



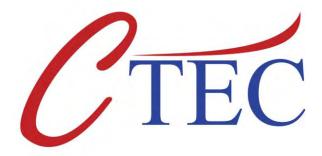
# 2021-2022 Course Catalog

- Real-World Experience
- Industry Certifications
- Concurrent Enrollment









# MISSION STATEMENT

THE MISSION OF CANYONS TECHNICAL
EDUCATION CENTER IS TO PROVIDE
ALL STUDENTS AN INNOVATIVE
EDUCATION THROUGH COMPETENCYBASED INSTRUCTION THAT PRODUCES
PRODUCTIVE, RESPONSIBLE, ENGAGED,
PROFESSIONAL, SUCCESSFUL
STUDENTS WHO POSSESS THE TOOLS
NECESSARY TO BE SUCCESSFUL IN
POST-SECONDARY EDUCATION OR
CAREER SETTINGS.



### Canyons Technical Education Center

Janet Goble, Principal

825 East 9085 South · Sandy, Utah 84094

Phone: 801.826.6600

Dear Students and Parents,

On behalf of the faculty and staff, I welcome you to investigate the educational opportunities for you here at CTEC. I speak with students daily who tell me this is their favorite part of the school day. The reasons are numerous, but let me tell you a few of the most common:

- **Building a Solid Foundation** For most people a few years down their career path, where they started is not where they finish. At CTEC, our goal is to build a solid foundation for your career and college plans and then you will determine your path from then on. We help you build a solid foundation consisting of technical skills, people skills, and a vision for what you can do with your future work experience, added college and workplace training, and your own desires to find success.
- Useful Now What students learn here, they are using now; the education applies to the work they want to do, or they
  are actually doing now.
- Chosen Career Students have the opportunity to learn, work, and/or intern in their chosen career field. CNA and
  Medical Assisting students will intern with hospitals and care facilities. Cosmetology students will cut, curl, and color
  clients' hair. Emergency Medical Technician students will have the opportunity to do a ride along with Sandy Fire. These
  opportunities are available for students who are learning and doing their best.
- College Credit Students will earn college credit now as juniors and seniors. The cost is minimal and the return in credit
  and educational self-confidence is rewarding. College classes can be applied toward College Certificates, Associate
  Degrees, or Bachelor Degrees. CTEC partners with Salt Lake Community College, Utah Valley University, as well as
  Utah State University Eastern to offer college credit.
- Industry Certifications In addition to college credit, many of our programs offer industry certifications. The business world loves to see future candidates with proven and tested training on their resumes. Many of the programs offer industry certifications including Adobe, and ASE certificates. Check the catalog or website to see what college credits and industry certifications your area of interest offers.
- **Friends** Students enjoy the opportunity to build friendships with students who have similar career and educational goals. Many lasting friendships have been created while working in the classroom with fellow students from other high schools as well as during internship opportunities.
- Varied Learning Opportunities Learning happens in the classrooms, shops, labs, field trips and during career days.
   Depending on the student's chosen program, students will participate in skills courses, as well as emergency and medical training. Doors are opened to CTEC students to get up close and personal with dissection labs, and tours of crime labs.
- **Transportation** Bussing is provided from all high schools in the Canyons School District. Many students choose to carpool, and at CTEC, there is a required parking sticker available. Please be safe if you choose to drive.

I hope you take the time to look through the catalog, visit us here at CTEC, or talk to our teachers and see if we have the right program for your future. You will have the opportunity to learn from industry professionals who have trained to become excellent teachers. At CTEC, students start with a high school course, but move with confidence toward a chosen career and college pathway. We look forward to having you at CTEC.

Janet Goble

Principal

Canyons Technical Education Center

Website: http:/ctec.canyonsdistrict.org



### CANYONS SCHOOL DISTRICT

### **BOARD OF EDUCATION**

Clareen Arnold Mont L. Millerberg Holly Neibaur Amanda Oaks Amber Shill Nancy Tingey Steve Wrigley

### DISTRICT ADMINISTRATION

Superintendent: Dr. Rick Robins

### CANYONS TECHNICAL EDUCATION CENTER

Janet Goble, Principal Doug Hallenbeck, Assistant Principal Ben Poulsen, CTE Coordinator

### CANYONS DISTRICT CAREER AND TECHNICAL EDUCATION

Janet Goble, CTE Director Patricia Larkin, CTE District Coordinator

No District employee or student shall be subjected to discrimination in employment or any District program or activity on the basis of age, color, disability, gender, gender identity, national origin, pregnancy, race, religion, sexual orientation, or veteran status. Canyons School District is committed to providing equal access and equal opportunity in its programs, services and employment including its policies, complaint processes, program accessibility, District facility use, accommodations and other Equal Employment Opportunity matters. The following person has been designated to handle inquiries and complaints regarding unlawful discrimination, harassment, and retaliation, Daniel Harper, General Counsel Officer 801-826-5062

Published December 2020



### **GENERAL INFORMATION**

### Canyons Technical Education Center



825 East 9085 South Sandy, Utah 84094 ctec.canyonsdistrict.org

Phone: 801-826-6600 Fax: 801-826-6609

### **REGISTRATION PROCEDURES**

STEP 1	Read the catalog or check out course information at <a href="ctec.canyonsdistrict.org">ctec.canyonsdistrict.org</a> . Select a
	program. Most courses are available to Junior and Senior students only. Any student
	enrolled at CTEC must also be registered at a Canyons School District or Wasatch Front
	Region affiliated high school. Charter school/home school students call Ben Poulsen 801-
	826-6621 for registration information.

- STEP 2 Evaluate your schedule, graduation status, time restrictions, and career goals with your CTE Coordinator and/or counselor at your school. Review the course requirements and take the steps necessary to meet those requirements.
- STEP 3 Canyons School District students, as well as Jordan, Murray and other Wasatch Front South Region District students will need to begin the registration process by completing the 2021-2022 Application Form at <a href="mailto:ctec.canyonsdistrict.org">ctec.canyonsdistrict.org</a> (Click on the <a href="mailto:Apply Here">Apply Here</a> tab). After you have filled out the requested information completely, click the <a href="mailto:Submit">Submit</a> button.
- STEP 4 **Jordan, Murray** and other **Wasatch Front South Region** students will need to see their school's CTE Coordinator to have their high school transcript forwarded to the Canyons Technical Education Center.
- STEP 5 Beginning December 11, 2020, students will enroll online in the program of their choice. All students will receive an email with additional information. Similar to college enrollment, this is a first-come, first-serve enrollment process. If a program has filled, you have the option of selecting an alternative time, an alternative program, or being placed on a waiting list. Later you will complete your boundary school scheduling.

Canyons District CTE Coordinators							
Alta High School	Brandon Jacobson	801-826-5641					
Brighton High School	Lisa Prudden	801-826-5841					
Corner Canyon High School	Wayne Dittmore	801-826-6441					
Hillcrest High School	Kevin Wood	801-826-6041					
Jordan High School	Karma Bateman	801-826-6241					
Other CTE Contacts							
Granite School District	Ben Anderson	385-646-7039					
Murray School District	Chantel Olsen	801-264-7460 Ext. 5182					
Jordan School District	Carla Matagi CTEC Registrar	801-826-6610					
JATC North	Mandi Jensen	801-256-5900					
JATC South	Tami Flygare	801-412-1305					
Salt Lake School District	Anne Martin	801-584-2900					

### BUSINESS LEADERSHIP/PROJECT MANAGEMENT

Full Year/Semester

### **Business**



Instructor: Kim Simpson-Batey kimberly.simpson@canyonsdistrict.org 801-826-6632

**PROGRAM DESCRIPTION:** This program focuses on business leadership, entrepreneurship and project management. This program integrates project management into its focus. CTEC collaborates with local businesses and community leaders to provide students with a unique, immersive experience resulting in highly skilled, adaptable innovators and leaders. Students will work on understanding business roles and the attributes of a business leader. Students will also be coached in project management, taking on actual business issues and helping businesses reach innovative solutions and answers. Students will gain valuable team working experience, professional growth and real-world opportunities.



**High School Credit:** CTE credit or elective credit: Up to 4 credits total. **Concurrent Enrollment:** Up to 15 college credits possible. Student is responsible to register and pay for concurrent enrollment classes at SLCC. For more information on these classes, see Appendix.

**Industry Certifications:** ESB (Entrepreneurship Small Business) industry

certifications TBD

**Skills Certifications:** Utah State Skills Certificate Tests

### **COURSE DESCRIPTIONS:**

**Business—Marketing Capstone**: The purpose of this course is to research and solve real world business needs. This course is designed for advanced business students to further their business knowledge and skills. It encourages students to think analytically, logically and creatively to integrate experience and knowledge in real world situations. In this program this is done in collaboration with local businesses with real projects and outcomes measured by our business partners.

**Business Law:** Students will gain an understanding of the law as it relates to them currently and the implications of the law in their future lives as well as the lives of their family and friends. They will also work to gain an understanding of basic legal vocabulary. Students will gain an understanding of contract law, their rights and responsibilities as citizens, utilization of financial transactions, employment and agency relationships, and the understanding of the regulations governing different types of business organizations. As a culminating project students will participate in one or more mock trials.

**Entrepreneurship**: Students will gain an understanding of the marketing and management principles necessary to start and operate their own business. They will develop an awareness of the opportunities for small business ownership and develop the planning skills needed to open a small business. Students will gain awareness of knowledge needed in research, planning and regulations affecting the small business and the means of financing a small business.

**-CTEL 1010 Leadership:** Earn college credit while discovering and developing strengths in leadership and teambuilding. Career-building strategies will be explored. Develop human relations skills. Gain leadership and teambuilding experience while working with industry partners.

