare the student for the first year college mathematics. Students study advanced topics in algebraic, logarithmic, exponential, and trigonometric functions and will explore series, sequences and limits.

Open to : 12
Prerequisite:

AP CALCULUS

1 credit

4470

A course designed for honors math students who have completed Algebra II-Trig., Honors Geometry, and Pre-Calculus. This course will cover those topics listed in the college course description. Students must successfully complete the AP exam to earn college credit.

Open to: 11, 12
Prerequisite: Pre-Calculus and
Teacher Recommendation

TRANSITION TO COLLEGE MATH

1 credit

4720

A course designed for the college bound students. Students will review higher-level topics in advanced algebra and geometry. Emphasis will be placed on analyzing and graphing functions as well as the use of the graphing calculator.

Open to: 12
Prerequisite: Algebra II/Trig
and Teacher Recommendation
***This course is not NCAA Clearinghouse Approved.

CONSUMER MATHEMATICS

1 credit

4420

A mathematics course emphasizing consumer applications of mathematical concepts such as banking, savings and credit; merchandising theories of pricing and comparison shopping; personal finances with regard to payroll, income tax and retirement; interpreting and analyzing data presented in table and graphs.

Open to: 12
Prerequisite: Algebra I and Geometry
***This course is not NCAA Clearinghouse Approved.



Music

STRING ORCHESTRA

1 credit

5130

This group consists of violin, viola, cello, and string bass players from grades 9 through 12. The string orchestra studies and performs a variety of string compositions and also functions as a training group. Previous experience and training on a string instrument are required. The string orchestra will perform for concerts, special civic events, state orchestra contest, solo and ensemble contest, and a variety of festivals. Grades are based on participation in concerts outside the regular school day and on rehearsal disciplines as outlined by the instructor.

Open to: 9, 10, 11, 12
Prerequisite: Middle School
Director's Recommendation

BAND

1 credit

5150

Band is a one-year course. During the fall, and before school begins, the Band will practice and perform as a Marching Band. All students enrolled in Band must participate in the Marching Band Camp in August. The Marching Band performs at East football games and at a variety of parades, festivals, competitions, and band shows. Following marching season, the Concert Band will perform at concerts, festivals, band contests, and Solo and Ensemble contests. Students enrolled in Band will be auditioned and tested as a regular requirement throughout the school year. Members of Marching Band auxiliary units are selected by tryouts in the spring for participation the following fall and are registered for band in the fall semester. Auxiliary unit students are required to play an instrument during Concert Band. Grades are based on participation in concerts outside the regular school day and on rehearsal disciplines as outlined by the instructor.

Open to: 9, 10, 11, 12
Prerequisite: Instructor Permission
Fee Required for Band Camp

JAZZ ENSEMBLE

1 credit

5250

This is a jazz education/performance group. Its repertoire will consist of the study and performance of jazz compositions played by dance bands of the swing era through the present contemporary styles. The Jazz Ensemble will perform for concerts, jazz festivals, competitions, and certain special civic affairs. Tours and festivals are an annual part of the Jazz Ensemble's activities. Grades are based on participation in concerts outside the regular school day and on rehearsal disciplines as outlined by the instructor.

Open to: 9,10,11,12
Prerequisite: Audition

INTERMEDIATE CHOIR

1 credit

5210

Students who are interested in participating in vocal music at the high school level may elect this class. Emphasis is placed on developing good vocal techniques including proper singing, sight-reading, ear training, and performance techniques. Classical, popular, and other music styles may be included in the repertoire. Grades are based on participation in concerts scheduled by the director and on rehearsal parameters as outlined by the instructor.

Open to: 9, 10, 11, 12

ADVANCED CHOIR

1 credit

5360

The symphonic choir has high performance standards. The group performs numerous times during the school year at various concerts and/or community functions. A strong emphasis is placed on the use of proper vocal technique. The repertoire of this group includes classical, popular, and other musical styles at a higher level of difficulty than other large vocal ensembles at East. Members of this group will be expected to perform in the district/state competitions and any other scheduled performances set by the director. Grades are based on participation in concerts and on rehearsal parameters as outlined by the instructor.

