

# Career & Technical Education

## Computer Science

### AP Computer Science Principles (Level 1 Computer Science Course)

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\$95 for AP Exam

Course #10927-10928

1 Year = 1 credit (Advanced Placement)

This course follows The College Board Advanced Placement curriculum and prepares students for the AP Computer Science Principles exam. This course will introduce students to the essential ideas of computer science and show how computing and technology can influence the world. This course focuses on technology and programming as a means to solve computational problems and find creative solutions. Students will creatively address real-world issues and concerns while using the same processes and tools as artists, writers, computer scientists, and engineers to bring ideas to life. The appropriate use of technology and industry-standard equipment is an integral part of this course.

*\*Satisfies Computer Literacy requirement*

### Computer Science II - Honors (Level 2 Computer Science Course)

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Course #10667-10668

Prerequisite: Computer Science 1 or AP Computer Science Principles  
1 Year = 1 credit (honors)

This course is a continuation of Computer Science I. This course provides intermediate computer science students with instruction in advanced techniques and processes, particularly as it relates to the language of C++. The areas of major emphasis in the course will be on object-oriented programming methodology, algorithms, data structures and ethics. Topics will include program design, program implementation, standard data structures, and standard algorithms. The appropriate use of technology and industry-standard equipment is an integral part of this course.

### Robotics Engineering

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Course Fee: \$10

Course #7115-7116

Prerequisite: Computer Science and Applications or AP Computer Science Principles  
1 Year = 1 credit (elective)

The instructional program for Robotics introduces high school students to both the building and basic programming of various robots, as well as problem solving strategies. This course will involve students in the development, building and fabrication, and programming of robots. Students will work in teams to design, build, program and document their progress. Topics may include motor control, gear ratios, torque, friction, sensors, decision-making, propulsion systems, locomotive systems, computer programming concepts and languages. The objective of this course is to use a hands-on approach to introduce the basic concepts in robotics, focusing on mobile robots and illustrations of current state of the art research and applications. Students who successfully complete this course will have learned: Fundamentals of programming concepts, scientific method and inquiry, basic physics and physical science concepts, programming concepts related to robotics, fundamentals of engineering concepts related to robotics, teamwork and collaboration, robotics competitions and the robotics industry and an introduction to 3D Printing

## **Computer Science & Applications**

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Course #8344

1 Semester = 0.5 credit

This course is an introduction to computer science and applications intended to “prepare young learners to become computational thinkers who understand how today's digital tools can help solve tomorrow's problems.” (ISTE, 2018). CS & A will include at least 50% computer science principles and computational thinking. The balance of the course will integrate skills in digital and media literacy and digital citizenship.

# Automotive and Manufacturing Technologies

## Automotive Technology I (Level 1)

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Course #10713-10714

Course Fee: \$40

1 Year = 1 credit

This course will introduce students to the operational and scientific nature of the automotive component systems including fuel, intake, exhaust, ignition, lubrication, braking, cooling, and suspension systems. Practical application of safe work habits and the correct use of tools and precision test instruments will be emphasized throughout the course.

## Automotive Technology II (Level 2)

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Course #10715-10716

Course Fee: \$40

Prerequisite: Automotive Technology I

1 Year = 1 credit

This course is a continuation of Automotive Service Technology I. This course provides intermediate automotive technology students with laboratory activities including tasks with advanced equipment to diagnose and service modern automotive systems. This course focuses on safety, engine repair, automatic transmission, manual transmission, manual drive train, drive axles, clutch systems, suspension and steering, heating and air conditioning, engine performance, braking systems, and basic electrical systems. The appropriate use of technology and industry-standard equipment is an integral part of this course.

## Automotive Technology III (Level 3)

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Course #10719-10720

Course Fee: \$40

Prerequisite: Automotive Technology II

1 Year = 1 credit

This course is a continuation of Automotive Service Technology II. This course provides advanced automotive technology students with in-depth study and skill development in the repair of automotive engines, engine performance, machine operations, steering and suspension service, drive train service, and air conditioning system service. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

## Manufacturing Technology I (Level 1)

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Course #10913-10914

Course Fee: \$40

1 Year = 1 credit

This course introduces students to the fundamentals of manufacturing technologies. Areas of emphasis include lab safety, print reading, measuring techniques, power systems, basic mechanical systems, and basic electricity. Students will gain experience in technical processes associated with metal, wood, and composites.