**BUS 1010 Introduction to Business:** Earn college credit in a business course which will expose students to the diverse world of business, revealing how each of us is connected to business personally, professionally, and how business connects us culturally and socially. Students will learn how individuals function within a specific field and how various disciplines work together in cross functional teams. Students will work as an employee in a professional business environment; gain management experience; build a portfolio of state and national certifications.

**MKTG 1030 Introduction to Marketing:** Earn college credit while covering a wide range of basic marketing concepts. The major objective of this class is to establish a foundation of the marketing process. Course materials are designed to develop knowledge of both general and specialized marketing terms; SWOT, Market Research, etc.

**ECON 1010 Economics for Social Sciences:** Earn college credit while studying the production, distribution and consumption of goods and services; and how society uses limited resources. Students will gain an awareness of the role of economics in social problems and business interactions and decisions. This class is designed as a general information course for all individuals despite major, and satisfies the social science component of general education.

**FIN 1050 Personal Finance (optional):** Satisfies the High School General Financial Literacy requirement while earning college credit. Study of financial skills essential for personal economic success. Subjects include but are not limited to:

financial planning, financial services, income taxes, consumer buying, insurance, retirement and estate planning, FAFSA, student financing and loans, and credit and debt.

**Costs/Fees: Costs/Fees for the 2020-2021 school year:** Pending school board approval.

### Career Possibilities:

Entrepreneur
Business Management
Department Manager
Human Resource Management
Management Analyst
Corporate Manager

Financial Services and/or management Meetings, Convention and Event Planner Certified Public Speaker TV/Radio Broadcasting Project Management Marketing and/or Social Media Specialist











"The business leadership program at the Canyons Technical Education Center is the absolute best class that I have ever taken. This class is nothing like normal high school, the minute you walk in the doors you enter a professional environment and are treated like a professional employee in a company. This may seem intimidating but it is one of the most empowering programs that you could ever be enrolled in. This class not only offers a more mature environment but it also offers the ability to obtain college credits at an amazing price, attendance and completion of multiple professional seminars, the ability to obtain certificates of competency and lastly offers the ability to make the paradigm shift from a student to a professional employee earlier in life than many others". Abbie Stojack

### CONSTRUCTION MANAGEMENT Full Year

### Skilled and Technical Sciences



Thomas.wheatley@canyonsdistrict.org Instructor: Tom Wheatley 801-826-6668

**PROGRAM DESCRIPTION:** Students will participate in managing all phases of constructing a home: blueprint reading, estimating proposal, hiring subcontractors, permits application, ordering supplies, math skills, layout work, surveying, zoning requirements, safety procedures, footing and foundation, concrete flatwork, framing, plumbing, electrical, HVAC, finish carpentry, sheetrock, roof coverings, installing windows, installing exterior doors, tile floors, hardwood floors, painting, carpet, hardware. All skills will require proper use of tools involved to complete each process. Students will work with engineers, building officials and licensed trades design consultants. Students will have the opportunity to be involved with SkillsUSA student organization which will help students excel by competing against other students. Students may choose to receive concurrent enrollment credit at SLCC.



**High School Credit:** CTE credit or elective credit: Up to 4 credits **Concurrent Enrollment:** Up to 10 college credits. Student is responsible to register and pay for concurrent enrollment classes at SLCC. For more information on these classes, see Appendix.

**Skills Certification:** Utah State Skills Certificate Test

**Additional Opportunities:** Students may experience youth leadership and

service through SkillsUSA.

**Requirements:** Physical ability to be able to lift at least 30 lbs. Ability to understand and follow safety procedures. Be able to use power and pneumatic tools safely. Drawing and design skills would be helpful.

**Recommended:** Woodworking

### **COURSE DESCRIPTIONS:**

CMGT 1410 Construction Management: Learn how to manage construction sites, materials, subcontractors and develop essential skills. Students take an active role in research, green build and smart home techniques.

Construction Introduction: A course that generally prepares individuals in the following areas: basic safety, introduction to blueprint reading, introduction to power tools, introduction to hand tools, and introduction to construction math. It also includes an industry overview, what to expect on the job and specific career opportunities.

**CMGT 1330 Interiors Finishes:** This course covers materials and selection that support the responsible use of natural resources. Subjects include hanging doors, installing base, casing, stair treads, skirts, and closet organizers. Installation of hardwood floors, handrails and stair caps will be

Students will also be introduced to the basics of installing tile floors and shower walls. Students will be taught how to install doorknobs and residential hardware.

**CMGT 1320 Building Construction 1/Carpentry 1:** Students will learn the concepts of footings, foundations and flat work. Green build and traditional techniques will be taught. Students will lay out and construct floors, exterior and interior walls, be introduced to metal stud framing, and hang exterior doors and windows. Students will learn how to install, tape, and mud drywall. Sophisticated methods used to maintain a tight building envelope will be used. Stair and roof construction will be introduced.

**Carpentry 2:** An advanced carpentry program with a sequence of courses that prepares individuals to layout, fabricate, erect, install, and repair wooden structures and fixtures using hand and power tools. Includes advanced instruction in common systems of framing, construction materials, estimating, blueprint reading, concrete placing, siding, and mechanical systems. These courses are based on the current National Center for Construction Education and Research (NCCER) task list.

Costs/Fees for the 2021-2022 school year: Pending school board approval.

### Career Possibilities:

Construction
Rough Carpenter
Finish Carpenter
Roofer
Drywall Installer and Finisher
Civil Engineer
Structural Engineer
Soil Engineer

General Contractor Remodeling Contractor Siding Installer Cement Finisher Construction Management Superintendent Project Manager Architect Draftsman











"My experience in the Construction Management class and the concurrent enrollment credits that I received has given me a jump start in my education at the college level now. I am now enrolled at SLCC taking business classes to start my own business in the future". Adam Clausen

"I am glad I took the Construction Management class because it gave me the skills and desire to become an electrician. I am going to enroll at SLCC and start my apprenticeship". Ryan Brown

### COSMETOLOGY/BARBERING Full Year

### Skilled and Technical Sciences



Instructor: Shelli Ivie shelli.ivie@canyonsdistrict.org 801-826-6661
Assistant: Lorrie Engstrom lorrie.engstrom@canyonsdistrict.org 801-826-6662



CTEC Cosmetology/Barber is the only high school cosmetology program in Utah where a student can earn a professional cosmetology/barber license at the time of their high school graduation. \*

- \*The student who attends the program for **2 years** including summer sessions has the ability to complete the state licensing requirements to be a licensed cosmetologist/barber.
- The student who attends the program for **1 year** is able to transfer their clock hours and services to a Cosmetology/Barber program of their choice after high school graduation.
- By successfully completing the **2 year** course sequence, students will have the opportunity to earn up to 44 elective college credits.
- Those seeking a Cosmetology Degree may attend the USU-Eastern campus to fulfill the USU-Eastern cosmetology/barber course curriculum.
- Upon the student's completion of the state license requirements, the student will be able to apply for a cosmetology/barber license.

**PROGRAM DESCRIPTION**: Cosmetology is the art and science of beautifying and improving the hair, skin and nails. The students earn required hours and prepare to pass both the Utah Written and Practical Examinations required to obtain a Utah DOPL Cosmetology/Barber License. Students receive this preparation while practicing in an actual salon experience through the program's public salon facilities and its clientele. Students are also prepared in theory classes. Students have the opportunity to study and practice men's and women's hair styling, cutting, coloring, perming, chemical relaxing, nail care, skin care, chemistry, anatomy, and physiology - all with an emphasis on safety, sanitation and professionalism.

**PROGRAM DESCRIPTION:** See Concurrent Enrollment Appendix.



**Additional Classes Available**: To provide the student with the opportunity to earn additional clock hours, the student has the option after their first semester to attend 2 evening sessions a week in addition to the school day session. A summer session is also available to the students to earn additional clock hours.

**High School Credit:** CTE credit or elective credit: up to 4 credits total each year **Concurrent Credit:** 44 elective college credits available. Student is required to register and pay for concurrent enrollment classes with USU-Eastern. For more information on these classes, see Appendix.

**Additional Opportunities:** Students may experience youth leadership and service through SkillsUSA.

**Industry Certification:** Students will work toward the State of Utah DOPL: Utah Cosmetology/Barbering Licensing Exams.

**Recommended:** Good eye-hand coordination, artistic color and design principles, basic geometric design, logical reasoning, basic math and customer service skills.

Requirements: Contact your CTE Coordinator before February for priority deadline dates. A parent is required to attend the orientation meeting. A 2.0 GPA is required by USU-Eastern.

### Career Possibilities:

Licensed Cosmetologist/Barber Hair Stylist Nail Technician Basic Esthetician (skin care) Make-up Artist Salon Manager Salon owner Platform Artist Professional Educator













"I learned so much from all the instructors here at the CTEC center. Every day, I apply the concepts I learned in the classroom to my professional work. After graduating with my Cosmetology License from CTEC, I am pursuing a Bachelor's Degree in Marketing. I plan on opening and running my own business. And, I have just been able to buy my first house!". Ashley Baker.

