# SWATC Course Descriptions 2017-2018

## Computer Science/Information Technology

## Health Science

## Protective Services

## Trades and Industry

# Computer Science/Information Technology

### 8711 and 8716 - A+ (Computer Repair/Maintenance)—CTSIG040Y—ITEC 1300
**Course Description:** This yearlong course is designed to teach the basics of PC hardware and operating systems, including hands-on projects and labs. It covers skills such as installation, configuration, preventive maintenance, troubleshooting, and repair, plus elements of security and soft skills. Topics include desktop hardware, operating systems, laptop computers, printers, networking, and technician job skills.
NOTE: This course will prepare the student to take CompTIA's A+ certification exam.
**Age/Grade Requirements:** 9th – 12th grade students.
**Prerequisites:** Open to students who have strong computer technology and keyboarding skills.
**Available:** Year B1 CHS/CVHS

### 8712 – Network+ — CTSIG030Y—ITEC 1500
**Course Description:** Knowing how to install, configure, and troubleshoot a computer network is a highly marketable and exciting skill. This course first introduces the fundamental building blocks that form a modern network, such as protocols, topologies, hardware, and network operating systems. It then provides in-depth coverage of the most important concepts in contemporary networking, such as TCP/IP, Ethernet, wireless transmission, and security. The course will prepare you to select the best network design, hardware, and software for your environment. You will also have the skills to build a network from scratch and maintain, upgrade, and troubleshoot an existing network. Finally, you will be prepared to pass CompTIA's Network+ certification exam.
**Age/Grade Requirements:** 10th-12th grade students
**Prerequisites:** High school computer technology, strong keyboarding skills, A+ Essentials.
**Availability:** Year A1 CHS/CVHS

### 8718 - Security Fundamentals—CTSIG036Y—ITEC 2210
**Course Description:** The Security Professional course will teach students to design and implement security solutions to effectively combat hackers, attacks and security threats. The instructor - led course will combine lectures with hands-on activities.
Note: This course helps prepare for CompTIA's Security + certification.
**Age/Grade Requirements:** 10th – 12th grade students.
**Prerequisites:** Students must have strong keyboarding skills and be computer literate; High school computer technology and A+ Essentials are required (can be concurrent).
**Available:** Year A2 CHS/CVHS

### 8722 – Linux Fundamentals—CTSIG025Y—ITEC 2700
**Course Description:** This course is for students who want to learn about the Linux operating system and prepare to pass the Linux+ certification exam from CompTIA. It does not assume any prior knowledge of Linux and is geared toward those interested in systems administration using command line, as well as those who will use or develop programs for Linux systems. The course provides comprehensive coverage of topics related to Linux certification, including Linux distributions, installation, administration, X-Windows, networking, and security. This course will prepare the student to take the CompTIA Linux+ certification exam.
**Age/Grade Requirements:** 10th – 12th grade students.
**Prerequisites:** Keyboarding, Computer Technology, A+ Essentials (can be concurrent)
**Available:** Year A4 CHS/CVHS

### 8822 - Computer Programming I (C++)—CTSEG030Y—ITEC 1200
**Course Description:** This yearlong course progresses students to an advanced level of computer programming using the C++ language. C++ is often used by professional programmers, computer operations staff, and engineers in all specialties. In this class students will learn fundamentals of programming theory, programming practices, and C++ code. Students apply those fundamentals while writing programs that reinforce the concepts being taught. Topics include data types, control structures, functions, pointers, arrays, I/O streams, classes, objects, and much more.
**Age/Grade Requirements:** 9th – 12th grade students
**Prerequisites:** Keyboarding, Computer Technology, Algebra 1
**Available:** Year B4 CVHS, B2 CHS


## Allied Health Professions (AHP)

### 8359 – Exercise Science/Sports Medicine— CTHEG040Y— SWSM 1002
**Course Description:** This full-year course teaches students components of exercise science/sports medicine.  Instruction includes exploration of therapeutic careers, medical terminology, anatomy and physiology, first aid, injury prevention principles, the healing process, rehabilitation techniques, therapeutic modalities, sport nutrition, sport psychology, and performance enhancement philosophies.  Students will have the opportunity to earn a skill certification in Exercise Science/Sports Medicine from the Utah State Office of Education.

