

# Hartford High School Course Directory 2018 - 2019

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# **Mission Statement**

**Hartford Public Schools will provide a quality education  
in a caring and safe environment to all students.**

## **Central Office**

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## **Hartford High School**

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## Desired Student Outcomes

A student who graduates from Hartford High School will:

- ✦ Have demonstrated continuous improvement in academic performances as evidenced by the Improved GPA Recognition Honor Roll.
- ✦ Possess skills in problem-solving and decision-making while demonstrating responsibility for consequences.
- ✦ Communicate ideas effectively and correctly in speaking and writing.
- ✦ Possess the skills necessary to be a responsible citizen who demonstrates concern, tolerance, and respect for others and for him/herself.
- ✦ Sustain a high level of self-esteem through emotional, intellectual, and physical well-being.

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Hartford High School requires a student to accumulate a minimum of **26 credits to graduate**. This total must include 19 credits in the Core Courses listed below. The remaining 7 credits are taken as electives.

Core Course Requirements	Credits Required
English Language Arts 1 Credit – English 9 1 Credit – English 10 1 Credit – American Literature 1 Credit – British Literature	4
Social Studies: 1 Credit – U.S. History and Geography ½ Credit – U. S. Government ½ Credit – Macroeconomics 1 Credit – World History and Geography	3
*Physical Education	1 ½
Mathematics: 1 Credit – Algebra I 1 Credit – Geometry 1 Credit – Algebra II 1 Credit – Mathematics Elective	4
Science: 1 Credit – Biology 1 Credit – Chemistry/ Physics/ Anatomy/ or Agriculture Science 1 Credit – Science Elective	3
World Language Note: 1 credit if student takes additional credit in Fine Arts, Performing arts or CTE Program (Up until Class of 2020) *Many 4 year universities look for 2 years of a language for their admission criteria	2
Health	½
Fine Arts (Band, Choir, Art, some CTE)	1
Total	19

\*Students who meet one of the following requirements may opt out of 1 physical education credit.

- 4 years of Band
- Complete 10 college courses during their Junior and Senior years
- Participate in 8 athletic seasons

### Student Progress

For a student to be considered on track to graduate with their graduating a required number of credits must be successfully completed at the conclusion of each school year. The chart below illustrates the minimum number of credits that must be successfully completed at each level in order to be on track for graduation.

Grade Level	<u>Minimum</u> number of credits that must be successfully completed at the conclusion of each year.
Freshman	5
Sophomore	12
Junior	19
Senior	26

**Business/Computers**

**Accounting I**

Note: This course can be used to satisfy the Math elective as required by the Michigan Merit Curriculum

Course Description: Accounting is the essential aspect of every business institution and organization. As future workers, small business owners, and entrepreneurs, students who understand basic accounting principles will more knowledgeably manage their company's financial resources. As citizens, future parents, and investors, these students will be better prepared to make the economic decisions that will impact their communities and make financial decisions that will affect their own economic futures. Students will learn the accounting cycle, accounting process and preparation of financial statements in a manual and computerized format.

Applicable Grades: 10, 11, 12

Prerequisite Course: None

Length of Course: One year

Course Expectations: Students will be issued a workbook and textbook to be used in the classroom. Students must complete class work in a manual and computerized format. Vocabulary and general knowledge will be tested from each chapter. In addition to chapter tests, study guides, and in-class work, a mid-term and final exam will contribute to the total grade achieved.

## Foreign Language

### **Pokagon**

Course Description:

Students will be introduced to the language and culture of the Potawatami Native American Tribe. There will be projects and assignments to take home and work on during class.

Applicable Grades: 9-12

Prerequisite Courses: None

Length of Course: One year

Course Expectations: It is expected that students will be active participants during class activities

### **Pokagon 2**

Course Description:

Students will continue to learn about the language and culture of the Potawatomi Native American Tribe. There will be projects and assignments to take home and work on during class.

Applicable Grades: 10-12

Prerequisite Courses: None

Length of Course: One year

Course Expectations: It is expected that students will be active participants during class activities

### **Pokagon 3**

Course Description:

Students will continue to learn about the language and culture of the Potawatomi Native American Tribe. There will be projects and assignments to take home and work on during class.

Applicable Grades: 10-12

Prerequisite Courses: None

Length of Course: One year

Course Expectations: It is expected that students will be active participants during class activities

### **Spanish 1**

Course Description: Students will be introduced to the language by listening to spoken Spanish and acting on the commands given by the instructor. There will be work in listening, reading, writing, and speaking. Students will learn the Spanish present and past tenses. There will be an introduction to Hispanic culture through films and class study. Students are encouraged to use Spanish daily in the classroom.

Applicable Grades: 9, 10, 11, 12  
Prerequisite Courses: “C” or better in English recommended  
Length of Course: One year

Course Expectations: It is expected that students will use Spanish as much as possible in the classroom and will be active participants in class activities.

## **Spanish 2**

Course Description: Students will review the vocabulary and grammatical structures from Spanish I. They will learn more verb tenses and be encouraged to use Spanish more in the classroom. There will be opportunities to be creative in Spanish through writing, speaking or dramatizing.

Applicable Grades: 10, 11, 12  
Prerequisite Course: “C” or better in Spanish I recommended  
Length of Course: One year

Course Expectations: It is expected that students will use Spanish as much as possible in the classroom and be active participants in class activities. Students will be expected to write a short composition each week.

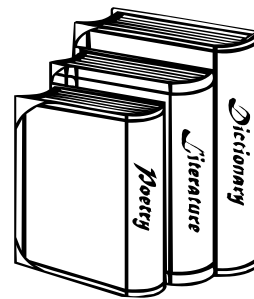
## **Spanish 3 & 4/ Spanish for Native Speakers**

Course Description: Students will review grammar and vocabulary from Spanish 2 and 3 as well as learn new verb tenses, commands, vocabulary, etc. They will do short readings by various Spanish authors. There will be an emphasis on oral work in the classroom, utilizing class discussion, dramatizations, listening exercises, projects etc. There will be internet projects to learn language and culture and these projects will be done mostly on your own time at home. There will also be a composition due every other week. Compositions will be graded for grammar, spelling, and punctuation.