"I've been passionate about becoming a Cosmetologist since age 3. With careful planning, 2 summers, 2 school years, and night classes, I graduated high school as a Licensed Cosmetologist and Barber. I saved time and money by taking advantage of the concurrent classes offered at CTEC during high school. CTEC provided me with amazing instructors that helped me hone my talents, leadership, and business skills. At the same time, they supported my goal of giving community service to better the lives of others. CTEC wants everyone in the program to thrive, not just survive. At age 18, I'm a Cosmetologist, enjoying my career, and will graduate from USU-E this Dec with my Applied Associate of Science Cosmetology Degree. After that I will advance towards a Business Degree". Stephanie Jencks

### CRIMINAL JUSTICE Semester

### Skilled and Technical Sciences



Instructor: Edwin Lehauli edwin.lehauli@canyonsdistrict.org 801-826-6648

**PROGRAM DESCRIPTION**: The Criminal Justice course is designed to prepare students for an exciting career in the field of law or law enforcement. Students will learn about many diverse job opportunities that are available such as patrol officer, SWAT team member, detective, K9 officer and other disciplines such as careers in federal agencies like the FBI, Secret Service and ATF (Bureau of Alcohol, Tobacco, Firearms and Explosives). Students will have the opportunity to meet professionals in the field and participate in simulated scenarios, demonstrations and tour pertinent law enforcement sites.



**High School Credit**: CTE credit or elective credit: up to 2 credits total **Concurrent Enrollment:** 12 college credits required. Student is responsible to register and pay for concurrent enrollment classes at SLCC. For more information on these classes, see Appendix. **Skills Certification:** Utah State Skill Certification Test **Additional Opportunities:** SkillsUSA membership

### **COURSE DESCRIPTONS:**

**CJ 1330 Criminal Law:** Students will gain an understanding of criminal law and punishments, the constitution, individual rights and general principles of criminal liability. They will also learn about crimes against persons and crimes against property. The students will also participate in various debates involving our current laws and regulations.

**CJ 2540 Careers in Law Enforcement:** The students will become familiar with the various careers in law enforcement. They will learn the steps involved to become a police officer or a federal officer. They will participate in an oral board interview and the police physical fitness test. They will be given instruction on officer safety issues and will also learn how to build a professional resume.

**CJ 1010 Introduction to Criminal Justice:** Exposes students to theories, concepts, and methods used to facilitate understanding, predicating and responding to issues of deviance and crime in America. Also includes development and evolution of components of American Criminal Justice System, including the history of racial, ethnic and gender discrimination on charging, conviction, incarceration and employment.

**CJ 1300 Introduction to Corrections:** Introduces the corrections system. Includes origin and evolution, philosophies of corrections, perspectives on sentencing, and alternatives to incarceration. Includes community corrections, probation and parole, offender rights and legal issues; adult, juvenile, and special needs offenders; corrections specialists, staff and administration as a profession and special challenges for the future.

### Career Possibilities:

Police Officer Probation and Parole Officer Corrections Officer Military Police Officer

Private Security Criminal Investigators and Special Agents Criminal Justice and Law Enforcement Teachers











"This class expands your knowledge on Law Enforcement and many things you didn't know before. I highly recommend this class to anyone who's looking into Law Enforcement as a career. It provides a challenge for anyone who's up for it". Nazhelly

"This class has taught me much more about law Enforcement. It makes you respect the job and gives you a better feel for Law Enforcement". Jason

"This is a very interesting and fun class! I've learned a lot and it's been fun". Maddie

"This class has been a truly amazing experience and opportunity and I love every minute of it". Dallas

"I would highly recommend this class to anyone who wants to experience a challenging and fun class!" Ethan

"This class is great"! Carson

# CYBERSECURITY/NETWORKING Full Year Information Technology Education



Instructor: Ben Crenshaw lawerence.crenshaw@canyonsdistrict.org 801-826-6653

**PROGRAM DESCRIPTION:** This program provides exciting opportunities for student professionals in the high-demand and challenging world of Cybersecurity and Digital Forensics. It introduces the technologies used in the field such as computer maintenance, basic networking, and cybersecurity awareness. Students will learn how to troubleshoot and repair various hardware, software, and configuration problems. Students will also practice installing basic computer parts, networking components, and apply security concepts. Further topics include identifying security threats, cryptography, hardening networks, and Ethical Hacking with Kali Linux.



High School Credit: CTE credit or elective credit: up to 4 credits

Industry Certifications: MTA Windows Operating System Fundamentals, MTA Network

Fundamentals, MTA Security Fundamentals, MTA Window Server Administration Fundamentals, TestOut PC Pro, TestOut Network Pro, and TestOut Security

**Skills Certification:** Utah State Skills Certification Tests **Additional Opportunities:** SkillsUSA membership

**Recommended:** Keyboarding and Foundations of Technology

### **COURSE DESCRIPTIONS:**

**Computer Repair Technician 1:** Enhance your technological and troubleshooting skills by building, maintaining and repairing the personal computer. Combine targeted computer repair training with industry expertise and certifications.

**Networking:** Enhance your training by designing and building network systems. This course covers essentials for a network engineer to survive and excel in this rapidly growing industry.

**Cybersecurity and Cyber Forensics:** Continue adding value for future employers with this course covering core security and forensics technologies. Learn to design and build security systems, how to monitor and prevent security leaks, maintain data and device confidentiality/integrity, and availability.

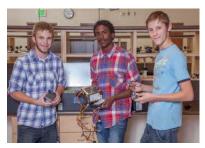
Costs/Fees for the 2021-2022 school year: Pending school board approval.

### Career Possibilities:

PC Help Desk Technician Computer Forensics Investigator Network Administrator Information Security Specialist Cybersecurity Analyst Cyber Threat Intelligence Analyst Field Technician Security Vulnerability Engineer Wireless Networking Technician Gaming PC Designer











"I graduated valedictorian from Neumont University in March 2014, receiving my computer science degree. Shortly before I graduated, I began working part-time for AtTask in Lehi, Utah. I accepted a full time offer there following graduation. I've been working as a Developer Operations (DevOps) engineer.

The programming, hardware, and networking knowledge I picked up at CTEC has been a huge boon. The knowledge of hardware and networking has given me an advantage over the average developer. Recently, a coworker and I have been building out a new cloud to host hundreds of virtual machines for distributed builds and tests. I've spent the past months working on the network, configuring virtual machines, and writing the code to glue it all together". Josh Bloom, class of 2011

"Right now, I am stationed with 2-11 field artillery in the 25th infantry division in Hawaii. My job here in the artillery world is based on a program called AFATADS (advanced field artillery data system) in which entire brigades need to be connected over LAN in order to communicate properly. The program was created by Raytheon in order to allow operators to place certain parameters on a live map to be shared among different units (No fire zones, friendly units, and so forth) and also enables the operator to submit fire missions and put artillery where it needs to be. My experience with networking and information technology has given me the jump on understanding how this works, and I'm already an asset to my team". Pv2 David Butler III, class of 2012

### DIGITAL MEDIA/3D ANIMATION Full Year

### Information Technology Education



Instructor: Jonathan Humphries jonathan.humphries@canyonsdistrict.org 801-826-6654

**PROGRAM DESCRIPTION**: This course prepares students for a variety of careers in the field of digital media and animation. Within an environment geared toward creativity and teamwork, students will develop skills in 3D graphics, digital painting, illustration, graphic design, 2D and 3D animation, audio, and video. Students will also learn project development skills such as project management, script writing, storyboarding, design skills, project evaluation, and critiquing skills.



**High School Credit:** CTE credit or elective credit: up to 4 credits total **Concurrent Enrollment:** 7 College Credits. AP Studio Art Credit optional. Student is responsible to register and pay for concurrent enrollment classes at SLCC. For more information on these classes, see Appendix.

**Industry Certifications:** Adobe ACA for Photoshop, Animate, Premiere Pro, InDusign, and Illustrator

InDesign, and Illustrator.

**Skills Certifications:** Utah State Skills Certificate Tests **Additional Opportunities:** SkillsUSA membership

### **COURSE DESCRIPTIONS:**

**ART 1080 Photoshop and Digital Media:** The course focus will be on using Adobe Photoshop as a tool to produce CG imagery for video production, photo illustration, digital publishing and animation. Adobe Illustrator, Premiere, and Autodesk Maya will be introduced.

**ART 1630 Computer Graphics Essentials:** Introduction to basic techniques and theories used in creating images with a computer. Exploring the fundamentals of modeling, texturing, lighting, rendering, animation, and compositing while applying principles of storytelling and design.

**3D Graphics:** Students will use 3D graphics software to produce 3D models. This course will introduce students to 2D and 3D modeling, the creation and application of textures, mapping, lighting, camera techniques, and rendering of 3D models.

**Digital Media 2:** Gain a deeper knowledge of concepts such as graphics, animation, audio and video production and create a professional level portfolio. Work toward the Adobe ACA software industry certifications on Photoshop, Illustrator, Animate, and Premiere Pro. Learn to create animation, video and audio projects using digital media applications. Animation principles, script writing, storyboarding, and project management techniques are used to help students in the production process.

**3D Animation:** Use 3D graphics software to produce 3D animations. Introduce students to 2D and 3D, animation planning, storyboard development, and the animation process.

**Digital Sculpting:** This course provides students with the skills required to create digital 3D sculptures. Unlike polygonal modeling as is done in 3D Graphics, students work with digital clay and sculpting tools. Students will also learn digital painting techniques to add color to their sculptures.

### Career Possibilities:

Graphic Designer Audio Engineer Video Specialist Industrial Designer Illustrator Concept/Storyboard Artist 3D Modeler/Texturer Instructional Designer Animator











"CTEC was a wonderful experience. It allowed me to explore different career paths without wasting time and money. CTEC teaches with professional technology and I learned so much about what will be needed in the working world. In fact, so much so, that I was able to get a job in a related field soon after graduation and am far ahead of the other kids in my college classes. I recommend CTEC to anyone interested in exploring the various career paths offered and want to have fun along the way". Ashlyn Cary

"I love CTEC because it had a class focusing on my future career goals. My home high school didn't have an in-depth animation class. I am able to learn what I love! I also get to make new friends from other schools I wouldn't have been able to meet normally. I have been able to make new friends for life. I have greatly enjoyed my two years at CTEC, and I would suggest to anyone with big dreams to come here and experience it for yourself"! Kaitlyn Brockbank

# EMERGENCY MEDICAL TECHNICIAN Semester (EMT) Health Sciences



Instructor: Tori Penrod Tori.penrod@canyonsdistrict.org 801-826-6657

**PROGRAM DESCRIPTION**: This EMT course provides students with insights into the theory and application of concepts related to the profession of emergency medical services. Specific topics include EMS preparatory, airway management, patient assessment, management of trauma patients, management of medical patients, treating infants and children, and various EMS operations. The course is based on the NHTSA Emergency Services Education Standards, National Registry of EMT's, and ATTA Guidelings.