**Age/Grade Requirements:** 11th -12th grade students
**Prerequisites:** High school Health and Biology are recommended
**Available:** Year A3 or A4 CHS/SEA/PHS

### 8361 - Medical Anatomy and Physiology— CTHEG110Y— SWMA 1001
**Course Description:** This full-year course provides students with instruction in intermediate anatomy and physiology, medical terminology, medical ethics, diseases and disorders, and health care careers.  Students will have the opportunity to earn a skill certification in Medical Anatomy and Physiology from the Utah State Office of Education.

**Age/Grade Requirements:** 10th -12th grade students
**Prerequisites:** High school Health and Biology are recommended
**Available:** Year B1 CVHS/CHS/SEA

### 8364 - Intro to Health Science— CTHEG0905S— SWIH 1001B
**Course Description:** This semester course is designed to create an awareness of career possibilities in health care and inform students of the educational options available for AHP programs. Instruction includes beginning anatomy and physiology, medical terminology, medical ethics, diseases and disorders.  Students will have the opportunity to earn a skill certification in Introduction to Health Sciences from the Utah State Office of Education.

**Age/Grade Requirements:** 9th – 12th grade students
**Prerequisites:** Open to all students who have a desire to explore health care careers
**Available:** SM1 B4 or A3 CVHS/SEA/PHS; B3 PHS; SM2 A1 CHS/CVHS/SEA/PHS

### 8365 - Emergency Medical Responder— CTHEG0705S— SWEM 1003
**Course Description:** Upon successful completion of this semester course, students will receive certification in Professional CPR (cardiopulmonary resuscitation) and Emergency

Response from the American Red Cross. The legal aspects, procedures, and skills used in providing emergency care will be covered.

**Age/Grade Requirements:** 9th – 12th grade students
**Prerequisites:** 9th – 12th grade students
**Available:** SM1 A1 CHS/CVHS/PHS/SEA; SM2 B1 CVHS/PHS/SEA; B2 CHS/PHS/SEA

### 8366 and 8368 - Nurse Assistant (CNA)—CTHEG190Y—NAHS 8010
**Course Description:** This semester course prepares the student for the profession of Certified Nursing Assistant (CNA). Instruction includes a knowledge base in health care, basic human needs, medical terminology, and other health-related topics. Students will learn skills to deliver nursing-related services to patients and residents. Training includes practice in lab settings as well as supervised clinical experiences in various health care agencies.  After successfully completing the SWATC's Nursing Assistant program, the student is eligible to certify with the Utah Nursing Assistant Registry (UNAR) by taking and passing the skills and written components of the certification test. Certification testing is available at various locations across the state (including at SWATC.)  Certification Test fee $75 (Payable to UNAR with application)

**Age/Grade Requirements:** Students must be 17 years old on the first day of class
**Prerequisites:** Nursing Assistant Packet completed and submitted to SWATC with the following completed on the **1st day of class**:
- o Current HCP/BLS or Professional CPR certification **that is valid through the last day of the clinical experience**
- o Screenings:  2 TB tests within the previous 9 months with negative results, must be 1-3 weeks between tests (approx. $25 per test)
- o Immunizations
  - ▪ 1 dose of Hepatitis B (approx. $60 per dose)
  - ▪ 1 dose Tdap after age 10 (approx. $50)
  - ▪ Annual Influenza vaccination
- o The student is responsible for providing proof of these screenings and vaccinations.  *The school copy of immunizations is not adequate proof.*  (See SWATC course application for details) For more information on immunizations, please contact an instructor in the AHP department or visit www.immunize-utah.org
- o Scrubs with SWATC student patch required during labs and clinical experience
- o Attendance is mandatory; students cannot complete the course if they miss more than 10.5 hours of class time and must attend 30 hours of clinical experience.

