# 2021-22

# PCSD CTE Completer Pathways



# Table of Contents

Courses		Pages
• Caree	r Pathway Courses	
Pathways		Pages
• Agric	ulture, Food & Natural Resources Cluster	
0	Food Science, Dietetics & Nutrition	7-10
• Archit	tecture & Construction Cluster	
0	Architectural Design (CAD)	
0	Interior Design	
• Arts, A	Audio/Visual Technology & Communications Cluster	
0	Broadcasting & Digital Media	
0	Fashion Apparel & Textiles	
0	Graphic Design & Communication	
• Busin	ess, Finance & Marketing Cluster	
0	Accounting & Finance	
0	Business Administration	
0	Business Information Management	
0	Marketing	
Comp	uter Science & Information Technology Cluster	
0	Cybersecurity	
0	Programming & Software Development	
0	Web Development	
• Educa	tion & Training Cluster	
0	Pre-K: Early Childhood Education	
0	K-12: Teaching as a Profession	
<ul> <li>Engin</li> </ul>	eering & Technology Cluster	
0	Engineering	
0	Mechanical Design (CAD)	



# Pathways

# Pages

•	Health	n Science Cluster	
	0	Health Science	
•	Hospi	tality & Tourism Cluster	
	0	Culinary Arts	
	0	Hospitality & Tourism	
•	Huma	n Services Cluster	
	0	Personal Care Services	
•	Manu	facturing Cluster	
	0	Welding & Machining	
•	Trans	portation, Distribution & Logistics Cluster	
	0	Auto Mechanics & Repairs	
	0	Diesel	

# **Other Categories**

# Pages

•	Explanatory Notes	
	Other PCSD CTE Approved Courses/CAPS	
	Discontinued CTE Courses	
•	New Titles/Combined Courses	
•	Suggested Progress of CTE Courses	
•	Index CTE Course Titles	



# **Career Pathway Courses**

# Agri, Food & Natural Resources

# FOOD SCIENCE, DIETETICS & NUTRITION

DE Foundation of Nutrition 1020 Food and Nutrition 1 Food and Nutrition 2 Medical Anatomy and Physiology \*Dietetics \*Food Science

#### Architecture and Construction

# **ARCHITECTURAL DESIGN (CAD)**

CAD Architectural Design 1 CAD Architectural Design 2 CAD Architectural Design 3 \*Carpentry 1 \*Construction Trades Foundation

#### **INTERIOR DESIGN**

CAD Architectural Design 1 Digital Graphics Art, Intro Interior Design 1 Interior Design 2 Marketing 1 \*Interior Design 3

# Arts/Visual Technology & Communications

#### **BROADCASTING & DIGITAL MEDIA**

Computer Programming 1 Computer Science Principles 1 Digital Graphics Art, Intro Digital Media 1 Digital Media 2 Screen Printing Technology TV Broadcasting 1 TV Broadcasting 2 Video Production 1 Video Production 2 Web Development 1

# **FASHION APPAREL & TEXTILES**

Digital Graphic Arts, Intro Fashion Design Studio Screen Printing Technology Sewing and Textile Design 1 Sewing and Textile Design 2 \*Sports and Outdoor Design 1

# GRAPHIC DESIGN & COMMUNICATIONS

Commercial Arts 1 Commercial Arts 2 Commercial Photo 1 Commercial Photo 2 Digital Graphic Arts, Intro Production Graphics 1 Screen Printing Technology

# **Business, Finance & Marketing**

#### **ACCOUNTING & FINANCE**

Accounting 1 Accounting 2 Business Law Digital Graphic Arts, Intro Economics Entrepreneurship Sports and Entertainment Marketing Web Development 1 \*Business and Marketing Capstone

# **BUSINESS ADMINISTRATION**

Accounting 1 Business Law Business Management Economics Entrepreneurship Leadership Principles 1 Leadership Principles 2 Sports and Entertainment Marketing \*Business and Marketing Capstone