## **Manufacturing Technology II (Level 2)**

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Course #10915-10916

Course Fee: \$40

Prerequisite: Manufacturing Technology I  
1 Year = 1 credit

This course is a continuation of Manufacturing Technologies I. This course provides intermediate manufacturing technologies students the ability to further their skills and knowledge levels. Areas of emphasis include print reading, mechatronics, automation, fabrication, and various manufacturing power systems. The appropriate use of technology and industry-standard equipment is an integral part of this course.

## **Manufacturing Technology III (Level 3)**

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Course #10919-10920

Course Fee: \$40

Prerequisite: Manufacturing Technology I  
1 Year = 1 credit

This course is a continuation of Manufacturing Technologies II. This course provides advanced manufacturing technologies students the ability to further their skills and knowledge levels. Areas of emphasis include product development, marketing, quality control, automation, and diagnostic/troubleshooting practices. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

# Human Development

## Human Development I (Level 1)

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Course #10885-10886

Course Fee: \$10

1 Year = 1 credit

This course introduces the topic of Human Development. Areas of study include the stages of human growth and development throughout the lifespan with a focus on conception through childhood. Topics include developmental stages and influences on physical, intellectual, social and emotional growth. *\*Satisfies Health Requirement*

## Human Development II - Honors (Level 2)

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Course #10887-10888

Course Fee: \$10

Prerequisite: Human Development I

1 Year = 1 credit (honors)

This course is a continuation of Human Development I. This course allows intermediate human development students to increase their understanding of human growth and development throughout the lifespan with a focus on adolescence through young adulthood. Topics include developmental stages and influences on physical, intellectual, social and emotional growth.

## Human Development III - Honors (Level 3 Completer Class - State Testing Required)

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Course #10889-10890

Course Fee: \$10

Prerequisite: Human Development II

1 Year = 1 credit (Honors)

This course is a continuation of Human Development II. This course allows advanced human development students to increase their understanding of human growth and development throughout the lifespan with a focus on middle adulthood through late adulthood. Topics include developmental stages and influences on physical, intellectual, social and emotional growth. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

# Culinary Arts

## Culinary Arts I (Level 1)

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Course #10313-10314

Course Fee: \$60

Prerequisite: None  
1 Year = 1 credit

This course provides students with an introduction to the principles and techniques of commercial food production. The classroom is patterned after industry with emphasis on the standards of food service occupations. Students acquire basic skills in food handling, food and nutritional science, equipment technology, cooking methods, kitchen safety, sanitation procedures, and employability skills. The appropriate use of technology and industry-standard equipment is an integral part of this course.

## Culinary Arts II - Honors (Level 2)

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Course #10317-10318

Course Fee: \$60

Prerequisite: Culinary Arts I  
1 Year = 1 credit (honors)

This course is a continuation of Culinary Arts I. This course allows intermediate culinary students to build on fundamental skills developed in Culinary Arts I. Students will receive practical training in areas of food preparation, equipment use, and service. The appropriate use of technology and industry-standard equipment is an integral part of this course.

## Culinary Arts III - Honors (Level 3 Completer) State Testing Required

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Course #10321-10322

Course Fee: \$60

Prerequisite: Culinary Arts II  
1 Year = 1 credit

This course is a continuation of Culinary Arts II. This course provides advanced culinary students with instruction in advanced techniques and processes. They will continue to develop all skills learned in Culinary Arts I and II. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

## Baking and Pastry I - Honors (Level 2)

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Course #10301-10302

Course Fee: \$50

Prerequisite: Culinary Arts I  
1 Year = 1 credit

This course is an option following Culinary Arts I. This course allows culinary students more in-depth study of baking and pastry arts. Areas of study include baking terminology, tool and equipment use, formula conversions, functions of ingredients, and methods used in creating breads, pastries, cookies, and other desserts. The fundamentals of dough and basic decorating skills are covered. The appropriate use of technology and industry-standard equipment is an integral part of this course.