**Available:** SM1 A1/A2 CHS/CVHS/SEA; SM2 B3/B4 CHS/CVHS/SEA; B3/B4 PHS

### 8369 – Biotechnology (Intro to Clinical Lab)—CTHEG080S—SWIC 1001
**Course Description:** This semester course introduces students to laboratory science. Each area of the lab will be covered with classroom instruction and hands-on laboratory experience. This course allows students to explore a future career with many job opportunities.

**Age/Grade Requirements:** Students must be 16 years old on the first day of class
**Prerequisites:** High school Health and Biology are recommended
**Available:** SM1 A4 CHS/CVHS

### 8371 - Anatomy and Physiology—SCBIG065S—SWAP 1001

**Course Description:** This semester course studies the anatomy and physiology of the human body.  Common laboratory procedures related to the body systems will also be covered.

**Age/Grade Requirements:** 10th -12th grade students
**Prerequisites:** High school Health and Biology are recommended
**Available:** SM1  A2 CHS/CVHS/PHS/SEA; SM2 A1 CHS/CVHS/PHS/SEA

### 8485 - Medical Terminology—CTHEG175S—SWMT 1001

**Course Description:** This in-depth semester course provides the student with skills necessary to interpret and understand medical terminology. This course will benefit anyone pursuing a health care career. Students have the opportunity to earn a skill certification in Medical Terminology from the Utah State Office of Education.

**Age/Grade Requirements:** 10th – 12th grade students
**Prerequisites:** High school Health and Biology, Anatomy & Physiology or Medical Anatomy & Physiology are recommended
**Available:** SM1 B1 CHS/CVHS/PHS/SEA; B3 CHS/CVHS/PHS/SEA; B4 PHS; SM2 A2 CHS/CVHS/PHS/SEA

### 8734 – Phlebotomy—8734 (Per Jeff)—PHHS 1010

**Course Description:** This semester course prepares students for a career in phlebotomy, or drawing blood from patients. All aspects of the job are covered, including basic anatomy, infection control, venipuncture, urinalysis, customer service and more. The class consists of 60 hours of classroom and laboratory experiences, followed by a 40 hour practicum at Cedar City Hospital. This course will allow students to become phlebotomists or to add to their skill set for any career in health care.

**Age/Grade Requirements:**
- Student must be 18 years old by the end of class, second semester
- Must be on track to graduate from high school, or have their GED, by the end of the classroom instruction

**Prerequisites: For the 1st Day of Class**
- Current HCP/BLS or Professional CPR card that is valid through the last day of practicum (approx. end of June)
- Complete and pass background check and drug screen (details in packet of paperwork)
- The student is responsible for providing proof of required screenings and vaccinations (details in packet of paperwork)
- *The school copy of immunizations is not adequate proof.*  (See SWATC course application for details) For more information on immunizations, please contact an instructor in the AHP department or visit www.immunize-utah.org
- Scrubs required during labs and practicum
- Attendance is mandatory; students cannot complete the course if they miss more than 6 hours of class

**Available:** SM2 A2 CHS/CVHS

### New – Medical Assistant—CTHEG120Y—Various

**Course Description:** This course requires students to enroll for A3/A4 and B3/B4.  During this time the students will complete college courses in Medical Clinical Assistant leading to a college program certificate.

**Medical Clinical Assistant**
Program Description: The Medical Clinical Assistant Pathway is designed to offer a high school student the opportunity to start in an exciting program that will eventually prepare them for an entry level position in a doctor's office, clinic, or other health care facility. Students will learn the theory and practice of the clinical procedures that medical assistants commonly perform in a medical office. **DISCLAIMER**: Students will have other courses that will need to be completed in the evenings or in the future to receive a certificate. Upon successful completion of the ENTIRE program, students will be eligible to acquire national certification to further their employment goals.