Open to: 9, 10, 11, 12
Prerequisite: Audition

Music Appreciation/History

1 credit

5480

This one year course deals with the history and development of music from it's earliest beginnings to present. Student will identify how music is affected by, economics, social problems, cultures, geography and religion. Student will listen to and describe a variety of music and musical styles, analyze compositions, performers and performances, compose/arrange music. Grades are based on tests/quizzes, classroom participation, homework, and compositions.

Open to : 9, 10, 11, 12
Prerequisite: Knowledge of basic music skills, participation in a performing group helpful but required

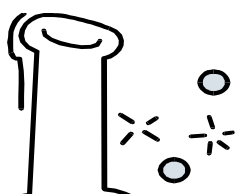
Backstage Pass

1/2 credit

5260

This semester class deals with the backstage workings of a performance. Students will identify the styles of a variety of plays, musicals and concert, learn about elements of lighting, sound and prop/stage construction, identify stage markings and musical terms and to evaluate types, styles, and genre of various performances. Grades are based on tests/quizzes, homework, and classroom participation. This class may require attendance at performances outside the normal school day.

Open to: 9, 10, 11, 12
Prerequisite: none



Science

PHYSICAL SCIENCES

1 credit

5670

A college preparatory and lab-based course for all students which will investigate atomic/molecular structure, structure/properties of matter, physical/chemical changes, chemical reactions, motion and forces, conservation of energy, increase in disorder, and interaction of energy and matter.

Open to: 9
Prerequisite: none

HONORS PHYSICAL SCIENCES

1 credit

5770

A college preparatory, lab-based course intended for students who wish to pursue a career involving science and math. The students will investigate motion, waves/optics, electricity, conservation of energy, heat transfer, moles, atomic/molecular structure and properties, physical/chemical changes, electron configuration, chemical reactions, gas laws, and stoichiometry.

Open to: 9
Prerequisite: Counselor or teacher
Recommendation

BIOCHEMICAL SYSTEMS

1 credit

5890

A college preparatory and lab-based course for students. This course will investigate the cell and organism's requirements, functions and behavior; the molecular basis of heredity and its relationship to diversity, species survival, adaptations and extinction; populations and their changes over time; interdependence of organisms; and the nature of matter, energy, and organization in living systems, including the impact of environmental quality on living systems.

Open to: 10
Prerequisite: none

HONORS BIOCHEMICAL SYSTEMS 1 credit 5990

A college preparatory, lab-based course intended for students who wish to pursue a career involving science or math. This course will investigate the cell and organism's requirements, functions and behavior; the basic nature of DNA and genes and their relationship to heredity, diversity, species survival, adaptations and extinction; populations and their changes over time; interdependence of organisms; and the nature of energy processes and transformations in living systems, specifically of photosynthesis and respiration.

Open to: 10
Prerequisite: Passed Phys Science

EARTH SYSTEMS 1 Credit 5910

Earth Systems is a college preparatory, lab-based course for all students. This course explores scientific theories and supporting evidence for changes in our universe, solar system and planets through time. Major themes include: (1) relating changes in the form or distribution of matter to the cyclic and finite nature of resources within the closed earth system; (2) interactions among the lithosphere, hydrosphere and atmosphere (e.g., weather, climate); (3) plate tectonics; (4) issues of environmental quality and impacts; (5) relationships among the Earth, other planets, and other objects in the solar system; and (6) how the Earth has changed since its origin and theories and/or evidence of these changes.

Open to: 11, 12
Prerequisite: none

CHEMISTRY 1 credit 5750

A college preparatory, lab-based course that investigates the relationships between the structure and properties of matter. This course will build on the concepts learned in the Physical Sciences and Biological and Chemical Systems courses. This cumulative knowledge will then be applied to many topics involving real-world situations. The student will study atomic structure, probability, periodicity, moles and stoichiometry, bonding, kinetic theory, acid/base chemistry, reaction rates and chemical equilibrium.