## **Baking and Pastry II - Honors (Level 3 Completer) State Testing Required**

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Course #10305-10306

Course Fee: \$50

Prerequisite: Baking and Pastry I  
1 Year = 1 credit

This course is a continuation of Baking and Pastry I. This course provides advanced baking students with instruction in advanced techniques and processes. They will continue to develop skills learned in Culinary Arts I and Baking and Pastry I. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.

# Military Science

## Military Science I

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Course #10413-10414

Course Fee: \$38

1 Year = 1 credit  
Level 1

This course introduces students to the fundamentals of Military Science. Areas of emphasis include introduction to JROTC, foundation of leadership, citizenship, wellness, physical fitness, and first aid. Students will also gain experience in specific branch topics related to their program.

## Military Science II (Honors)

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Course #10415-10416

Course Fee: \$20

1 Year = 1 credit  
Level 2

**Prerequisite:** Military Science I

This course is a continuation of Military Science I. This course provides military students the ability to further their skills and knowledge levels. Areas of emphasis include personal growth, basic leadership, military careers, military branch core values and communications. Students will also gain experience in specific branch topics related to their program. (Air Force, Army, Marine Corps or Navy) The appropriate use of technology and industry-standard equipment is an integral part of this course.

## Military Science III (Honors)

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Course #10417- 10418

Course Fee: \$20

1 Year = 1 credit  
Level 3 Completer (L3C) State Testing

**Prerequisite:** Military Science II

This course is a continuation of Military Science II. This course provides an in-depth experience that applies the processes, concepts and the principles as described in the classroom instruction. Areas of emphasis include intermediate leadership and financial planning. Students will also gain experience in specific branch topics related to their program. (Air Force, Army, Marine Corps or Navy) The appropriate use of technology and industry-standard equipment is an integral part of this course.

## Military Science IV

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Course #10419-10420

Course Fee: \$20

1 Year = 1 credit

Level 4

**Prerequisite:** Military Science III

This course is a continuation of Military Science III. This course provides advanced military science students the ability to further their skills and knowledge levels. Areas of emphasis include advanced leadership, management and specific branch topics. The appropriate use of technology and industry-standard equipment is an integral part of this course. Upon successful completion of this course, students will have acquired entry-level skills for employment and be prepared for postsecondary education.



## Jobs for America's Graduates (JAG)

JAG Nevada is a private, nonprofit organization whose mission is to ensure that Nevada's students are set up for success and graduate work-ready. JAG Specialists assigned to participating schools assist students with challenges that may be in their way, and show them the way towards a bright future.

JAG provides a multi-year model where struggling students are identified by a school team that includes an administrator, counselor and teachers. Students are presented with the opportunities provided through JAG electives and, once enrolled, have the opportunity to continue participating in the program through graduation.

### **JAG Elective G10**

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Course #8424-8425

1 Year = 1 credit

Students will develop job readiness skills that employers believe are fundamental to success on the job, including: personal motivation, ability to work in group settings, communication skills and more. JAG's goal is for 80% of graduates to be employed or enrolled in postsecondary education after graduation. The JAG elective will assist students with goal setting and will help provide the necessary tools for students to reach their goals.

### **JAG Elective G11**

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Course #8426-8427

1 Year = 1 credit

Students will develop job readiness skills that employers believe are fundamental to success on the job, including: personal motivation, ability to work in group settings, communication skills and more. JAG's goal is for 80% of graduates to be employed or enrolled in postsecondary education after graduation. The JAG elective will assist students with goal setting and will help provide the necessary tools for students to reach their goals.

### **JAG Elective G12**

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Course #8417-8418

1 Year = 1 credit

Students will develop job readiness skills that employers believe are fundamental to success on the job, including: personal motivation, ability to work in group settings, communication skills and more. JAG's goal is for 80% of graduates to be employed or enrolled in postsecondary education after graduation. The JAG elective will assist students with goal setting and will help provide the necessary tools for students to reach their goals.