Applicable Grades: 11,12

Prerequisite Course: “B” or better in Spanish 2 or 3  
Length of Course: One year

Course Expectations: Students will be expected to speak Spanish almost exclusively in the classroom. They are also expected to be active participants in class discussions as well as activities.



## **Language Arts**

### **English 9**

Course Description: The goal for English Language Arts 9 is to build a solid foundation of knowledge, skills, and strategies that will be refined, applied, and extended as students engage in more complex ideas, texts, and tasks. In English Language Arts 9, students will be introduced to the various genres of classic and contemporary narrative and informational texts that will be read and analyzed throughout high school. Ninth graders will connect with and respond to texts by analyzing relationships within and across families, communities, societies, governments, and economies. Through the lens of Inter-Relationships and Self-Reliance, they will consider how they build relationships, how their relationships impact others, and their responsibility to society.

Applicable Grades: 9

Prerequisite Course: None  
Length of Course: One year

Course Expectations: Students are expected to work cooperatively and exhibit a satisfactory work ethic.

### **Honors English 9**

Note: Students who do not earn a “B” or better in a semester may be moved to the regular English 9 course the following semester and will not be allowed to enroll in Honors English classes the following year.

Course Description: The goal for Honors English Language Arts 9 is for students of above average ability to build a solid foundation of knowledge, skills, and strategies that will be refined, applied, and extended as students engage in more complex ideas, texts, and tasks. In Honors English Language Arts 9, students will be introduced to the various genres of classic and contemporary narrative and informational texts that will be read and analyzed throughout high school. Ninth graders will connect with and respond to texts by analyzing relationships within and across families, communities, societies, governments, and economies. Through the lens of Inter-Relationships and Self-Reliance, they will consider how they build relationships, how their relationships impact others, and their responsibility to society.

Applicable Grades: 9  
Prerequisite Courses: Placement recommendation by eighth grade teacher  
Length of Course: One year

Course Expectations: Students are expected to work cooperatively and exhibit a satisfactory work ethic while striving to maintain a “B” average or above throughout each semester. Honors English students must take responsibility for themselves and be motivated to accept a challenge.

### **English 10**

Course Description: The goal for English 10 is to continue to build a solid foundation of knowledge, skills, and strategies that will be refined, applied and extended as students engage in more complex ideas, texts, and tasks. In English 10, students will add to the list of various genres of classic and contemporary narrative and informational texts that will be read and analyzed throughout high school. Tenth graders will connect with and respond to texts through critical response and stance. They will learn to evaluate for validity and quality, to balance and expand their perspectives promoting empathy, social action and appropriate use of power. Critical Response and Stance offers students the lens to assess and modify their beliefs, views of the world, and how they have the power to impact them.

Applicable Grades: 10  
Prerequisite Course: None  
Length of Course: One year

Course Expectations: Students are expected to work cooperatively and exhibit a satisfactory work ethic.

### **Honors English 10**

Note: Students who do not earn a “B” or better in a semester may be moved to the regular English 10 course the following semester and will not be allowed to enroll in Honors English classes the following year.

Course Description: The goal for Honors English 10 is for students of above average ability to continue to build a solid foundation of knowledge, skills, and strategies that will be refined, applied and extended as students engage in more complex ideas, texts, and tasks. In Honors English 10, students will add to the list of various genres of classic and contemporary narrative and informational texts that will be read and analyzed throughout high school.

Tenth graders will connect with and respond to texts through critical response and stance. They will learn to evaluate for validity and quality, to balance and expand their perspectives promoting empathy, social action and appropriate use of power. Critical Response and Stance offers students the lens to assess and modify their beliefs, views of the world, and how they have the power to impact them.

Applicable Grades: 10

Prerequisite Courses: Completion of Honors English 9 with a “B” or above and/or recommendation of instructor.

Length of Course: One year

Course Expectations: Students are expected to work cooperatively and exhibit a strong work ethic while striving to maintain a “B” average or above throughout each semester.

### **American Literature**

Course Description: The goal for American Literature is to continue to build a solid foundation of knowledge, skills, and strategies that will be refined, applied, and extended as students engage in more complex ideas, texts, and tasks. In American Literature, students will add to the list of various genres of classic and contemporary narrative and informational texts that will be read and analyzed throughout high school with a special focus on American Literature and ACT success. Eleventh graders will connect with and respond to text through transformational thinking. They will learn to use forward thinking to help make better decisions, to generate new ideas for solving problems, and to find wisdom. They will build a context for change in their lives and develop realistic plans for the future.

Applicable Grades: 11

Prerequisite Courses: None

Length of Course: One year

Course Expectations: It is expected that students will successfully complete the course of study outlined, work cooperatively and exhibit a satisfactory work ethic.

### **Honors American Literature**

Note: Students who do not earn a “B” or better in a semester may be moved to the regular American Literature course the following semester and will not be allowed to enroll in Honors English classes the following year.

Course Description: The goal for Honors American Literature is for students of above average ability to continue to build a solid foundation of knowledge, skills, and strategies that will be refined, applied, and extended as students engage in more complex ideas, texts, and tasks. In Honors American Literature, students will add to the list of various genres of classic and contemporary narrative and informational texts that will be read and analyzed throughout high school with a special focus on American Literature and ACT success. Eleventh graders will connect with and respond to text through transformational thinking. They will learn to use forward thinking to help make better decisions, to generate new ideas for solving problems, and to find wisdom. They will build a context for change in their lives and develop realistic plans for the future.

Applicable Grades: 11

Prerequisite Courses: Completion of Honors English 9 and Honors English 10 with “B” or above and/or recommendation from instructor.

Length of Course: One year

Course Expectations: It is expected that students will successfully complete the course of study as outlined, work cooperatively, exhibit a satisfactory work ethic while striving to maintain a “B” average or above throughout each semester.