**Age/Grade Requirements:** 17 years old on the first day of class.
**Prerequisites:** Discussion of pre-requisites, program details, and costs are needed with the Allied Health Professions Program Coordinator. Please call 435-586-2899 to schedule an appointment.
**Available:** Requires attendance A3/A4 and B3/B4

### New – Emergency Medical Technician—CTHEG030Y—Various
**Course Description:** This full-year course prepares students for licensure as an Emergency Medical Technician (EMT).  All aspects of the job are covered including legal issues, patient assessment, practical skills performed by an EMT in a community emergency and more.  The class consists of 190 hours of classroom and a 24 hour practicum with Gold Cross Ambulance. This course will allow students to obtain their EMT license through the National Registry Emergency Medical Technician (NREMT).  **DISCLAIMER**:  Students will have significant testing fees (currently 12/2016 $345) to obtain EMT license.

**Age/Grade Requirements:**  Student must be 18 years old within 120 days of the end of class
**Prerequisites: For the 1st Day of Class**
   o Current HCP/BLS or Professional CPR card that is valid through the last day of class
   o Screenings:  1 TB tests within the previous 9 months with negative results; second screening is required during the class (instructor will provide details)
   o EMT uniform:  shirt, EMT navy pants, black work boots required during class
   o Attendance is mandatory
        ▪ Any absences must be approved by the instructor and made up with a certified EMS instructor—instructor will provide details in class
**Available:**  Year A3/A4 CHS/CVHS/SEA/PHS

## Protective Services

### 8372 - Law Enforcement—CTPRG001S—SWLW 1001
**Course Description:** This program is for those students considering a career in law enforcement, criminal justice or public service. Program will consist of coursework in general law enforcement principles including crime awareness, legal issues, the causes of crime, juvenile justice, and the laws of arrest / search / seizures. Guest speakers will include area attorneys, corrections officers and representatives from other law enforcement agencies.
**Age/Grade Requirements:** 10th, 11th and 12th grade students
**Prerequisites:** None
**Available:** SM1 and SM2 A1 CHS/PHS/SEA, B1 CVHS

## Trades and Industry

### 8796 – Carpentry I—CTCSG010Y—SWBC 1004
**Course Description:** The Carpentry I course replaces the previous two period Building Construction course and follows all USOE core standards, objectives and indicators. Standards: receive an orientation to the carpentry trade; able to understand and demonstrate the use of wood building materials, framing of flooring systems, wall and ceilings and roofing systems, installation of windows and exterior doors, drywall installation and finishing and interior finishing. In addition, professional development, leadership skill and career planning are included. The course is required for the Building Trades Pathway.
**Age/Grade requirements:** 10th, 11th and 12th grade students 9th grade only with Pre-arranged Instructor approval.
**Prerequisites:** Students must provide own transportation to job site daily
**Available:** SM1 A1/A2 CVHS/PHS/SEA; SM1 A3/A4 CHS/PHS/SEA

### 8797 – Carpentry II—CTCSG0015Y—SWBC 1005
**Course Description:** The Carpentry II course replaces the previous two period Building Construction course and follows all USOE core standards, objectives and indicators. Standards: receive an orientation to the carpentry trade; able to understand and demonstrate the use of wood building materials, framing of flooring systems, wall and ceilings and roofing systems, installation of windows and exterior doors, drywall installation and finishing and interior finishing. In addition, professional development, leadership skill and career planning are included. The course is required for the Building Trades Pathway.
**Age/Grade Requirements:** 10th, 11th, 12th grade students 9th grade only with completion of carpentry I and Instructor approval.
**Prerequisites:** Completion of carpentry I or Instructor approval.
**Available:** SM2 A1/A2 CVHS/PHS/SEA; SM2 A3/A4 CHS/PHS/SEA

### 8798 – Construction Trades Foundation—CTCSG035S—SWBC 1006
**Course Description:** The Construction Trades Foundation course replaces the basic Masonry/Building Construction course and follows all USOE core standards, objectives and indicators. **Standards:** The student will learn and practice basic safety skills; the student will understand and demonstrate basic math skills; the student will recognize and demonstrate hand tool, power tools and read blueprints; explain and demonstrate basic rigging techniques. In addition, professional development, leadership skills and career planning are included. The course is required for the Building Trades Pathway.
**Age/Grade Requirements:** 9th – 12th grade students
**Prerequisites:** Open to students interested in the Construction Trades industry.
**Available:** SM1 B3 CVHS/PHS/SEA; B4 CHS/PHS/SEA; SM2 B3 CHS/PHS/SEA B4 CVHS/PHS/SEA