Open to: 11, 12
Prerequisite: Physical Science,
Bio-Chem. Sys., and Passed OGT

PHYSICS 1 credit 5870

A college preparatory, lab-based course that investigates the interaction between matter and energy and how it relates to the world around them. This course will build on the concepts learned in the Physical Science course. The students will study mechanics: including linear and non-linear motion (forces, energy, momentum, simple machines), general introduction to thermodynamics (heat and transfer of energy), optics, and electromagnetism.

Open to: 11, 12
Prerequisite: Passed OGT

AP CHEMISTRY

1 credit

5780

The AP Chemistry course is designed to be equivalent to a college introductory chemistry course usually taken by science majors during their first year of college. This rigorous, lab-based course will investigate colligative properties, electrochemistry, oxidation-reduction reactions, thermodynamics, and chemistry of elements as outline in the AP ACORN booklet.

Open to: 11, 12
Prerequisite: Chemistry

AP BIOLOGY

1 credit

5840

The AP Biology course is designed to be equivalent to a college introductory biology course taken by science majors during their first year of college. In this rigorous lab-based course students will examine the major biological themes of molecules and cells, heredity and evolution, and organisms and populations. They will be expected to work together to recognize problems, formulate hypotheses, design controlled experiments and interpret data.

Open to: 11,12
Prerequisite: Honors Bio-Chem

Astronomy

.5 credit

592S

This course includes the study of the historical development of astronomy and natural laws; light, optics and the telescope; the solar system; stars and our galaxy: surveying space, relative distance to the stars, motions of stars, analyzing starlight, stellar masses and sizes, double stars, and careers in astronomy.

Issues in Science

.5 credit

5960

A focus of this course is to enable students to recognize and analyze alternative explanations and models. This focus requires students to use critical abilities of analyzing an argument or issue by reviewing current scientific understanding, weighing the evidence, and examining the logic so as to decide which explanations and models are best. Although there may be several plausible explanations, they do not all have equal weight. Students should be able to use scientific criteria to find the preferred explanations. This course will focus on students investigating current societal issues related to science. One such focus could be forensic science.



Social Studies

WORLD HISTORY

1 credit

6120

Students study historic eras of World History. They will consider the influence of geographic settings cultural perspectives, economic systems and various forms of government. Students will continue to develop research skills.

Open to: 9
Prerequisite: None

HONORS WORLD HISTORY

1 credit

6140

As students study historic eras of World History they will consider the influence of geographic settings, cultural perspectives, economic systems and various forms of government. Students will gain a deeper understanding and continue to develop research skills. Students will enhance their analytical and research skills by examining primary source material and researching to prepare original research papers and projects.

Open to: 9
Prerequisite: Teacher or Counselor Recommendation; OPT Completion

UNITED STATES HISTORY

1 credit

6130

The tenth grade utilizes the time period of 1877 through the present to provide a context for the next six strands of the social studies program. This year provides learners with the opportunity to extend and clarify perspectives gained in previous years as they examine the issues of the twentieth century and speculate on the prospects for the twenty-first century. This course is aligned to the 10th grade graduation exam.

Open to: 10
Prerequisite: None

HONORS US HISTORY

1 credit

6020

This course is designed to familiarize students with the major historical concepts such as industrialization, imperialism, global conflicts and current events of the 1877-present time frame. Students will refine analytical and research skills by examining primary source material and researching to prepare original research papers and projects.

Open to: 10
Prerequisite: 2.75 GPA or
Teacher or Recommendation,

**ADVANCED PLACEMENT
AMERICAN HISTORY**

1 credit

6210

This survey course explores history of the United States from the colonial period to the present. The class provides a challenging experience for those students who are most capable and high achievers. The course deals with a variety of aspects of American History: the American Revolution, the Jacksonian period, Civil War and Reconstruction, the Populist-Progressive period and the New Deal, and international affairs and domestic change in the post-1945 period. The class will be asked to analyze and interpret historical information through research projects and primary documents. A college text will be used. The AP exam is required for college credit.