### **British Literature**

Course Description: The goal for British Literature is to refine, apply, and extend the solid foundation of knowledge, skills, and strategies developed in English Language Arts 9 through 11. Using the lens of leadership skills, British Literature students will develop a world perspective by analyzing classic and contemporary texts in of variety of genres, with a focus on British Literature. Twelfth graders will synthesize information, ideas, and themes to understand the past, the present, and to think innovatively about the future. They will identify and apply their own leadership skills and prepare for responsible action as American citizens in the context of the global world.

Applicable Grades: 12

Prerequisite Courses: None

Length of Course: One year

Course Expectations: It is expected that the student will complete the course of study as outlined, work cooperatively and exhibit a satisfactory work ethic.

### **Honors British Literature**

Note: Students who do not earn a “B” or better in a semester may be moved to the regular World Literature course the following semester and will not be allowed to enroll in Honors English classes the following year.

Course Description: The goal for Honors British Literature is for students of above average ability to refine, apply, and extend the solid foundation of knowledge, skills, and strategies developed in English Language Arts 9 through 11. Using the lens of leadership skills, Honors British Literature students will develop a world perspective by analyzing classic and contemporary texts in of variety of genres, with a focus on British and world literature. Twelfth graders will synthesize information, ideas, and themes to understand the past, the present, and to think innovatively about the future. They will identify and apply their own leadership skills and prepare for responsible action as American citizens in the context of the global world.

Applicable Grades: 12

Prerequisite Course: Completion of Honors English 9, Honors English 10 and Honors American Literature, with a “B” or above and/or recommendation of instructor.

Length of Course: One year

Course Expectations: Students are expected to strive to maintain a “B” or above average throughout each semester and/or exhibit strong academics to be placed in and remain in *Honors British Literature*.

## **Mathematics**

### **Math Strategies**

Course Description: This course is taken in conjunction with Algebra I. Students are identified by the math department to take this course. It is a class that will support success in the Algebra I course for students who struggle with some of the algebra level math concepts.

Upon completion, students should be able to solve problems, apply critical thinking skills and communicate effectively. The curriculum spans a wide range of topics; but, special emphasis is given to the topics most

needed by the students. Computer tutorials and integrated mathematical software programs will be used in combination of the material used in the pre-algebra class. Emphasis is on experiences that enhance the materials presented in the class. Since this is a second Math class, in addition to a student's "regular" Math class, topics are covered at an individual pace to help them master the skills.

Applicable Grades: 9

Prerequisite: Teacher Recommendation

Length of Course: One year

Course Expectations: This course will provide a solid foundation for students to successfully move on to Algebra I. Student will complete assigned coursework and meet the evaluation requirements to receive credit for this class.

### **Algebra I**

Course Description: Students will work at a rigorous pace to complete the material outlined. They will learn about different number representations and number sense of real and complex numbers. Students will learn how to manipulate and solve equations as well as inequalities of the following functions: linear, quadratic, polynomial, rational, power, exponential, and logarithmic. Definitions and properties of the above functions will be a large part of the course material. Students will also learn real world applications of the family of functions.

Applicable Grades: 9, 10, 11, 12

Prerequisite: Willingness to learn, determination to succeed and a solid background and success in math operations previously learned.

Length of Course: One year

Course Expectations: Students are expected to be dedicated, hardworking and meet the

evaluation requirements to receive credit for this course.

### **Geometry**

Course Description: This course will introduce the figures, properties and relationships of geometric shapes. The student will be able to define, describe and draw examples of geometric figures such as, but not limited to, lines, segments, rays, planes, triangles, angles and polygons. They will construct oral and written arguments to prove some of the relationships of geometric figures. We also cover measuring and construction of shapes, writing formal and informal proofs, using deductive reasoning and applying logic and algebra to solve geometric problems.

Applicable Grades: 9, 10, 11, 12

Prerequisite Courses: Successful completion of Algebra I or Algebra A & B

Length of Course: One year

Course Expectations: Students will do the course work assigned and meet the evaluation requirements to receive credit for the course.

### **Honors Geometry**

Course Description: This class is specifically designed on a continuation of the Honors Algebra class. It will give the students a more thorough knowledge of Geometry. This class will go in depth at an accelerated pace.

Applicable Grades: 10

Prerequisite Courses: Honors Algebra I

Length of Course: One year

Course Expectations: Students in this class must have a substantial foundation of Algebra I.

### **Algebra II**

Course Description: The students will review the real numbers and solving first-degree equations. We will solve and graph

inequalities and combined inequalities and absolute value equations and inequalities. We will solve and graph linear two variable equations and functions. After reviewing properties of exponents and various factoring techniques, we will solve quadratics and simplify rational algebraic expressions. Algebra II will also include non-factoring techniques for solving quadratic equations and functions. We will also study irrational and complex numbers. Problem solving will be included at appropriate times throughout the class. Additional topics will be included if time permits.

Applicable Grades: 9, 10, 11, 12

Prerequisite Courses: Algebra I (or Algebra A and B) and Geometry. The only exception would be to take Geometry concurrently with Algebra II. This would require written permission from both instructors and the recommendation of the Algebra I instructor.

Length of Course: One year

Course Expectations: Students are expected to do the course work assigned and meet the evaluation requirements to receive credit for this course.

### **Algebra IIR**

Course Description: This course will teach the students the same content as the Algebra II course but is broken down into 4 semesters. This course allows time for the instructor and student to identify and learn the skills and content necessary to fill in gaps of knowledge. Students who take this course will be required to pass and complete all 4 semesters in order to meet graduation requirements. The second year of this course will count as the 4<sup>th</sup> level of math. Students will receive .5 credit for each semester of the course.

Applicable Grades: 11, 12

Prerequisite Courses: Algebra I (or Algebra A and B) and Geometry. This course would

require a recommendation from the math department.

Length of Course: Two years

Course Expectations: Students are expected to do the course work assigned and meet the evaluation requirements to receive credit for this course.

### **Honors Algebra II**

Course Description: This class is specifically designed on a continuation of the Honors Geometry class. It will go in depth at an accelerated pace.