#### BUSINESS INFORMATION MANAGEMENT

Accounting 1 Business Law Business Office Specialist Digital Graphic Arts, Intro Economics Entrepreneurship Sports and Entertainment Marketing Web Development 1 \*Business and Marketing Capstone

#### MARKETING

Accounting 1 Business Law Digital Graphic Arts, Intro Digital Marketing Economics Entrepreneurship Marketing 1 Sports and Entertainment Marketing Web Development 1 \*Business and Marketing Capstone

#### **Computer Science & Info Tech**

#### CYBERSECURITY

Computer Programming 1 Computer Science Principles 1 Web Development 1 \*Cybersecurity Forensics \*Linux Fundamentals

#### PROGRAMMING & SOFTWARE DEVELOPMENT

Computer Programming 1 Computer Programming 2 Computer Programming, Advanced Computer Science Principles 1 Game Development Fundamentals 1 Information Technology, Intro Mobile Development Fundamentals \*Algorithm and Data Structures

#### WEB DEVELOPMENT

Computer Science Principles 1 Digital Graphics Art, Intro Entrepreneurship Information Technology, Intro Web Development 1 \*Algorithm and Data Structures \*GIS Remote Sensing \*Web Development 2 \*Web Development Capstone

#### **Education & Training**

# PRE-K: EARLY CHILDHOOD EDUCATION

Early Childhood Education 1 Child Development Food and Nutrition 1 Early Childhood Education 2 Early Childhood Education 3

#### **K-12: TEACHING AS A PROFESSION**

CE College Algebra 1050 CE College Writing 1010 DE Human Development 1100 Teaching as a Profession 1 Teaching as a Profession 2

# Engineering & Technology

# ENGINEERING

CAD Architecture Design 1 CAD Mechanical Design 1 Electronics 1 Electronics 2 Engineering Principles 1 Engineering Principles 2 Robotics 1 Robotics 2 Welding Technician, Entry Level Woods 1 \*Engineering Capstone



# MECHANICAL DESIGN (CAD)

CAD Mechanical Design 1 (recommended) CAD Mechanical Design 2 CAD Mechanical Design 3 Welding Technician, Entry Level

# **Health Science**

# HEALTH SCIENCE

Biotechnology Emergency Medical Response Exercise Science/Sports Medicine Medical Anatomy and Physiology Medical Assistant Medical Terminology

# Hospitality & Tourism

# CULINARY ARTS

ProStart 1 (recommended) Food and Nutrition 1 ProStart 2 \*Baking and Pastry \*Culinary Arts 1 \*Culinary Arts 2

# **HOSPITALITY & TOURISM**

Accounting 1 Business Law Economics Digital Graphic Arts, Intro Marketing 1 Web Development 1 \*Event Planning and Management \*Business and Marketing Capstone

# Human Services

#### PERSONAL CARE SERVICES

Accounting 1 Business Management

#### Manufacturing

#### WELDING & MACHINING

<u>Welding Technician, Entry Level</u> <u>Welding Technician, Intermediate Level</u> <u>Welding Technician, Advanced Level</u> \*American Welding Society Level 1 Welder (Certification)

# Transportation, Distribution & Logistics

# **AUTO MECHANICS & LOGISTICS**

ASE Chassis MLR ASE Engine MLR Automotive, Intro (recommended) Collision 1 (recommended) Collision 3 Electronics 1 Welding Technician, Entry Level \*Collision 2

#### DIESEL

Automotive, Intro Electronics 1 Welding, Entry Level





# Workforce Trends:

According to the U.S. Department of Labor, dietitians and nutritionists held 70,900 jobs nationwide in 2018. Employment of dietitians and nutritionists is projected to increase 11% nationwide through the year 2028.