**High School Credit**: CTE credit or elective credit: 2 credits total

**Concurrent Enrollment:** Through SLCC 10 college credits. For more information on those classes, see Appendix

on these classes, see Appendix.

**Industry Certification:** Students will prepare to take the NREMT Psychomotor

and Cognitive Exams, NRE MT Certification and Utah license

**Additional Opportunities:** HOSA membership

**Requirements:** Must be a senior to attend this class. It is strongly recommended that students have current immunizations including the hepatitis A and B series and current TB. Students must provide their own transportation to all clinical sessions.

Students must be able to lift 125 pounds.

**Recommended:** Biology, Medical Anatomy and Physiology, Medical Terminology

### **COURSE DESCRIPTIONS:**

**HSEM 2300/Emergency Medical Technician 1 and 2:** Our exciting, yet demanding course will be taught through didactic lecture, hands on demonstration and practical application settings. Reading assignments and bookwork will be part of this program. The EMT candidate must maintain 80% on every assignment and test or better in order to take all required exams. Candidates who successfully complete the written exam and prove competency will then be recommended to take the NREMT psychomotor skills testing. Candidates who successfully complete the National Registry practical (psychomotor) skills stations and have successfully completed both testing phases will be required to schedule for the National Registry of EMT's (NREMT) written exam through Pearson Vue testing center. Candidates will need to be competent in their skills and knowledge and will be evaluated throughout the program. As we spend time in discussions, class lectures and implementing those tools through practice, the students will become knowledgeable, confident and competent. These techniques will help the student prepare for the National Registry of Emergency Medical Technician (NREMT) exams. Upon recommendation and successful completion of all requirements, students become eligible to be licensed as an Emergency Medical Technician through the State of Utah and NREMT. The NREMT Certification is renewed every 2 years and the Utah Bureau of EMS Licensure is renewed every 2 years.

Costs/Fees for the 2021-2022 school year: Pending school board approval.

### Career Possibilities:

Firefighter Ski Patrol Pre-Med Pre-Nursing EMT

Advanced EMT

Paramedic Emergency Room Technician Critical Care Technician Military Foreign Aid Medical

**Humanitarian Expeditions** 

EMT Instructor Phlebotomist Flight Paramedic Physician Assistant Police Detective











"I had a great experience taking the EMT-basic course through CTEC. I was able to earn my EMT-Basic certificate in high school which got me ahead of the game and saved me a lot of money. I enjoyed being able to leave my regular high school every day and meet in a classroom where I could learn and practice skills that I knew could apply to my future. The skills I learned and exposure I received from CTEC helped start me on my career path. I am currently working in emergency services as a Paramedic and it all began with CTEC! I competed and won the CPR competition for SkillsUSA a few years ago and worked for Sandy City Fire Department as a member of Sandy Fire's Medic Corp program. I am currently working as a Gold Cross paramedic in St George". Laura Berbert

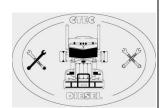
"The EMT program at CTEC is a great program to attend. The instructors know what they are talking about and are willing to help with any questions I had or skills I was struggling with. The program has prepared me for the jobs I currently hold as a part time firefighter/EMT for South Salt Lake Fire and Unified Fire Authority. I wouldn't be where I am at today without the CTEC EMT program". Austin Rekoutis

# HEAVY DUTY MECHANICS/DIESEL Full Year Skilled and Technical Sciences



Instructor: Spencer Call Spencer.call@canyonsdistrict.org 801-826-6637

**PROGRAM DESCRIPTION:** Topics include learning tools for measuring internal and external diesel engine components, complete engine rebuild, 12/24 volt electrical systems, Ohms law in incorporating math into the electrical systems, voltage drop, resistance, wiring, trouble shooting and fuel systems. Students will learn to use power tools and hand tools safely. Students will learn about brakes and air brake systems, arc welding and gas torch use, suspensions on trailers, truck and wheel alignments, transmission, clutch repair, truck preventive maintenance, and differential removal/rebuild. Reading and understanding shop manuals will also be covered. Students will have internship and career opportunities.



**High School Credit:** CTE credit or elective credit: Up to 4 credits **Concurrent Enrollment:** 8 college credits available. Student is responsible to register and pay for concurrent enrollment classes at SLCC. For more information on these classes, see Appendix.

**Industry Certifications:** ASE Diesel Brakes, ASE Engines, ASE Electrical/Electronic Systems, ASE Suspension/Steering

**Additional Opportunities:** Students may experience youth leadership and service through SkillsUSA.

**Recommended:** Automotive classes and mechanical experience

### **COURSE DESCRIPTIONS:**

**ASE Diesel Brakes and ASE Diesel Steering & Suspension/Diesel Technician:** This class will cover all aspects of air and hydraulic brake repair and fundamentals of operation. There will be troubleshooting and hands on repair in the shop. This class will cover basic suspension systems and steering systems, troubleshooting, repair, and performance of systems.

**ASE Electrical/Electronics/Diesel Technician:** This course will cover vehicle electrical systems, troubleshooting of systems, and repair of systems. It also covers electronic engine controls, diesel/gas diagnosis, repair, and trouble shooting.

**DST 1045 Basic Diesel:** This course will cover theory and practical experience in disassembly, inspection and reassembly of 4 cycle diesel engines. Subassemblies for different engine systems, running and tuning up engines from different manufacturers are also covered.

**DST 1065 Basic Engine Performance:** This course will cover rebuilding of diesel and gas engines. Identification of parts, engine theory, and rebuilding of individual components are covered.

### Career Possibilities:

Diesel Mechanic Tool Sales Truck Driver Machining

Dealership Management and Sales Welder Fleet Maintenance and Management











"I took Diesel because it seemed like a fun class. It is a good environment and there are good kids in the class. I love working in a class where the teacher is there to help us all learn and I really like the shop time. I have done one internship at Geneva Rock and it was amazing. Someday I would like to open my own shop. The two are a great combination. Since I am a junior, I plan on taking diesel again." Ammon Wright

"I have always loved working on cars and I had heard a lot of good things about CTEC. My sister did the cosmetology program, so I wanted to come here also. I really like learning all the little things that make up the big picture of Diesel Mechanics. I am a hands on learner and this was the perfect place to get those skills. I play soccer but I wanted to learn diesel because it pays more than auto mechanics. I also love math and physics. The other thing I like about CTEC is the new friends I have made here that are from other schools, we are all supercool with each other. I was a little nervous about coming to CTEC, but got more comfortable and now I am excited about it." Parker Brown

### MEDICAL ASSISTANT Full Year

### **Health Sciences**



Instructor: Todd Butler todd.butler@canyonsdistrict.org 801-826-6640

**PROGRAM DESCRIPTION:** This is a college level program that requires intrinsic motivation, professionalism, and self-determination. This program provides students with opportunities for growth as they become proficient in medical terminology, medical office administration, and a wide range of clinical skills. Students learn techniques for effective management of patient care and providing a safe environment that promotes healing and wellness. Students who successfully complete this course and the required testing will earn a Medical Assisting Endorsement from the State of Utah and the option to test for the National Medical Assistant Certification.





MEDICAL ASSISTING

**High School Credit:** CTE credit or elective credit: up to 4 credits **Concurrent Enrollment:** 3 college credits for Medical Terminology. Student is responsible to register and pay for concurrent enrollment Classes at SLCC. For information on these classes, see Appendix.

Industry Certifications: NCCT National Medical Assistant Certification.

**Skills Certification:** Utah State Medical Assistant Endorsement

**Additional Opportunities:** HOSA membership

**Requirements:** In order for students to complete externships, they MUST be a senior while attending the class. Students MUST have completed all required immunizations, background check and urine drug screening.

**Recommended:** This course is a full year course where students attend every day. GPA of 3.0 is recommended for this course. Science classes such as anatomy, physiology, biology, chemistry, and physics.

### **COURSE DESCRIPTIONS:**

**Medical Assisting 1 & 2:** Become proficient in medical front office skills such as scheduling appointments and setting up patient records. Learn clinical skills such as measuring vital signs, medical record documentation, and administering EKG.

**MA1100 Medical Terminology:** Course format is lecture supplemented with videos and discussion covering more than 350 medical word roots, suffixes, and prefixes. Emphasis is placed on pronunciation, spelling, and proper usage of medical terms. Medical abbreviations are also introduced.

**Medical Anatomy and Physiology:** Learn the structure and function of the systems of the body and how diseases and disorders affect these systems.

**Advanced Health Science:** This course is designed to help prepare students for a career in healthcare. The course will help students gain professional skills needed, understand the healthcare system, and attain knowledge required to excel in the healthcare field.