Applicable Grades: 10, 11

Length of Course: One Year

Prerequisite Courses: Honors Algebra I, Honors Geometry and teacher's recommendation

Course Expectations: Students must have a substantial background of Algebra I. Students will be expected to work at an accelerated pace in and out of class.

### **Coordinate Algebra**

Course Description: Coordinate Algebra is a full-year mathematics course intended for high school students who have successfully completed general mathematics for Algebra, Geometry and Algebra II. This course focuses on complex operations of integers and variables while incorporating algebraic techniques and methods in order to develop student understanding of mathematical expressions, and concepts involving linear, quadratic, exponential and polynomial functions. Coordinate Algebra also integrates statistical theory with computational practices as well as to include coordinate geometry and geometric concepts, theorems and skills. Students are exposed to several branches of mathematics and will explore ways in which each one can be used as a mathematical model in understanding the world. Coordinate Algebra is a blended course where the content will be given online through Odysseyware Software in a room with a certified mathematics instructor for guidance.

Applicable Grades: 12

Length of Course: One Year

Prerequisite Courses: Algebra I, Geometry, and Algebra II.

Course Expectations: Students must have a substantial background of the state required mathematics courses. Students will be expected to work at an accelerated pace in and out of class.

### **Pre-Calculus**

Course Description: This course will cover both Trigonometry and introductory Calculus topics. Students will understand relations and function, graphing functions, Trigonometric functions and their graphs, inverses, and the concept of odd/even functions. They will also use Trigonometry to solve triangles, prove identities and solve practical problems. The course will cover some beginning Calculus topics including, but not limited to, polynomials, exponential, logarithmic and circular functions. Scientific calculators will be used throughout the course where appropriate. Students will also learn to model a problem mathematically and learn that there is often more than one model that describes the same situation.

Applicable Grades: 11, 12

Prerequisite Courses: Successful completion of Algebra I and completion of Algebra II with a “B” or better. Successful completion of Geometry is not required but is strongly recommended.

Length of Course: One year

Course Expectations: Students will be expected to do the course work assigned and meet the evaluation requirements to receive credit for the course.

### **AP Calculus**

Calculus AB is a college-level course intended for students who have a thorough knowledge of college preparatory mathematics. AB Calculus is a course in introductory calculus designed to prepare

students for the Advanced Placement Calculus AB exam, but also for higher-level college courses in mathematics. Students interested in pursuing programs in mathematical sciences, physics, chemistry, life sciences, economics, computer science, or engineering are especially encouraged to take this course.

Applicable Grades: 12

Prerequisite Courses: Successful completion of Algebra 2 and Pre-Calculus with a “B” or better.

Length of Course: One year

Course Expectations: Students will be expected to do the course work assigned and meet the evaluation requirements to receive credit for the course.



## **Physical Education & Health**

### **Freshman Semester Physical Education**

Course Description: This course is designed to fulfill the physical education requirement in high school. Students will actively participate in indoor and outdoor sports and activities. This course offers varied activities from lacrosse, soccer, volleyball, football and basketball to ping pong, badminton and bowling.

Applicable Grades: 9

Prerequisite Course: None  
Length of Course: One year

Course Expectations: Students will need to come prepared every day to class with a change of clothes, gym shoes, a towel and a readiness to participate. Classroom rules and additional information will be provided with the course syllabus during the first class sessions.

### **Fitness**

Course Description: This class is designed to improve students' strength, speed, and develop overall athleticism. Weight lifting principles and the gymnasium will be utilized to increase student's muscular strength and endurance, as well as, improve overall speed. This class is designed for the student who wants to improve his or her overall strength and speed. Olympic style weightlifting, as well as, auxiliary lifting, will be performed three days a week, with the other two days focusing on running, agility, conditioning, or knowledge components.

Course Focal Points: Triple extension principles, increasing muscular strength, increasing flexibility, improving quickness and agility, improving footwork, form running, speed training, Olympic style lifting, plyometric training, developing explosiveness and power, increasing anaerobic capacity, and many others.

Knowledge Components: Strength training principles and techniques, factors that affect muscular strength, basic anatomy and physiology, nutrition aspects, anaerobic respiration/glycolysis, types of muscle fibers, types of exercises, training techniques, and others.

Applicable Grades: 10-12  
Prerequisite Course: None,  
Length of Course: One year

Course Expectations: Students will need to come prepared every day to work. This means being on time, having an acceptable change of clothes, athletic shoes, a towel and a readiness to participate. Students need to be intrinsically motivated. Some aspects of this class are repetitive, but repetition can be needed to become proficient at something. Classroom rules and additional information will be provided with the course syllabus during the first class sessions.

### **Advanced Physical Education**

Course Description: This class will emphasize weightlifting, strength or toning, and aerobic fitness. The class will be designed for the student who wants to improve his or her conditioning. Weightlifting will be done three days a week. While running, aerobics or other types of conditioning will be done the other two days. This course is specifically designed for those who wish to investigate concepts revolving around a healthy body.

Applicable Grades: 10, 11, 12  
Prerequisite Courses: By permission of instructor only  
Length of Course: One year

Course Expectations: Students will need to come prepared every day to class with a change of clothes, gym shoes, a towel and a readiness to participate. Classroom rules and additional information will be provided with the course syllabus during the first class sessions.

### **Health**

Course Description: This **required** course reflects the latest developments in health to encourage students to extend their knowledge and to motivate students to take a positive interest in their own health. Some of the units to be covered are prevention, nutrition, stress, fitness, exploring various systems of the body, AIDS and other infectious diseases, alcohol, drugs and tobacco. The focus of this class will be on

personal decisions and prevention through awareness and information.

Applicable Grades: 9

Prerequisite Course: None

Length of Course: One semester

Course Expectations: This course offering is designed to provide students with an understanding that staying in good health is an important goal for everyone. Students will examine behaviors that help anticipate health problems and prevent them from occurring. Health care includes proper maintenance of the body, eating a well-balanced diet and getting plenty of rest. This course will promote an awareness of current crucial issues (i.e., substance abuse) and help to develop knowledge in family planning, reproductive health, STD's and other areas involved in sex education. Additional information is provided with the course syllabus to be presented to students during the first class session.