Open to: 11
Prerequisite: Hon. World Hist.
with 2.75 GPA or Teacher
Recommendation

ECONOMICS

.5 credit

6270

The student will explore and learn: the principles of the American Free Enterprise System; the individual and his role in the modern economy; and the international factors that have changed our economy. Both historical and modern concepts and developments will be studied. The student will have an understanding of basic economics. The student will develop the skills and knowledge needed for informed personal and social decision making.

Open to: 12
Prerequisite: None

AMERICAN GOVERNMENT

.5 credit

6290

This course provides a concentrated study of the three levels of American Government (local, state, and national). The student will examine the roles of public opinion, civil liberties, political parties and interest groups. Case studies will be used to teach all sides of current issues and to help students form and defend their own positions. Supreme Court cases and current events will also supplement this course.

Open to: 12
Prerequisite: None

AFRICAN AMERICAN STUDIES

.5 credit

6340

African-American studies is an indepth look at historical contributions of the African-American to human kind in global context and the United States in particular.

Open to: 11, 12
Prerequisite: None

STREET LAW

.5 Credit

6080

This course is designed to introduce students to the major legal concepts, which govern our society. Mock trials, debates, role-plays, discussion, guest speakers, movies and cooperative learning experiences are just a few of the techniques used in this class. This course takes a common sense approach to our legal system including crime, justice and corrections with and emphasis on active participation and current events.

Open to: 11,12
Prerequisite: None

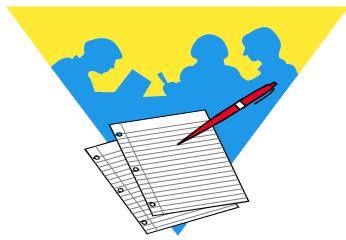
**ADVANCED PLACEMENT
EUROPEAN HISTORY**

1 credit

6240

This course will cover the major political, intellectual, economic, social and cultural events of Europe from the renaissance to the present. The college text will be supplemented with primary source readings, interpretive works and fiction. Discussion, visuals and lectures will be used to refine student's analytical and interpretive skills. Research papers and book reports are required.

Open to: 12
Prerequisite: AP Amer. History with
2.75 GPA or Teacher
Recommendation



Tech Prep

AUTOMOTIVE YOUTH EDUCATION SYSTEM (A-YES)

3 Credits

7500 & 8500

Currently there is a large demand for highly skilled auto technicians. This High Tech Automotive program will give you the skills you need to meet these demands. These skills will open doors to a number of career opportunities including: on-board computer diagnostic repair, emission controls testing and repair, fuel injection service, and a complete understanding of all the many systems on today's cars. To supplement classroom training, students will be exposed to business through speakers, job shadowing, and internships. Students may enter the work force or continue their education in the automotive field through Stark State Technical College. A Post Secondary Option agreement has been made for any senior with a 3.0 GPA to attend classes at no cost.

Open to: 11,12
Prerequisite: 2.0 GPA or higher **or**
Parent/Teacher Recommendation
Student Responsibility, Steel Toe
Boots, and Safety Glasses

BUSINESS TECHNOLOGY

3 Credits

9100 & 9120

Students enrolled in Tech Prep Business Technology will gain a general background in business education, training in employability skills, and intensive training in computer applications and office technology. Upon completing this two-year program (11th and 12th grades) successfully, students will be prepared to continue their education in a two-year associate degree program at a college or university **or** seek employment in a business environment. Training can lead to the following business occupations: office management specialist, computer user specialist, management information specialist, and accounting specialist. To supplement classroom study and training, students have the advantage of being exposed to business occupations through speakers and field trips. Students also have the opportunities for shadowing business people and working internships to gain first-hand business knowledge and work experience.