### Career Possibilities:

Medical Assistant in a physician's office, clinic or outpatient surgical setting

Nurse Practitioner

Physician Assistant Physician











"My name is Nadine I took Medical Assisting my last year of high school. Being in the Medical Assisting Program was probably the best time of my last year in high school. I chose to take this class because I want to be in a medical field and being in a medical program would be a start to my long term goals. The experience I gained in this program, I can't even find enough words to describe how much fun and how informative it was. Sometimes studying was hard, especially at the end of the year when we had to take the State exams but I wouldn't take away any part of it. Above all, there's only one person who made the year the best, Mr. Butler is probably the best teacher I have had in my whole life. He is always there to help me no matter what you need help with, even when some kids are struggling he tries to help them and make sure they understand. They say no one ever misses school when they have a week of spring break, but to be honest, when we had breaks I always couldn't wait to go back to class, he made learning easier and he always pushed everyone to do their best. I would most definitely recommend this class to anyone who is looking into a career in the medical field".

### MEDICAL FORENSICS Semester

### **Health Sciences**



Instructor: Rebekah Kay rebekah.kay@canyonsdistrict.org 801-826-6641

**PROGRAM DESCRIPTION**: This program is designed to introduce a field of science that incorporates both science and criminal justice. Students will learn to identify, collect and analyze evidence using the scientific method and deductive reasoning. Medical forensics involves many aspects of health science instruction including anatomy, physiology, microscopy, lab safety, and clean techniques. Career exploration will include hands-on experience with evidence identification, measurement and collection, blood spatter documentation and analysis, microscopic examination, chemical analyses, death investigation, and more.



**High School Credit:** CTE credit or elective credit: up to 2 credits and a possible science credit.

**Concurrent Enrollment:** 6 college credits through SLCC. Student is responsible to register and pay for concurrent enrollment classes at SLCC. For more information on these classes, see Appendix.

**Skills Certification:** Utah State Skill Certificate Test **Additional Opportunities:** HOSA membership **Required:** ACT or SLCC Placement Test results

**Recommended:** General Biology and Introduction to Criminal Justice

**COURSE DESCRIPTIONS:** See Concurrent Enrollment Appendix.

**CJ 1350/Medical Forensics- Intro to Forensic Science:** This semester course is designed to introduce the field of forensic science. The focus is on introductory skills necessary to prepare students for careers such as crime scene technician, criminalist or forensic scientist.

**Biology 1090/Advanced Health Science- Medical Anatomy & Physiology:** This is a semester course designed to prepare students for a health science career. Paired with medical forensics, the focus will be on the normal functions of the human body in order to aid in determining the manner and cause of death as determined by a medical examiner.

Costs/Fees for the 2021-2022 school year: Pending school board approval.

### Career Possibilities:

Crime Scene Technician
Forensic Psychologist
Criminalist
Forensic DNA Analyst
Fingerprint Analyst
Drug Chemist
Toxicologist

Forensic Pathologist
Medical Examiner
Forensic Nurse Examiner
Blood Spatter Analyst
Firearms Examiner
Forensic Serologist
Clinical Laboratory Technician











"I loved taking Medical Forensics at CTEC. We learned new information every day. All the units were very interesting. The field trips were fun and informative. Being at CTEC didn't feel like my regular high school and I was able to meet people from other schools. It was never boring in class. The teacher is fun and really explains things in a way you can understand". Zoey Sadler

"Medical Forensics is a great class, students are able to do a lab or two almost every week in order to apply what we learn in class. It is a very hands-on class. We learn to look at all sides of the story. We learn something new every day and I can understand so much more about what is going on in medical and forensic shows". Blake Gentilcore

## NURSE ASSISTANT (CNA) Semester

### **Health Sciences**



Instructor: Mary Lee Hackman Marylee.hackman@canyonsdistrict.org 801-826-6658

**PROGRAM DESCRIPTION**: Students will provide patient care, assess patient wellness, report changes in patient condition, measure intake/output, perform range of motion tests, and measure vital signs (blood pressure, pulse, respiration, temperature, height, and weight). Additionally, students will assist with lifting, moving, walking, turning and positioning patients. CPR (cardiopulmonary resuscitation), medical terminology, basic human anatomy, and physiology concepts will be taught.



**High School Credit:** CTE credit or elective credit: up to 2 credits **Concurrent Enrollment:** 5 college credits available. Student is responsible to register and pay for concurrent enrollment classes at SLCC. For more information on these classes, see Appendix.

**Industry Certification:** Students prepare to take the State Nurse Assistant Certification Test.

**Skills Certification:** Utah State Skills Certification Test **Additional Opportunities:** Students may experience youth leadership and service through HOSA.

**Requirements:** Excellent attendance, <u>students must attend one clinical session each week, above and beyond class time</u>. Must have current immunizations: Hepatitis B series, Tuberculosis (TB) skin test, Tdap, Measles, Mumps, and Rubella (MMR), Flu and Varicella vaccine.

**Recommended:** Biology, Health Occupations, Medical Anatomy and Physiology, and Health Sciences

### **COURSE DESCRIPTIONS:**

**Nurse Assisting:** Nurse assisting is the fastest growing profession in the U.S. This class will lead to Utah certification so that you can get a job in the healthcare field. Most Utah colleges require CNA experience to apply to a nursing program.

**MA1100 Medical Terminology:** Uses videos and lecture to cover over 350 medical word root, suffixes, and prefixes. Learn the proper usage, pronunciation and spelling of medical terminology.

**HLTH 1200/Emergency Medical Responder:** The student will learn how to perform CPR and first aid. The student will be prepared to become CPR and first aid certified while taking this class.

### Career Possibilities:

Work as a Certified Nurse Assistant in a:
Hospital Hospice Agency
Skilled Nursing Facility Physician's Office
Long-Term Health Agency











### PHYSICAL THERAPY Semester

### **Health Sciences**



Instructor: Austin Giove austin.giove@canyonsdistrict.org 801-826-6646

**PROGRAM DESCRIPTION:** This program is designed for students interested in the rehabilitation career field of physical therapy. Students will learn skills required to function as a therapy or rehabilitation technician including therapy treatments, communication skills, patient transfers, patient ambulation, patient range of motion, clinic policies and procedures, and professionalism. Students will learn to assist physical therapists and physical therapist assistants in managing patient care in a rehabilitation setting such as outpatient, hospital, and skilled nursing facilities. Students will demonstrate abilities such as evaluating patient range of motion, therapeutic exercise, interpersonal and professional communication skills, and basic and functional human anatomy. Students will participate in clinical observations.



**High School Credit:** CTE credit or elective credit: 2 credits **Concurrent Enrollment:** 2 college credits available. Student is responsible to register and pay for concurrent enrollment at UVU. For more information on these classes, see Appendix.

**Skills Certification:** Utah State Skills Certification Tests **Additional Opportunities:** Physical Therapy clinical hours, Utah Skill Physical Therapy Aide Endorsement, Utah Skills Sports Medicine Endorsement, BLS CPR Certification, Concussion Prevention Certification, Heat Illness Prevention Certification, NSCA Certified Personal Trainer (CPT Certification), Compete in HOSA State/National Championships

**Recommended:** Anatomy, Physiology and Exercise Science

### **COURSE DESCRIPTIONS:**

**Introduction to Physical Therapy**: This course introduces students to the field of physical therapy through the history, medical terminology, documentation, therapy treatments, and pertinent legal and ethical considerations of the profession. Healthcare for a diverse population begins its thread in this course. Students will participate in clinical observations.

**PES 2400/Exercise Science/Sports Medicine:** This course is designed to introduce the student to the area of physical therapy and athletic training. Students will also learn components of sports medicine including human anatomy and physiology, injury prevention, first aid practices, injury evaluations, healing processes, therapeutic modalities, sports nutrition, performance skills, and career options.

### **EDUCATIONAL OPPORTUNITIES:**

Students have the opportunity to further their education at a community college for an Associate's Degree in the much needed field of Physical Therapy Assisting. Students can also go on to a Bachelor's Degree in a related field, and then obtain a Doctor of Physical Therapy Degree.

### Career Possibilities:

Rehabilitation Technician Physician
Physical Therapist Assistant Surgeon
Physical Therapist Athletic Trainer
Physical Therapy Aide Sports Psychologist

Certified Personal Trainer Certified Strength and Conditioning Specialist











"This class has been the best course decision I have made in all of my high school career. Unlike other classes, we learn hands on and can apply what we learn to a physical therapy or Exercise Science profession". Nichols Berndt

"This class is really applicable to the real world. It not only gives you an in depth view of physical therapy, but also an overview of other health professions relating to rehabilitation which helps you know what you want to do in the future". Riley Wood

"This class gives you fantastic hands-on experience. The teacher, the curriculum and the experience are all a part of what makes this class so unique and educational". Tristynn Faris

"This is a class that you do not want to miss out on. Experiencing physical therapy hands-on, practicing techniques, and how to provide the best care for a potential patient. Every day is something new and fun to participate in". Lexi Walker

"I wish I could be in this class all year. I have learned so much from physical therapy. We always do fun activities and always have fun. There is a positive attitude in the class". Hannah McClure

"I like that we actually get up and do the exercises and things that we are learning about on ourselves. It is so much more interesting than just sitting taking notes and doing bookwork all class period". Rebekah Oakeson

### PROGRAMMING/SOFTWARE DEVELOPMENT Full Year

### Information Technology Education



Instructor: Cody Henrichsen cody.henrichsen@canyonsdistrict.org 801-826-6651

**PROGRAM DESCRIPTION**: This course is a college level introduction to computer science concepts. These concepts include data representation/abstraction, recursion, software engineering, sorting/searching, and object oriented programming. Student's problem-solving skills will be developed through designing, implementing, and executing computer programs. The Java programming language will be used for the majority of the class. Students will work with desktop, mobile and database development. Students will be prepared to take the AP Computer Science Principles and AP Computer Science A exams. They will have opportunities to participate in programming competitions against other schools and gain marketable skills before they graduate high school.



**High School Credit:** CTE credit or elective credit: Up to 4 credits total and a possible math or science credit

**Concurrent Enrollment:** 8 college credits <u>required</u>. Student is responsible to register and pay for concurrent enrollment classes at SLCC and Weber State University. For more information on these classes, see Appendix.