## **Project Lead the Way (PLTW)**

### **PLTW Computer Science Essentials**

Computer Science Essentials Computer Science Essentials exposes students to a diverse set of computational thinking concepts, fundamentals, and tools, allowing them to gain understanding and build confidence. Students use visual, block-based programming and seamlessly transition to text-based programming with languages such as Python® to create apps and develop websites, and learn how to make computers work together to put their design into practice. They apply computational thinking practices, build their vocabulary, and collaborate just as computing professionals do to create products that address topics and problems important to them

Applicable Grades: 9,10,11,12

Prerequisite Courses: None

### **PLTW Introduction to Engineering Design**

Course Description: Introduction to Engineering Design (IED) is a high school level course that is appropriate for 9th or 10th grade students who are interested in design and engineering or another technical career. 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 (APPB) learning. Used in combination with a teaming approach, APPB-learning challenges students to continually hone their interpersonal skills and creative abilities while applying math, science, and technology knowledge learned in other courses to solve engineering design problems and communicate their solutions. IED also allows students to develop strategies to enable and direct their own learning, an ultimate goal of education.

Applicable Grades: 9, 10, 11, 12

Prerequisite Courses: None

Course Expectations: students will use industry standard 3D solid modeling software to facilitate the design and documentation of their solutions to design problems and challenges. As the course progresses and the complexity of the design problems increase students will learn more advanced computer modeling skills as they become more independent in their learning, more professional in their collaboration and communication, and more experienced in problem solving.

### **PLTW Principles of Engineering**

Course Description: Through problems that engage and challenge, students explore a broad range of engineering topics, including mechanisms, the strength of structures and

materials, and automation. Students develop skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation. This course exposes students to major concepts they'll encounter in a post-secondary engineering course of study. Topics include mechanisms, energy, statics, materials, and kinematics.

Applicable Grades: 10, 11, 12

Prerequisite Courses: PLTW Intro to Engineering Design

Course Expectations: Students develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges. Students will also document their work and communicate solutions.

### **Coding and Video Game Design**

Course Description: Coding and Video Game Design is a year-long course. Students interested in Computer Science will be introduced to C++, Basic, Visual coding and other programming structures while incorporating graphics editing. Coding will be used to design video games on different mediums and to explore apps. Coding is a platform utilizing creativity, problem solving, storytelling, as well as programming. **This course will fulfill required VPAA credit.**

Applicable Grades: 10, 11, 12

Prerequisite courses: None

Course Expectations: Students will gain an understanding of areas stated in the course



description. Projects will be required throughout the year.

## **Science**

### **Biology**

Course Description: This course covers cellular biology, genetics, microbiology, botany, zoology and ecology. Laboratory experiments and dissection are required. This is the first course in the academic curriculum of the science department.

Applicable For Grades: 9, 10, 11

Prerequisite Courses: None

Length of Course: One year

Course Expectations: Students will gain an understanding of areas stated in the course description. Projects will be required throughout the year.

### **Practical Biology**

Course Description: This course will familiarize students with everyday practical uses of biology. Such things as food chains, ecology, recycling, and horticulture will be explored. Laboratory experiments, field work and field work are required.

Applicable For Grades: 9, 10, 11

Prerequisite Courses: None

Length of Course: One year

Course expectations: Students will gain an understanding of areas stated in the course.

### **Anatomy and Physiology**

Course Description: This is a year-long course for college bound students and/or





students who plan on entering the health science field. Students will study the structure and function of the human body. Topics will include basic chemistry, cellular specialization, genetics, diseases, the major body systems and how they work together to maintain homeostasis, and much more. This class is writing intensive and will be taught using lecture, labs, class discussion and the dissection of various vertebrate organisms.

Applicable For Grades: 11, 12

Prerequisite Course: A “C” or higher in Biology or Permission of Instructor

Length of Course: One year

Course Expectations: After completing this course, students will have studied the anatomy and physiology of the human body by way of dissection of lower animals and the use of models and diagrams.

### **Physics**

*Only taught in ODD school years*

Course Description: This course covers the study of energy transfer, dynamics, work and power, and kinetic theory. Additional topics covered include light, atomic radiation, electricity, and magnetic fields.

Applicable For Grades: 11, 12

Prerequisite Courses: Geometry, Algebra II (concurrently). Students need to have a good understanding of solving algebraic equations.

Length of Course: One year

Course Expectations: Problem solving and critical thinking skills will be developed. Students will develop a knowledge base that will prepare them for college level courses. Students need to be self-motivated and expect to be challenged.

### **Chemistry**

Course Description: This course introduces the fundamental concepts of chemistry with an emphasis on physical and chemical properties of matter, problem-solving, and

an introduction to chemical reactions. Other topics include atomic structure, periodic classification of elements, stoichiometry, solutions, acids and bases, pH and buffers, the gas laws, and chemical equilibrium. This course is math and reading intensive and will include labs.

Applicable For Grades: 11, 12

Prerequisite Courses: A “C” or higher in Algebra, Biology or Practical Biology or permission of instructor.

Length of Course: One year

Course Expectations: Students will exit this course with a solid understanding of the fundamentals of chemistry and chemical reactions.

### **Applied Chemistry**

Course Description: This course covers the basic principles of matter, liquids, gasses, atoms and energy.

Applicable Grades: 11, 12

Length of Course: One Year

Prerequisite Courses: Biology or Practical Biology

Course Expectations: Students will gain a basic understanding of chemistry through the areas listed in the course description.

### **Forensics**

Course Description: Forensics is a course that centers on problem solving. This class will require active hands-on participation. Inductive and deductive reasoning are used to discover the cause of the problems studied or crimes that were committed. This course does not just include the basics of criminology, but will include learning basic fundamentals of biology, chemistry and physics. This course is reading and writing intensive. Teamwork is stressed. Guest speakers may be utilized to information



regarding their expertise in forensics investigation. Career study is on-going.