### 8815 – Industrial Robotics and Manufacturing—8815 (per Laurie)—INMA 0001
**Course Description:** Industrial Robotics and Manufacturing is a lab-based hands-on curriculum that will prepare students to perform a wide variety of electrical, automation, design, programming, trouble shooting and repair tasks that are critical to the modern, automated manufacturing environment. Industrial safety practices will be emphasized as students learn to set up, trouble shoot and maintain industrial robotics and automated systems. Students will build, program, and debug devices used in the interrelated fields of automation, robotics, mechatronics, and process control and instrumentation.  Job skills leading to local and regional technical careers will be strongly emphasized.
**Age/Grade Requirements:** 10th – 12th grade students
**Prerequisites:** Open to students interested robotics and automation in industry.

**Available:** Year A4 CHS/PHS/SEA; B4 CVHS/PHS/SEA


### 8818 – Introduction to Auto—CTMEG020S—SWAM 1005/SM 1 & SWAM 1006 SM 2
**Course Description:** This course provides classroom and lab activities pertaining to passenger car and light truck vehicle operation and service. Students will identify parts and components, and demonstrate a basic knowledge of the operation/function of vehicle systems. This knowledge will be reinforced through related lab assignments based on national automotive industry standards, where students will perform basic diagnostic and service procedures on various automotive systems and components. This course is designed to help the student gain entry-level automotive service skills. Units of study include introductory skill development in the areas of Brakes, Electrical, Engine Performance, and Steering / Suspension.
**Age/Grade Requirements:** 9th -12th grade students
**Prerequisite:** Classes are held at the SWATC Automotive facility located at 101 E. Nichols Canyon Rd., student must provide own transportation to and from class.
**Available:** SM1 B1 or A4 CHS/PHS/SEA, A1 or B4 CVHS/PHS/SEA;
SM2 A1 or B4 CHS/PHS/SEA, B1 or A4 CVHS/PHS/SEA


### Name Change— ASE Engine MLR — CTMEG026Y -- Various
**Course Description:** Enrolling in this course will cover ASE courses depending on the period enrolled. The courses will count toward the SWATC Automotive certificate if the student returns as an adult student.  The courses available through this advanced automotive program are designed to help the student gain higher level automotive service skills, and begin to prepare the student to pass the National ASE examinations to become nationally certified in each of the content areas.
Students enrolled in A4/B4 must commit to attend daily from 1:00 pm to 4:00 pm from 8/3/2017 to 6/4/2018.
Students enrolled in A2/A3 and B2/B3 must commit to attend the morning courses from 9:30 to 12:30 daily from 8/3/2017 to 6/4/2018.
**Age/Grade Requirements:** 10th-12th grade students
**Prerequisite:** Basic Automotive Mechanics, students must provide own transportation to and from class. Classes held at the SWATC Automotive facility.
**Available:** Year A4/B4 until 4:00 pm daily CHS/CVHS/PHS/SEA; A2/A3 and B2/B3 from 9:30 to 12:30 daily CHS/CVHS/PHS/SEA.


### Name Change— ASE Engine Performance — CTMG025Y -- SWAM 1610H
**Course Description:** This course covers the same curriculum as the Engine Performance I college course and will count toward and SWATC automotive certificate if the student returns as an adult.  The course is intended to help the student gain higher level automotive service skills, and begin to prepare the student to pass the National ASE examinations to become nationally certified in this content area.
**Age/Grade Requirements:** 10th-12th grade students
**Prerequisite:** Basic Automotive Mechanics, students must provide own transportation to and from class. Classes held at the SWATC Automotive facility.
**Available:** Year A1 CHS/CVHS/PHS/SEA.