**AP Credit:** AP Computer Science tests available

**Additional Information:** Compete in programming competitions

**Industry Certifications:** MTA, Adobe

**Skills Certifications:** Utah State Skills Certificate Tests

**Requirements:** Secondary Math II completed. All 2<sup>nd</sup> semester classes

require passing the 1<sup>st</sup> semester (College requirement).

Keyboarding and basic computer skills.

### **COURSE DESCRIPTIONS:**

**CSIS 1400 Fundamentals of Programming:** Students will learn the basics of programming using Java including GUI development.

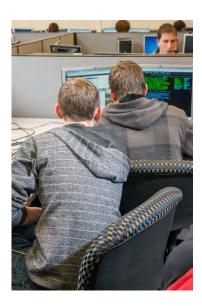
**AP Computer Science Principles:** Students will use the Swift programming language to develop iOS applications to learn about computer science and software development principles and address real world topics.

**CSIS 1410 Object Programming:** Students will create more complex GUI applications including games using Java. Build more complex applications that involve data structures and prepare for the AP Computer Science Exam.

**CS 2550 Database Design:** Students will design and implement databases using SQL. Students will solve database problems using simple and complex queries on datasets.

### Career Possibilities:

Computer Programmer Game Developer Software Engineer Computer Engineer Software Developer Database Developer Database Administrator











"I really enjoyed the programming class at CTEC because of the fun projects, and the great instruction. It is a lot of hands-on learning, which makes concepts easier to understand. My favorite project that we did was programming Lego robots in Java". L. Wyness

# WELDING TECHNICIAN Full Year Skilled and Technical Sciences



Instructor: Dalton Magee dalton.magee@canyonsdistrict.org 801-826-6638

**PROGRAM DESCRIPTION:** The skills and experience gained in this class will prepare you for the careers of the future. The demand for skilled welders is at an all-time high. Students will gain skills in a range of welding processes including SMAW, FCAW, GMAW, and GTAW. Cutting processes including oxy-fuel, plasma and mechanical cutting will be used. Project creation, design, and layout will be emphasized. This course can prepare you for a welding career, or it can open opportunities to better summer and college jobs and a career to fall back on. Soft skills are a high priority. This means being on time, attending consistently, working with others, and following safety procedures.



**High School Credit:** CTE credit or elective credit: Up to 4 credits **Concurrent Enrollment:** 3 college credits available. Student is responsible to register and pay for concurrent enrollment classes at SLCC. For more information on these classes, see Appendix.

**Skills Certification:** Utah State Skills Certificates and AWS SENSE certification opportunity.

**Additional Opportunities:** Participate in SkillsUSA competitions and leadership rolls.

**Recommended:** This class is for any student who enjoys working and learning in a hands-on environment. No prior welding experience needed.

### **COURSE DESCRIPTIONS:**

**Entry Welding Technician:** This is an entry level course that will teach basic welding skills. This course will prepare students to apply technical knowledge and skill in the workplace and in project construction. SMAW and GMAW welding will be the main welding processes covered in this portion of the class.

**Intermediate Welding Technician:** This is an intermediate level course that will teach the next level of welding skills. This course will dive deeper in the GMAW process along with FCAW. How to plan, prepare, and construct projects will be covered.

**Advanced Welding Technician:** This is an advanced welding skills course. This course will teach students the processes that will prepare them to apply technical knowledge and skill in the workplace and in project construction. A focus on project creation, structural welding and refining welding techniques will be the main focus. An introduction to the GTAW process will also be covered.

**WLD 1005 Related Welding:** Students will learn basic principles of the arc and acetylene welding including flat and horizontal welds; brazing and cutting techniques.

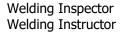
### Career Possibilities:

Welding Technician Welding Repair Technician



Welding Engineer Welding Salesman









"I believe that in joining welding, I have greatly improved my future in many fields and I will almost never have financial troubles". Shawn

"Taking the welding class has helped me a lot. I have learned skills that will help me throughout my life. I am very glad to have taken the class". Austin

"Taking this class has been a very good experience for me. I have learned valuable life skills and more". Anthony

"Welding is an invaluable skill. There are many job opportunities for a certified welder. Welding is all over the world and in many fields such as underwater and construction. Welding teaches patience and control. It truly is a valuable skill to learn". Caleb

# Canyons School District Engineering Program at Alta High School

\*This program is open to all Canyons School District students 9th Grade 10th Grade 11th Grade 12th Grade CAD Mechanical 1 CAD Mechanical 2 & 3 and Period 3 Only Robotics 1 & 2 Engineering Principles 1 and **Engineering Capstone** Period 8 Only If starting Physics with Engineering Period 4 Only AP Physics 1 Pathway in -Technology AP Physics AP Physics C AP Physics 1 recommended 9th grade AP Physics C Mechanics Mechanics recommended recommended CAD Mechanical 1 CAD Mechanical 2 & 3 and Period 3 Only Robotics 1 & 2 If starting Engineering Principles 1 and Physics with Engineering Capstone Period 4 Only Pathway in Period 8 Only AP Physics AP Physics 1 10th grade AP Physics C AP Physics 1 recommended AP Physics C Mechanics Mechanics recommended recommended CAD Mechanical 1 CAD Mechanical 2 & 3 If starting and Period 3 Only Engineering Principles 1 Pathway in and Period 8 Only **Engineering Capstone** 11th grade Period 4 Only AP Physics 1 AP Physics C AP Physics 1 AP Physics C Mechanics recommended Mechanics recommended CAD Mechanical 2 & 3 If starting HYSIC Period 3 Only Pathway in and 12th grade **Engineering Capstone** Period 4 Only AP Physics 1 or AP Physics C

**Engineering Technology** should be taken during 9th grade, but can be taken anytime during the four years of high school. It must be taken before or concurrently with Robotics 1 & 2.

**Robotics 1 & 2** should be taken during 10th or 11th grade, but can be taken anytime during the four years of high school. It can be taken concurrently with CAD Mechanical 1 and Engineering Principles 1. (*Physics with Technology, or AP Physics recommended*)

Mechanics recommended

**CAD Mechanical 1** Period 8 only (SLCC College Credit) and **Engineering Principles 1** can **only** be taken in 11th or 12th grade. No prerequisites required

(Physics with Technology, AP Physics or AP Physics C Mechanics recommended)

**Recommended Class Sequence** 

**CAD Mechanical 2 & 3** Period 3 only (SLCC College Credit) can <u>only</u> be taken during 11th or 12th grade. It should be taken after CAD Mechanical 1 and Engineering Principles 1 before or concurrently with Engineering Capstone

**Engineering Capstone** Period 4 only and can **only** be taken during the 11th or 12th grade year. It should be taken after CAD Mechanical 2 & 3, but can be taken concurrently with CAD Mechanical 2 & 3. This is the capstone class of the Engineering program at Alta High School.

(Physics with Technology, AP Physics or AP Physics C Mechanics recommended)

### **Course Descriptions**

### **ENGINEERING TECHNOLOGY**

A foundational engineering design course that introduces basic problem-solving and documentation skills. Various aspects of engineering will be explored along with technology's environmental, societal, political, and economic impacts on our world. By utilizing problem-solving skills, students will develop essential abilities and attitudes that will, in turn, expand their occupational opportunities in the world of engineering.

### **ROBOTICS**

A lab-based, hands-on curriculum combining electrical, mechanical and engineering principles. Students will learn to design, build, program and control robotic devices by applying science, technology, engineering, and math concepts. A rigorous study and application of electrical concepts will include sources of energy, electrical safety, use and identification of basic electronic components, sensors, and actuators. Engineering concepts will include: mechanical design, prototype development, design testing, programming, and proper engineering documentation. Industrial automation, robotic applications, and career opportunities will also be discussed.

### CAD MECHANICAL

Introduces high school students to the engineering design process and to the properties of good design. Students will plan, complete, and document a number of analysis-based designs. Skills will be developed in the creation of memos, design reports, and technical drawings using 2D/3D CAD software. The course content will be covered through a series of hands-on activities.

### **ENGINEERING PRINCIPLES**

A hands-on course that ties together observations and concepts common to a variety of different engineering disciplines in order to develop a better understanding of basic math and science principles used in engineering. By utilizing problem-solving skills in a laboratory environment, students will develop skills and attitudes that impact and expand occupational opportunities.

### **ENGINEERING CAPSTONE**

As members of an engineering team, students apply science, technology, and mathematical concepts and skills to solve engineering design problems or to significantly innovate existing products. Students research, develop, test, and analyze designs using criteria such as cost, effectiveness, safety, human factors, and ethics. Long term project development by student teams and regular interaction with and presentations to members of industry are essential components to the success of this course.

### AP PHYSICS 1/HONORS PHYSICS

Highly recommended for grades 11-12. Students must have successfully completed Secondary Mathematics II. AP Physics 1 is the equivalent of a first semester algebra-based college physics course, but it is designed to be taught over a full academic high school year to enable AP students to develop deep understanding of the content. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy and power; mechanical waves and sound; and an introduction to electric circuits. As part of this class students have the opportunity to complete 10 labs outside of the school day at the University of Utah for university credit.

### AP PHYSICS C MECHANICS

Highly recommended for grades 11-12. Students must be concurrently enrolled in AP Calculus and have completed an introductory physics course. AP Physics C Mechanics is the equivalent of a first semester calculus-based college physics course, but it is designed to be taught over a full academic high school year to enable AP students to develop deep understanding of the content. The focus of AP Physics C Mechanics is classical Newtonian mechanics. It is especially appropriate for students planning to enter careers in engineering or physical science. University credit can be earned with a successful performance on the Advanced Placement exam. As part of this class students have the opportunity to complete 10 labs outside of the school day at the University of Utah for university credit.