Applicable Grades: 11,12

Prerequisite Courses: Integrated Science or Life and Space Science

Length of Course: One semester

Course Expectations: Students will be problem solvers, questioning events as to cause, procedure, improvements, etc. Use of various scientific principles will provide pathways to solutions. Students should leave this course with a basic knowledge of biology, chemistry, and physics.

### **Earth Space Science**

Students will explore the Earth/Moon system, Solar System, Star life cycle, Black holes, Big Bang Theory, space technology, and other topics.

Applicable For Grades: 10, 11, 12

Prerequisite Courses: None

Length of Course: One semester

## **Social Studies**

### **World History and Geography**

Course Description: The purpose of this course is to relate the cultures and achievements of the world's countries to today's global society. Students will be able to apply the five themes of geography (place, location, region, movement, human/environment interaction) to the different countries of the world. Students will discuss current global events and issues in order to understand how today's global economy functions. Students will write papers and work on projects to further their understanding of the history and geography of the major countries.

Applicable Grades: 11

Length of Course: Full Year

Prerequisite Courses: None

Course Expectations: Students should master the fundamental skills necessary to understand concepts noted in course description and evaluation procedure.

### **U.S. History and Geography**

Course Description: This is a required two-semester course for all sophomores. In U.S. History, students will study important periods of United States history and geography from pre-civil war years to current events.

Application For Grades: 9

Length of Course: Full Year

Prerequisite Courses: None

Course Expectations: Students who successfully complete this course will have an understanding of the Civil War, Reconstruction, Westward Expansion, Progressive Era, World War I, Depression, World War II, Vietnam, the civil rights movements and all other significant historical events up to the present time. Students will also be able to identify the influences of geography on these events and relate them to locations and places in the physical world.

### **Government**

Course Description: This course is required for graduation from Hartford High School. It is the study of national, state, and local government and is centered on two basic principle ideas: Why our government is organized the way it is and how it works in today's environment. The central theme emphasized throughout the course is the importance of citizen participation. Developing the skills to stay informed, make sound decision, vote and become part of the political process, to include running for and holding office, are all integral parts of the democratic process and are highlighted throughout the course. This class must be taken with the **Economics** course.

Applicable For Grades: 10



Prerequisite Courses: None  
Length of Course: One semester

Course Expectations: To master the fundamental skills necessary to understand our government and the rights and obligations of citizenship. In addition, each student is expected to gain a working understanding of the US Constitution.

### **Economics**

Course Description: The course, required for graduation, is designed to give students an understanding of basic economic principles and how to apply these to the free enterprise system and to their own individual lives. Units on the stock market, real estate, insurance, wills and collective bargaining should encourage rational decision making as well as contribute to sound financial planning. Basic economic laws and principles are integrated into the course content to better understand the need and timing of specific decisions. This class must be taken with the **Government** course.

Application For Grades: 10  
Prerequisite Courses: None  
Length of Course: One semester

Course Expectations: Master the fundamental skills necessary to understand those concepts noted in the course description.

## **Performing Arts**

### **Senior Band (Hartford Indian Emerald Vanguard)**

Course Description: An academic course covering fundamental music theory, music history and advance performance skills. Students will study the music from all periods of history and of varied compositional styles. Students will acquire public performance skills through required performances with both the Senior band and Hartford Indian Emerald Vanguard.

Applicable For Grades: 9, 10, 11, 12  
Prerequisite Course: None; however, previous musical experience is highly recommended.

Length of Course: One year

Course Expectations: The course work will consist of written work, musical preparation, music performance (required) and applications of historical and theoretical knowledge in musical performance.



School Equipment: The Hartford Public Schools makes the use of many forms of musical equipment, uniforms and facilities available to our students. Students using this equipment are financially liable for any damage caused to this equipment either through neglect or misuse.

### **Jazz Band**

Course Description: This class is involved in the study of the theory, history and performance of jazz music. This class is a performance intensive class with performances at concerts, sporting events, jazz festivals and community events.

Applicable For Grades: 9, 10, 11, 12  
Prerequisite Courses: None  
Length of Course: One year

Course Expectations: The course work will consist of written work, musical preparation, music performance (required) and applications of historical and theoretical knowledge in the performance of various styles of jazz music.

School Equipment: The Hartford Public Schools makes the use of many forms of musical equipment, uniforms and facilities available to our students. Students using

this equipment are financially liable for any damage caused to this equipment either through neglect or misuse.

### **Choir**

Course Description: This ensemble is a mixed group for guys and gals who are taking choir for the first time as well as for beginner students in their second or third year of choir, depending on their skill level.

Applicable Grades: 9, 10, 11, 12

Length of Course: Full Year

Prerequisite Courses: None

Course Expectations: To attend daily rehearsals in class. Students will prepare for public performances each quarter. They will learn a variety of musical styles and musical elements of theory and musicianship that are basic to the art of group singing.

Choir Uniform Requirements: Men must provide black dress shoes and socks.

Women must provide black dress shoes and black nylons.

## **Visual Arts**

### **Basic Design**

Course Description: Design is critical to all visual expression. Accordingly, this course introduces students to the formal elements of design – line, shape, color, texture, and space along with the principles of art.

Through challenging exercises and a variety of mediums and the use of technology, students are encouraged to explore traditional methods of organization and to discover new solutions on their own.

Projects may include both two- and three-dimensional concepts. Emphasis will also be placed on developing an appreciation and understanding of artists and art periods, both recently and historically.

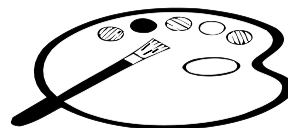
Applicable Grades: 9, 10, 11, 12

Prerequisite Courses: None

Length of Course: One year

### Course Expectations:

1. Develop a working knowledge of the art elements and principles while creating a variety of art products with various art materials and techniques.
2. Develop an appreciation for artists, both recently and historically.
3. Incorporate previously learned information into evaluating and critiquing your own work as well as that of others.
4. Develop on-line learning experiences through class work associated with research and communication in the area of art. **\*Qualifies as Online Experience if hours are met.**
5. The student will be responsible for course requirements as stated in the course syllabus.