### 8847 - Welding Technician-Entry Level—CTPPG110S—SWWL 1001
**Course Description:** A one semester exploratory course based on the Utah Association of Career and Technical Association (UACTE) entry level standards. Available 1st or 2nd period, this course will provide both academic instruction and practical experience with

welding safety, blueprint reading, shop mathematics, shielded metal arc welding (SMAW), gas metal arc welding (GMAW) and oxyfuel cutting (OFC). The student's time will be spent in the classroom as well as in the welding lab performing practical exercises.
**Age/Grade Requirements:** 9th – 12th grade students
**Prerequisites:** Open to all students; Students wishing to enroll in advanced welding must successfully complete this course first.
**Available:** SM1 A1 or A2 CVHS/PHS/SEA B1 or B2 CHS/PHS/SEA;
SM2 A1 or A2 CVHS/PHS/SEA B1 or B2 CHS/PHS/SEA

### 8849 - Welding Technician-Intrm Level—CTPPG112Y—Various
**Course Description:** A full-year, concurrent enrollment program offered 3rd or 4th periods consisting of the college courses in the Basic Welding adult, 930 hour certificate of completion.   This program is for students seriously considering a career in welding, an allied trade or career where welding will be used in addition to other required skills. Students will enroll in Welding Technician-Intrm Level and progress through the coursework in the Basic Welding certificate.  These courses will count toward an SWATC welding certificate if the student enrolls as an adult student in the welding program.
**Age/Grade Requirements:** 10th – 12th grade students
**Prerequisites:** Open to all students who have successfully completed 8847- Welding Technician-Entry Level.
**Available:** Year A3 or A4 CVHS/PHS/SEA Year B3 or B4 CHS/PHS/SEA

### New - Welding Technician-Adv Level—CTPPG114Y—SWWL 1100
**Course Description:** This course is an instructor permission only offering for students who have completed the basic and intermediate courses, and who are working on the college certificate courses.
**Age/Grade Requirements:** 11th – 12th grade students
**Prerequisites:** Instructor permission only for student working toward the college certificate.
**Available:** Year A3 or A4 CVHS/PHS/SEA Year B3 or B4 CHS/PHS/SEA

### New – Sheet Metal—CTPPG090S—SHML 0001
**Course Description:** This course is the second half of the Utah Aerospace Pathway. Students must take Manufacturing Principles 1 during first semester and Sheet Metal second semester to complete the pathway.
**Age/Grade Requirements:** 11th – 12th grade students
**Prerequisites:** Students must complete the admissions requirements and receive instructor permission.
**Available:** SM 2 A1 CVHS/CHS/PHS/SEA

## Culinary Arts

### New – Food Service/Culinary Arts — CTFCG170Y— CULA 1001
**Course Description:** This High School Culinary program will focus on the development of fundamental cooking skills and techniques, taking what the students have learned in Pro-Start, putting it to practical use as well as learning advanced techniques.
Students will be trained for career opportunities in the food service/culinary arts industry. Students will have the opportunity to practice safety and sanitation procedures that were learned in Pro-Start, and use and maintain commercial food service equipment. They will perform quantity food preparation as it relates to catering, bakery, restaurant, hospitality, and fast food business operations.

The High school program will also give students a "Head Start" if they plan on taking our adult program, they will be advanced to Intro to Professional cuisine saving 40 hours of class time.
**Age/Grade Requirements:** 11th -12th grade students
**Prerequisites:** Students must have either taken Pro-Start 1 or 2 prior to or are enrolled concurrently in Pro-start 1 or 2 while enrolled in SWATC Culinary program.
**Available:** Year CHS/CVHS/SEA/PHS A4 or B4

## Financial Services

### New – Customer Service (Banking) — CTMOG025S— ACCT 1001

**Course Description:** This course was created in collaboration with Zions Bank.  It is a capstone, semester long class that will prepare students for entry level employment in financial institutions.  Students must take several high school pre-requisite courses, and participate in an externship experience during the customer service course.  Students will learn core banking functions and procedures, ethics, critical customer service techniques, and required soft skills.
**Age/Grade Requirements:** 11th -12th grade students
**Prerequisites: Taken at your high school—**Personal Finance, Accounting I, Computer Tech II or CSIS 1000
**Available:** SM2 CHS/CVHS A4