# CTEC Medical Innovations Pathway



### MIP

Housed at Jordan High School and taught by Travis Rowley, these courses are available to all Canyons School District seniors. Students interested in engineering or biomanufacturing will learn the manufacturing process from start to finish with project based activities, and complete job shadows and externships with leading bio-manufacturing companies. Employment, career opportunities, and college tuition reimbursement are available.

Utah's medical device industry is the fastest growing industry in Utah, and is growing so quickly that it threatens to outpace the state's ability to provide enough workers to fill the skilled jobs the industry requires. A lucrative and exciting job in biotechnology or medical manufacturing could be in your future.

This is a great class for students interested in pursuing a career in any of the engineering fields, as the manufacturing process is critical to all engineering processes. This is also a great opportunity for those wishing to start a career right out of high school.

Seniors in high school spend the first semester in a manufacturing principles course, learning the history of the industry, product development, operational structures and optimization, cost and quality control.

Second semester includes a course in biomanufacturing, exploring the medical device industry, FDA regulations as they apply to the medical device industry, and careers in this field.

### Careers & Salary

Median Average Hourly Wage: \$13 - \$27

### **Length of Program**

8<sup>th</sup> Period, full year 1.0 CTE credit

### **Certifications**

Medical Innovations Pathway Certificate

### Reasons to take MIP

- Exciting jobs right after high school
- Build a rewarding career
- Earn above market wages, excellent benefits
- Receive potential tuition support for a college degree <u>travis.rowley@canyonsdistrict.org</u>

### Courses

Manufacturing Principles 1 (.5 credit) Biomanufacturing 1 (.5 credit)

### **More Information**



### **Industry Partners**



**BD** Medical



Edwards Lifesciences







# Please see ctec.canyonsdistrict.org for more information and to apply!

# Class/Program Information

Canyons Technical Educ	Janet Goble, Principal, (801)826-5510			
ctec.canyonsdistrict.org	825 East 9085 South, Sandy, UT 84094	Doug Hallenbeck, Assistant Principal, (801)826-6601		
<u> </u>	(801) 826-6600	Ben Poulsen, CTE Coord	inator, (801)826-6621	
PROGRAM	DESCRIPTION	Certifications	College Credit Available	
	Academy of Information Technology			
	Build and secure computer systems and networks with hands-on labs and	MTA: OS, Network, Security,		
Cybersecurity/Networking	cybersecurity briefings. This course prepares students for successful job	Server Admin. TestOut: PC Pro,		
	placement by earning industry certifications in IT and Cybersecurity.	Network Pro, Security.		
	Learn to use digital media, 3D animation and digital editing software, 2D	Photoshop, Flash,	7 SLCC Credits	
Digital Media	and 3D graphics, audio and video to prepare for jobs in graphic design and			
	the multimedia industry. Intro to IT.	Dreamweaver		
Programming/Software	Learn advanced programming skills and develop software applications.	C#, JAVA, MTA, Adobe	8 SLCC Credits	
Development	Build computer programs, apps for mobile devices, the Internet, and		4 WSU Credits	
201010	gaming systems. Earn industry certifications. Intro to IT.			
	Business			
Business Leadership/	Be a business professional and learn skills such as: communication,		15 SLCC Credits	
Project Management	creating business plans, and essential workplace skills. Build your			
	resume and work on real industry projects.			
	Health Sciences			
Certified Nurse Assistant	Learn patient care, anatomy, physiology, nutrition, medical terminology,	CNA Utah State	3 SLCC Credits	
(CNA)	first aide, and CPR. Prepare to take the state CNA exam. Participate in	License		
` ,	clinicals at a hospital or care facility.			
Emergency Medical	Learn training standards for EMT, administering basic life support,	Utah State EMT	10 SLCC Credits	
Technician (EMT)	splinting, airway management, rapid extraction, emergency childbirth,	License and NREMT		
, ,	etc Prepare to take the state EMT certification exam.	Certification		
Maritinal Arabatan	Learn clinical skills to work in a physician's office. These skills include:	Utah State and National	3 SLCC Credits	
Medical Assisting	taking vital signs, drawing blood, giving shots, performing simple lab	Medical Assistant		
	tests, and documenting medical records. Clinical externship.	Certification		
Madical Faurusias	Solve mysteries using problem solving techniques. Learn health science		6 SLCC Credits	
Medical Forensics	skills such as microscopy, toxicology, measurement, physical evidence			
	ID, pathology, entomology, and photography.		0.10/11/0 156	
Dhysical Thereny	Learn physical therapy skills such as: therapy treatments, communication		2 UVU Credits	
Physical Therapy	skills, patient transfers, patient ambulation, patient range of motion, clinic			
	policies, procedures, and professionalism.			
	Skilled and Technical Sciences Learn construction management skills including managing and		10 SLCC Credits	
Construction Management	participating in framing, roofing, painting, finish carpentry and concrete		TO SECO Credits	
Construction Management	finishing. Build a project house from start to finish.			
	Learn hair styling, cutting, coloring, perming, chemical relaxing, skin care,	Prepare for State of Utah DOPL	44 USU-Eastern	
Cosmetology / Barbering	and nail care with emphasis on safety, sanitation and professionalism.	and Utah Cosmetology/	Credits	
coomotology / Earsoning	Will have constant exposure to clients to practice for employment.	Barbering Licensing Exam.	Oreuns	
	Learn about the criminal justice system, including how law enforcement		12 SLCC credits	
	officers function, criminal law, and the diversity of law enforcement		12 0200 0104110	
Criminal Justice	careers. Learn take-down tactics, arrest techniques, interacting with the			
	public, and many other skills.			
	Learn diesel technician certificate competencies in the following areas:	ASE Certifications in Brakes,	8 SLCC Credits	
Heavy Duty Mechanics /	safety, brakes and bearing adjustments, air brake systems, electrical	Engines, Electrical/Electronic		
Diesel	repair and trouble shooting, welding and cutting, complete engine	Systems, Suspension/Steering		
	overhaul, suspensions, clutches, preventative maintenance, and			
	Learn technical skills and knowledge through hands on lessons in gas	Utah State Skills	3 SLCC Credits	
Wolding Tochnician	and electric welding, metal fabrication, plasma cutting, pipe welding, and	Certificates, AWS		
Welding Technician	more. American Welding Society task list emphasized.	Welding Certifications		
	·			
	Technology and Engineering			
İ	These courses are housed at Alta High and are available to all Canyons	Utah State Skills	3 SLCC Credits	
	IO alternation of the Control of the	Certificates		
Engineering Capstone	School District high school students. See the CTEC catalog for a full			
Engineering Capstone	description of the courses and the recommended class sequence.			
	description of the courses and the recommended class sequence.  Housed at Jordan High School, these courses are available to all Canyons	Medical Innovations		
Engineering Capstone  Medical Innovations Pathway	description of the courses and the recommended class sequence.	Medical Innovations		

Juniors and Seniors can enroll in any classes unless indicated as "Seniors Only"