Open to: 11, 12
Prerequisite: Tech Prep Student

NETWORKING

3 credits

9230

Network Systems is an Information Technology program that will provide students with the necessary skills to analyze network system needs for design, installation, maintenance, and management of network and computer systems.

Essential skill areas include, but are not limited to: Information Technology Basics, Computer Applications and Operations, Network Administration, Network Design, Network Troubleshooting, Computer Hardware Maintenance, Network Security, and Communications Skills.

East has become a **Cisco** Networking Academy. Using Web technologies, the Cisco Networking Academy Program prepares students for the 21st century workplace and serves as a model for successful e-learning. At the end of the two-year program, the student has covered material required to become a Cisco Certified Network Associate. Students may choose to continue their education at The University of Akron to pursue a Computer Information Systems degree.

Open to: 11, 12
Prerequisite: Teacher and Counselor Recommendation

Principles of Electronic Engineering - Level I

1 credit

C133

A course that helps students understand the field of electronic engineering/engineering technology. Exploring various technology systems and manufacturing processes help students learn how electronic engineers and technicians use math, science and technology in an engineering problem solving process to benefit people. The course also includes concerns about social and political consequences of technological change and its influence on society. As a major portion of this course Customer Service Specialist certification material is covered culminating in a nationally recognized certification for those students that successfully pass the exam.

Open to: 9

Fundamental of Electronic Engineering - Level II

1 credit

C142

A course that helps students understand the field of electronic engineering/engineering technology. This course explores a variety of electronic components and how they react in an AC environment. Trigonometry and Algebra are used calculate circuit variables for the purpose of system design. These design applications are then put to work as the course explores manufacturing systems and programmable logic control. Students are then introduced to autonomous robot design and programming. Students learn how electronic engineers and technicians use math, science and technology in an engineering problem solving process to benefit people. The course also includes concerns about social and political consequences of technological change and automation on society.

Open to: 10
Prerequisite: Completion of Levels I

Digital Electronic Engineering - Level III

1 credit

C144

A course that helps students understand the field of digital electronic engineering/engineering technology. This course explores a variety of digital electronic components and how they are interconnected to perform logical circuit operations in real world home, industrial and computer applications. Boolean Algebra is used to calculate circuit operation and simplification for the purpose of system design. These design applications are then put to work as the course explores digital applications used in the home, industrial manufacturing and computer systems. Students then apply the digital technology learned to design, construct, program and compete with an autonomous robot in regional and state level competitions. Students learn how electronic engineers and technicians use math, science and technology in an engineering problem solving process to benefit people.

Open to: 11

Prerequisite: Completion of Levels I, II

Microprocessor Control Engineering - Level IV

1 credit

C145

A course that helps students understand the theory and applications of microprocessor control as it applies to engineering/engineering technology. This course explores a microprocessor control system beginning at the component level and advancing through machine level programming and troubleshooting. The microprocessor control system is then programmed and interfaced to control real world applications such as those used in computers, robotics and industrial manufacturing. Students then apply this technology to design, construct, and program and compete with an autonomous robot in regional and state level competitions. Students learn how electronic engineers and technicians use math, science and technology in an engineering problem solving process to benefit people. The course also includes concerns about social and political consequences of technological change.

Open to: 12

Prerequisite: Successful Completion of Levels I, II and III

E-COMMERCE/Marketing

3 credits lab

7230 & 8220

Students training in this area will gain general marketing skills and the skills and knowledge to develop and implement E-commerce marketing activities for business conducting transactions in an online environment. The students in this class are innovators. They are high-energy teens that have an entrepreneurial spirit, are enthusiastic about their work and are willing to put in the extra time and effort needed to make their companies and themselves successful. Students in this program will have the opportunity to participate in DECA (an association of marketing students), leadership activities and competitions with other students at the district, state, and national level. Marketing students also have the opportunity to earn college credits while still in high school. Students may “bank” credits they earn until they enroll in the University of Akron.

Open to: 11, 12

Prerequisite: Teacher Recommendation