### **Drawing and Painting**

Course Description: A creative approach will be taken toward drawing and painting through the use of various materials and techniques. Drawing will start out with the basics and then proceed into different mediums. A variety of paintings will be created through the use of watercolors, acrylics, oil paints, and mixed media. Students will be encouraged to develop a personal approach to the drawing and painting experience along with creating a variety of drawings and paintings.

Applicable Grades: 10, 11, 12

Prerequisite Courses: Basic Design

Length of Course: One year

### Course Expectations:

1. Incorporate previously learned art information into your own artwork along with furthering your

- knowledge in different drawing and painting materials and techniques.
2. Develop a personal approach to the drawing and painting experience along with creating a variety of art products.
  3. Develop on-line learning experiences through class work associated with research and communication in the area of art. **\*Qualifies as Online Experience if hours are met.** The student will be responsible for course requirements as stated in the course syllabus.

### **Life Skills**

Course Description: Subjects studied in this class include preparing for independent adult living such as: banking, budgeting, employment, insurance, income taxes, completing forms, food and clothing comparisons, becoming a careful consumer, parenting, resumes, job interviews, goal setting, and post-secondary planning of college, work, and housing. Also included is a “hands-on” approach to preparing simple meals and clothing repair.

Applicable Grades: 9, 10, 11, 12

Prerequisite: Permission of Administration

Length of Course: One year

Course Expectations: Participating in class discussions and activities, passing grades on test and quizzes, attend class daily and work toward self-improvement.

### **Reading Strategies**

Note: This course can be used to satisfy ½ of an elective credit towards the 26 required credits to graduate with the Michigan Merit Curriculum Diploma.

Course Description: Reading Strategies focuses on increasing a student’s independent reading level, their fluency, and their comprehension and vocabulary knowledge. This is an elective course designed as universal reading intervention. There is heavy reading, including short

novels, news articles and reading comprehension progress checks. Instruction in strategies to break down and approach different multisyllabic words is implemented throughout the semester.

Applicable Grades: 9, 10, 11

Prerequisite Course: None

Length of Course: 1 Semester

Course Expectations: Students will be issued the novels and become responsible for their care until the end of the semester. In addition to chapter tests, study guides, and in-class work, a final exam will contribute to the total grade achieved.

### **Peer to Peer Mentoring**

Course Description: Students who are interested in becoming a peer mentor to a special needs student must apply for the program. Specific students with IEPs are identified as students who would benefit from additional social support and guidance. Mentors will be assigned based on information provided in the essays on the application. The need for mentors is very limited. If you would like to apply you must complete and application during the Spring prior to the start of the new school. Applications provided in the guidance office upon request.

Applicable grades: 10, 11, 12

Prerequisite: None

Length of course: 2 semesters

### **Dual Enrollment**

Students may dual enroll at a college/university if they meet state guidelines. Dual enrollment eligibility is dependent on SAT, PSAT, and/or Accuplacer scores. Before enrolling, students must check with the Counseling Office to determine eligibility. Students are responsible to apply to the college of their choosing, submit a College Dual Enrollment Authorization Form to the college, and

complete a Hartford Dual Enrollment Form which is submitted to the high school Counseling Office.

### **Special Education**

Special education services are available for the basic academic classes for those who meet the state of Michigan requirements. Contact the Director of Special Education.

### **School-To-Work**

The school-to-work program is coordinated through the Tech Center. A student who wishes to enter this program **MUST** contact the counseling office for approval. The job in which the student will be engaged must be related to the student's Educational Development Plan (EDP). The purpose of the school-to-work program is to provide work experience in the student's area of interest. The positions may be paid or unpaid.

### **Credit Recovery**

Any student who has failed any course that must be made up (i.e. any core subject) can do so by enrolling in the Credit Recovery Program (CRP). This program is run after school. All students wishing to do Credit recovery must be approved by the Counseling Office

### **Online Courses**

Select students may take a variety of online courses offered through Odysseyware® or Michigan Virtual High School. Michigan Virtual course descriptions and list can be found on our website at:

<https://michiganvirtual.org/students/high-school/>

These courses are self-paced and are mentored by a Mentor. Each course must be completed within the semester that the course is taken. Failure to do so will result in the student receiving an "F" for the semester. Students wishing to take an online course(s) must seek permission from the Counseling Office. The courses available are as follows:

## Odysseyware Courses

Art History (ART7101) Sem	Info Information Technology (MISC1725) Sem
Agribusiness Systems (SS7510) Sem	Intro to Agriculture (MISC1734) Sem
Animal Systems (MISC1731) Sem	Intro to Human Growth and Develop (MISC1717) Sem
Business Computer Info Systems (BUS7210) Sem	Intro to Technology Support (MISC1726) Sem
Career Management (MISC1700) Sem	Law Enforcement Services (MISC1747) Sem
Careers in Health Sciences (MISC 1702) Sem	Music Appreciation (ART7105) Sem
Career Exploration 1 (MISC1749) Sem	Music Theory
Career Exploration 2 (MISC1750) Sem	Natural Resources Systems (MISC1735) Sem
Civil War (SS7511) Sem	Nursing (MISC1704) Sem
Corrections Policy & Procedures (MISC1744) Sem	Personal And Family Living (HEALTH7805) Sem
Digital Arts	Personal Care Services (MISC1721) Sem
Engineering and Design (MISC1738) Sem	Personal Finance (BUS7215) Sem
Engineering and Innovation (MISC1739) Sem	Physicians and Other Doctors (MISC1705) Sem
Essentials of Communication (BUS7205) Sem	Principles of Tech and Engineering (MISC1741) Sem
Family and Community Services (MISC1746) Sem	Psychology (SS7520) Sem
Fire and Emergency Services (MISC1746) Sem	Public Health (MISC1706) Sem
Food and Beverage Mgmt (MISC1709) Sem	Security and Protective Service (MISC1745) Sem
Food Safety and Sanitation (MISC1710) Sem	Therapeutics (MISC1708) Sem
Forensics (MISC1703) Sem	Transportation and Tours (MISC1716) Sem
Fund of Digital Media (MISC1723) Sem	Vietnam Era (SS7516) Sem