Revised 9/2020



### Concurrent Enrollment – Appendix 2021-2022

Course Title					High	Concurrent
Code	Course Title	Course	Credit Type	Grade	_	
Building Construction Trades - SLCC	Course ritie	Code	Credit Type	Level		
CMGT 1320/Building Construction   9864   CTE, Elective   10-12   50   2	Building Construction Trades – SLCC				Credits	Credits
Month   Section   Sectio		9864	CTE. Elective	10-12	.50	2
Month   Section   Sectio			•			
Business Leadership Training - SLCC   Bus 1010/Intro to Business   9844   CTE, Elective   11-12   .50   3   CTEL 1010/Leadership Principles   5706   CTE, Elective   11-12   .50   3   CTEL 1010/Leadership Principles   5706   CTE, Elective   11-12   .50   3   CTEL 1010/Leadership Principles   5706   CTE, Elective   11-12   .50   3   CTEL 1010/Leadership Principles   5706   CTE, Elective   11-12   .50   3   CTEL 1010/Leadership Principles   5706   CTE, Elective   11-12   .50   3   CTE, 1010/Decisional Finance   9803   CTE, Elective   11-12   .50   3   CTE, 1010/Decisional Principles   5706   CTE, Elective   11-12   .50   3   CTE, 1010/Decisional Principles   5706   CTE, Elective   11-12   .50   3   CTE, 1010/Decisional Principles   5706   CTE, Elective   11-12   .50   CTE, 1010/Decisional Principles   5706   CTE, Elective   11-12   .50   CTE, 1010/Decisional Principles   5706   CTE, Elective   5706   CTE, E		-			.50	
Bus 1010/Intro to Business	·		,			
ECON 1010/Economics for Social Sciences	· ·	9844	CTE, Elective	11-12	.50	3
CTEL 1010/Leadership Principles	·					
Fin 1050/Personal Finance		5706	CTE, Elective		.50	3
MKTG 1030/intro to Marketing		_				3
Cost		9825		11-12	.50	3
COST 1200/Barbering Theory			,			
COST 1210/Parbering Lab		9952	CTE, Elective	11-12	1	5
COST 1100/Orientation		_			1	
COST 1110/Orientation Lab		_		11-12	1	
COST 2300/Intermediate					1	
COST 2310/Intermediate Lab					1	
COST 2300/Intermediate II	COST 2310/Intermediate Lab	9955		11-12	1	6
COST 2410/Advanced	COST 2300/Intermediate II	_	•			
COST 2410/Advanced Lab	COST 2310/Intermediate II Lab	9957	CTE, Elective	11-12	1	6
Criminal Justice - SLCC         CJ 3330/Criminal Law         9151         CTE, Elective         11-12         .50         3           CJ 2540/Careers in Law Enforcement         9155         CTE, Elective         11-12         .50         3           CJ 2540/Careers in Law Enforcement         9150         CTE, Elective         11-12         .50         3           CJ 1300/Intro to Corrections         9152         CTE, Elective         11-12         .50         3           Digital Media - SLCC         ART 1630/Computer Graphics Essentials         1073         CTE, Elective         11-12         1         4           ART 1630/Computer Graphics Essentials         1073         CTE, Elective         11-12         1         4           Emergency Medical Technician (EMT)         9730         CTE, Elective         11-12         2         10           Heavy Duty Mechanics – Diesel - SLCC           DST 1045/Basic Diesel         9040         CTE, Elective         10-12         1         4           Medical Forensics - SLCC           US 1350/Medical Forensics         9129         CTE, Elective         10-12         1         4           Medical Assistant - SLCC           MA 1109/Medical Terminology		9958		1	1	5
CJ 1330/Criminal Law	COST 2410/Advanced Lab	9959	CTE, Elective	11-12	1	6
CJ 2540/Careers in Law Enforcement   9155   CTE, Elective   11-12   .50   3   CJ 1010/Criminal Justice   9150   CTE, Elective   11-12   .50   3   CJ 300/Intro to Corrections   9152   CTE, Elective   11-12   .50   3   CJ 300/Intro to Corrections   9152   CTE, Elective   11-12   .50   3   CJ 300/Intro to Corrections   9152   CTE, Elective   11-12   .50   3   CJ 300/Intro to Corrections   9152   CTE, Elective   11-12   .50   3   CJ 300/Intro to Corrections   20   CJ 50   CJ	Criminal Justice - SLCC					
CJ 1010/Criminal Justice	CJ 1330/Criminal Law	9151	CTE, Elective	11-12	.50	3
CJ 1300/Intro to Corrections	CJ 2540/Careers in Law Enforcement	9155	CTE, Elective	11-12	.50	3
Digital Media - SLCC	CJ 1010/Criminal Justice	9150	CTE, Elective	11-12	.50	3
ART 1080/Photoshop and Digital Media	CJ 1300/Intro to Corrections	9152	CTE, Elective	11-12	.50	3
ART 1630/Computer Graphics Essentials	Digital Media - SLCC					
Emergency Medical Technician - EMT - SLCC	ART 1080/Photoshop and Digital Media	8667	CTE, Elective	11-12	1	4
HSEM 2300/Emergency Medical Technician (EMT)   9730   CTE, Elective   11-12   2   10     Heavy Duty Mechanics – Diesel - SLCC	ART 1630/Computer Graphics Essentials	1073	CTE, Elective	11-12	.50	3
Heavy Duty Mechanics - Diesel - SLCC	Emergency Medical Technician - EMT - SLCC					
DST 1045/Basic Diesel   9040   CTE, Elective   10-12   1   4	HSEM 2300/Emergency Medical Technician (EMT)	9730	CTE, Elective	11-12	2	10
DST 1065/Basic Engine Performance   9042   CTE, Elective   10-12   1   4	Heavy Duty Mechanics – Diesel - SLCC					
Medical Forensics - SLCC         9129         CTE, Elective         11-12         1         3           BIOL 1090/Human Medical Biology         3240         CTE, Possible Science, Elective         11-12         1         3           Medical Assistant - SLCC         MA 1100/Medical Terminology         9725         CTE, Elective         11-12         .50         3           Nurse Assistant - CNA - SLCC         STE, Elective         11-12         .50         3           MA 1100/Medical Terminology         9725         CTE, Elective         11-12         .50         3           HLTH 1200/First Aid and Safety         9118         CTE, Elective         11-12         .50         2           Physical Therapy - UVU         PES 2400/Exercise Science/Sports Medicine         9175         CTE, Elective         11-12         1         2           Computer Programming - SLCC & WSU         CTE, Possible Math, Elective         11-12         1         4           CS 1410/Object Programming         5712         CTE, Possible Math, Elective         11-12         1         4           CS 2550/Introduction to Database Design and SQL         5717         CTE, Elective         11-12         1         4           Welding Technician - SLCC         TE, Elective         11-12         1	DST 1045/Basic Diesel	9040	CTE, Elective	10-12	1	4
CJ 1350/Medical Forensics   9129   CTE, Elective   11-12   1   3	DST 1065/Basic Engine Performance	9042	CTE, Elective	10-12	1	4
BIOL 1090/Human Medical Biology   3240   CTE, Possible Science, Elective   11-12   1   3	Medical Forensics - SLCC					
Medical Assistant - SLCC         Science, Elective         11-12         1         3           MA 1100/Medical Terminology         9725         CTE, Elective         11-12         .50         3           Nurse Assistant - CNA - SLCC	CJ 1350/Medical Forensics	9129		11-12	1	3
Medical Assistant - SLCC9725CTE, Elective11-12.503Nurse Assistant - CNA - SLCC9725CTE, Elective11-12.503MA 1100/Medical Terminology9725CTE, Elective11-12.503HLTH 1200/First Aid and Safety9118CTE, Elective11-12.502Physical Therapy - UVU9175CTE, Elective11-1212Computer Programming - SLCC & WSUCTE, Elective11-1212CS 1400/Fundamentals of Programming5711CTE, Possible Math, Elective11-1214CS 1410/Object Programming5712CTE, Possible Math, Elective11-1214CS 2550/Introduction to Database Design and SQL5717CTE, Elective11-1214Welding Technician - SLCCTIT-1214	BIOL 1090/Human Medical Biology	3240		11-12	1	3
MA 1100/Medical Terminology         9725         CTE, Elective         11-12         .50         3           Nurse Assistant – CNA - SLCC         MA 1100/Medical Terminology         9725         CTE, Elective         11-12         .50         3           HLTH 1200/First Aid and Safety         9118         CTE, Elective         11-12         .50         2           Physical Therapy - UVU         PES 2400/Exercise Science/Sports Medicine         9175         CTE, Elective         11-12         1         2           Computer Programming – SLCC & WSU         5711         CTE, Possible Math, Elective         11-12         1         4           CS 1400/Fundamentals of Programming         5712         CTE, Possible Math, Elective         11-12         1         4           CS 2550/Introduction to Database Design and SQL         5717         CTE, Elective         11-12         1         4           Welding Technician - SLCC         Technician - SLCC         Technician - SLCC         Technician - SLCC	Medical Assistant - SLCC		Science, Liective			
Nurse Assistant – CNA - SLCC  MA 1100/Medical Terminology 9725 CTE, Elective 11-12 .50 3  HLTH 1200/First Aid and Safety 9118 CTE, Elective 11-12 .50 2  Physical Therapy - UVU  PES 2400/Exercise Science/Sports Medicine 9175 CTE, Elective 11-12 1 2  Computer Programming – SLCC & WSU  CS 1400/Fundamentals of Programming 5711 CTE, Possible Math, Elective Math, Electi		9725	CTE. Elective	11-12	.50	3
MA 1100/Medical Terminology 9725 CTE, Elective 11-12 .50 3  HLTH 1200/First Aid and Safety 9118 CTE, Elective 11-12 .50 2  Physical Therapy - UVU  PES 2400/Exercise Science/Sports Medicine 9175 CTE, Elective 11-12 1 2  Computer Programming - SLCC & WSU  CS 1400/Fundamentals of Programming 5711 CTE, Possible Math, Elective Math, Electi			212, 2.000.10		.50	
HLTH 1200/First Aid and Safety  Physical Therapy - UVU  PES 2400/Exercise Science/Sports Medicine  Computer Programming – SLCC & WSU  CS 1400/Fundamentals of Programming  ST11  CTE, Possible Math, Elective  CTE, Possible Math, Elective  T1-12  T1  T2  T3  T4  CS 2550/Introduction to Database Design and SQL  Welding Technician - SLCC		9725	CTE. Elective	11-12	.50	3
Physical Therapy - UVU  PES 2400/Exercise Science/Sports Medicine 9175 CTE, Elective 11-12 1 2  Computer Programming – SLCC & WSU  CS 1400/Fundamentals of Programming 5711 CTE, Possible Math, Elective		_				
PES 2400/Exercise Science/Sports Medicine  Computer Programming – SLCC & WSU  CS 1400/Fundamentals of Programming  S711  CTE, Possible Math, Elective  CTE, Possible Math, Elective  T1-12  T  4  CS 2550/Introduction to Database Design and SQL  Welding Technician - SLCC	·		2.2,2.00.70			
CS 1400/Fundamentals of Programming 5711 CTE, Possible Math, Elective 11-12 1 4  CS 1410/Object Programming 5712 CTE, Possible Math, Elective		9175	CTE, Elective	11-12	1	2
CS 1400/Fundamentals of Programming  5711 CTE, Possible Math, Elective  CS 1410/Object Programming  5712 CTE, Possible Math, Elective  CTE, Possible Math, Elective  T1-12 1 4  CS 2550/Introduction to Database Design and SQL  Welding Technician - SLCC			, =::::::::	<u> </u>	=	_
CS 1410/Object Programming 5712 CTE, Possible Math, Elective 11-12 1 4  CS 2550/Introduction to Database Design and SQL 5717 CTE, Elective 11-12 1 4  Welding Technician - SLCC		5711		11-12	1	4
CS 2550/Introduction to Database Design and SQL 5717 CTE, Elective 11-12 1 4  Welding Technician - SLCC	CS 1410/Object Programming	5712	CTE, Possible	11-12	1	4
Welding Technician - SLCC	CS 2550/Introduction to Database Design and SQL	5717		11-12	1	4
		9027	CTE, Elective	10-12	1	3

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