In Utah, a dietitian and a nutritionist must be licensed. From hospitals to care facilities to grocery stores to schools, businesses and organizations in Utah utilize the expertise of dietitians and nutritionists. By the year 2026, the average annual growth rate for this occupation in Utah is projected to increase 3%.

# FACS – Student Organization:

**Nutrition** 

FCCLA is the CTSO for students in the Food Science, Dietetics and Nutrition Career Pathway. FCCLA provides students with opportunities to attain the knowledge, skills, and leadership characteristics necessary to succeed in life and careers. FCCLA has chapters in both Provo High School and Timpview High School.

# Sample Occupations:

- Food Protections Manager
- Food Inspector Assistant
- Food Sanitation Coordinator
- Research and Development Technician
- CTE Teacher
- Dietitian/Nutritionist
- Food Scientist
- Nutrition Education Specialist
- **Research Technician**

# **Collegiate or Technical Programs:**

- Brigham Young University
- University of Utah
- Utah State University
- Weber State University



Career Pathways: Food Science, Dietetics & Nutrition								
EXPLORER COURSES	CREDITS	PHS	THS	ESCH	MTECH	CE Credits	UVU Title	DE Credits
Food and Nutrition 1 (recommended)	0.5	~	~	~				
DE Human Development	0.5						PSY 1100	3.0
Medical Anatomy and Physiology	1.0	√	1					
CONCENTRATOR COURSES								
Food and Nutrition 2	0.5	√	1	1				
COMPLETER COURSES								
DE Foundation of Nutrition 1020	0.5						NUTR 1020	3.0
*Dietetics	TBD							
*Food Science	0.5							
CTE Internship	0.5	~	1					

Note: PCSD Pathway Completer Criteria: total earned credits of 3.0 or more, including a required concentrator course. To enhance your pathway background, it is recommended to also take completer courses.

\*Currently not an approved PCSD course, yet suggested for future consideration by the PCSD School Board.

# **EXPLORER COURSES**

#### Food and Nutrition 1 (recommended)

Duration: Grades: Graduation: Prerequisite: Description: Semester (0.5) 9-12 Qualifies for (CTE) None This course is designed to focus on the

science of food and nutrition. Experiences will include food safety and sanitation, culinary technology, food preparation and dietary analysis to develop a healthy life style with pathways to career readiness. Laboratory based experiences strengthen comprehension of concepts and standards outlined in Sciences, Technology, Engineering and Math (STEM) education. Student leadership and competitive events (FCCLA) may be integrated into this course.

#### **DE Human Development 1100**

Duration: Grades:	Semester (0.5) 9-12
Graduation:	Qualifies for (SS, CTE)
Prerequisite:	None
Description:	This class covers the development of the human from the first stages of life in the womb through old age. It discusses the norms and abnormalities of human development from a biological and social point of view. This course fulfills the required Behavioral Science for Nursing and other medical fields.

#### Medical Anatomy & Physiology

Duration:	Year (1.0)
Grades:	10-12
Graduation:	Qualifies for (SE, H, CTE)
Prerequisite:	None
Description:	This full-year course provides students
1	with an in-depth study of healthcare
	careers including actual clinical
	experience in a variety of areas.
	Instruction includes intermediate anatomy
	& physiology, medical terminology,
	diseases and disorders, medical ethics and
	first aid. The class is designed to prepare
	students for the Advanced Health Science
	course and/or for a variety of health
	technology programs.



#### **CONCENTRATOR COURSES**

# Food and Nutrition 2

i ood alla lit	
Duration:	Semester (0.5)
Grades:	9-12
Graduation:	Qualifies for (CTE)
Prerequisite:	Food and Nutrition 1
Description:	This course is designed to focus on
	principles of food preparation, sports
	nutrition, consumerism, and career
	options in the food industry. The study
	and application of nutrition, sanitation,
	food sciences and technology in this
	course provides students with laboratory-
	based experiences that will strengthen
	their comprehension of concepts and
	standards outlined in Science,
	Technology Engineering and Math

Technology, Engineering and Math (STEM) education. FCCLA may be an integral part of this course.