Full Year/Credit Recovery	Full Year/Credit Recovery
Algebra 1 (MATH7404) CR	French I (WL7603) CR
Algebra II (MATH7405) CR	Geometry (MATH7406) CR
Biology (SCI7902) CR	Government (SS7504) CR
Chemistry (SCI7920) CR	Health (HEALTH7805) CR
Economics (SS7505) CR	Physical Education and Physical Fitness
English 9 (ENG7323) CR	Physics (SCI7909) CR
English 10 (ENG7330) CR	Spanish I (WL7601) CR
English 11 (ENG7342) CR	Spanish II (WL7602) CR
English 12 (ENG7344) CR	US History Reconstruction (SS7715) CR
Earth Science (SCI7923) CR	World History (SS7512) CR

## List of Tech Center Programs

Advanced Manufacturing	Emergency Medical Technician (EMT)
Agriculture and Natural Resources	Engineering & Architectural Design
Allied Health Technologies	Fire Science
Auto Body Technician	Fundamentals of Patient Care
Auto BES	Law Enforcement
Auto EEP	Marketing/ Entrepreneurship
Cadet Teacher Academy	Medical Biotechnology
Commercial Design	Pharmacy Technician
Construction Trades	Polymer Technologies
Cosmetology	Print Media Technologies
Culinary Arts & Catering Management	Software Engineering
CyberSecurity & Computer Network Technology	Welding
Early Childhood Careers & Education	

Generally Juniors attend the Tech Center in the **AM** and Seniors attend the Tech Center in the **PM**. Note that certain programs only meet in the **AM** or only in the **PM**.

## **Van Buren Early Middle College Program**

### **Mission:**

The mission of the Van Buren Early College Program is to build community partnerships that promote opportunities for interested students to prepare for high-wage, high-demand careers in the workplace by utilizing rigorous, challenging, and accelerated educational experiences.

### **The Vision**

The Van Buren Early College Program is designed to target students who wish to get a jump start on their careers by providing them with an opportunity to complete their Michigan Merit Curriculum graduation requirements while simultaneously gaining knowledge, skills, work experience, and credit toward either a program certification or major area of study.

Through coordinated, rigorous, and accelerated educational and work experiences involving partnerships between high schools, career-technical education, and community colleges, students will be prepared to begin the pursuit of their chosen career.

### **Student Benefits**

- Reduces overall cost of college education.
- Prepares students for high-demand, high-wage careers.
- Provides opportunities for internships, education, job shadowing, and experience in the area of career interest.
- Provides challenging and relevant course work to help engage students in the learning process.

### **Program Description**

**Junior:** During the students' junior year they will attend their local high school for half of the school day, and attend the Van Buren Technology Center during the other half of the school day. Classes have been scheduled for both morning and afternoon sessions depending on the schedule

of the local school district. Juniors will also take a college readiness course in preparation for the college courses they will begin taking in the senior year.

**Senior:** During the students' senior year they will attend classes at the college campus on a full time basis. Students in the VBEC program will have an extra year of high school before officially graduating. They will walk at graduation but they will not receive their actual diploma until the end of the following year.

**Fifth Senior Year:** During the students' fifth year they will attend classes on the college campus full-time and will complete the last high school course requirement. Students will be eligible to apply for freshmen scholarships at this time. They will not be eligible during their senior year because they will have to pay tuition until after the fifth year.

## General Course Sequence

<p><b>Grade 9</b></p> <ul style="list-style-type: none"> <li>• English 9/ Honors English 9</li> <li>• Algebra I/ Geometry/ Honors Geometry</li> <li>• Practical Biology/Biology</li> <li>• US History- Geography</li> <li>• Health/PE</li> <li>• World Language</li> <li>• Elective</li> </ul>	<p><b>Grade 10</b></p> <ul style="list-style-type: none"> <li>• English 10/Honors English 10</li> <li>• Algebra I/ Geometry/ Honors Geometry/Algebra 2/Honors Algebra 2</li> <li>• Government/ Economics</li> <li>• Chemistry/ Applied Chemistry/Anatomy</li> <li>• World Language</li> <li>• PE</li> <li>• Elective</li> </ul>
<p><b>Grade 11</b></p> <ul style="list-style-type: none"> <li>• American Literature/Honors American Literature</li> <li>• Geometry/Algebra 2/ Honors Algebra 2/ Pre-Calculus</li> <li>• World History/Geography</li> <li>• Science Elective</li> <li>• Elective</li> <li>• Elective</li> <li>• Elective</li> </ul> <p>*Students may take dual enrollment classes or attend the tech center in place of electives</p>	<p><b>Grade 12</b></p> <ul style="list-style-type: none"> <li>• British Literature/ Honors British Literature</li> <li>• Math Elective</li> <li>• Elective</li> <li>• Elective</li> <li>• Elective</li> <li>• Elective</li> <li>• Elective</li> </ul> <p>*Students may take dual enrollment classes or attend the tech center in place of electives</p>

Hartford High weights dual enrollment and AP course with a 5 point GPA scale. This has been done to provide incentive for students to challenge themselves in order to become better prepared for college level rigor by the end of the senior year without worrying about the impact it may have on the GPA. Hartford High School is still on a 4 point GPA scale, but the more rigorous courses have a heavier weight on them to maintain or improve class ranking and student GPA based on more demanding course loads. The weighted GPA will not help in the admissions process to a college, but the more challenging coursework listed on the transcript will help with the admissions process. The more demanding courses will also better prepare students for college level rigor. It will also allow students to take challenging courses



without having to worry about their class rank and GPA. Higher GPAs will also help students earn more scholarships, so the weighted GPA may help improve eligibility for scholarships.

The weighted course GPA scale is as follows:

A+	5.0
A	5.0
A-	4.667
B+	4.333
B	4.0
B-	3.667
C+	3.333
C	3.0
C-	2.667
D+	2.333
D	2.0
D-	1.667
F	0