# **COMPLETER COURSES**

# \*Dietetics

# (State ready by SY 2021-22)

Duration:	TBD
Grades:	TBD
Graduation:	Qualifies for (CTE)
Prerequisite:	TBD
Description:	TBD

# \*Food Science

Duration:	0.5
Grades:	9-12
Graduation:	Required (CTE)
Prerequisite:	Foods and Nutrition 1 & 2
Description:	This course teaches scientific principles
	and how those principles can be applied
	to improve the health of individuals and
	families. Instruction is given concerning
	the physical, microbiological, and
	chemical principles that affect the food
	we eat. This course will strengthen
	comprehension of concepts and standards

outlined in Sciences, Technology, Engineering and Math (STEM) education. Student leadership (FCCLA) may be an

integral part of the course.

# **DE Foundation of Nutrition**

Collegiate Credit:3.0Grades:11-12Graduation:Qualifies for (H, CTE)	
Prerequisite:Minimum 3.0 GPADescription:This course is for students who are particularly interested in the health professions, such as nursing. This course covers basic principles of human nutrition and studies factors influence nutritive requirements and maintenance of nutritional balance. examines relationships between pro- nutrition and social, mental and physical well-being.	It



# **CTE Internship**

Duration: Grades: Graduation: Prerequisite:	Semester (0.5) 11-12 Qualifies for (CTE) Directly related to CCRP & previously or currently taking CTE class associated with internship
Description:	CTE Internships provide on the job training opportunities that are directly related to a career goal and course of study identified through the College and Career Ready Plan (CCRP). Therefore, a student must have taken or currently be enrolled in a CTE class related to the internship opportunity. This Work-Based Learning experience is designed to bridge the gap between school and work. Appropriate supervision by a school/district coordinator must be maintained.





# Workforce Trends:

Computer Aided Design (CAD) technologies have allowed architects to do more work without the help of drafters, making it easier to share the work with engineers, contractors, and clients.

According to the U.S. Department of Labor, employment of architects is projected to grow 8% nationwide through the years 2028. In Utah, projected growth is 2.6% through the year 2026. Business expansion will provide the majority of job openings in the coming decade. In Utah, an architect must be licensed. From commercial to residential, Utah is home to more than 900 architects and building designers.

# TSA – Student Organization:

TSA is the CTSO for students in the Architectural Design (CAD) Career Pathway. TSA fosters personal growth, leadership, and opportunities in science, technology, engineering, and mathematics (STEM).

# Sample Occupations:

- Architectural Drafter
- Civil Drafter
- Architect
- Architectural and Engineering Manager
- CTE Teacher
- Civil Engineer
- Landscape Architect
- Secondary Education Teacher
- Surveyor

# Collegiate & Technical Programs:

- Bridgerland Technical College
- <u>University of Utah</u>
- <u>Utah Valley University</u>
- <u>Utah State University</u>
- Weber State University



Career Pathways: Architectural Design (CAD)								
EXPLORER COURSES	CREDITS	PHS	THS	ESCH	MTECH	CE Credits	UVU Title	DE Credits
CAD Architectural Design 1 (recommended) or CE CAD Architectural	0.5	1	1			3.0	EGDT 1090	
*Carpentry 1 or CE Carpentry 1190	1.0					3.0	CMGT 1190	
*Construction Trades Foundation	0.5							
CONCENTRATOR COURSES								
CAD Architectural Design 2 or CE CAD Architectural Design 2 1020	0.5	1	4			3.0	EGDT 1020	
COMPLETER COURSES								
CAD Architectural Design 3	0.5	~						
CAPS (Engineering)	1.0	~	1					
CTE Internship	0.5	1	1					

Note: PCSD Pathway Completer Criteria: total earned credits of 3.0 or more, including a required concentrator course. \*Currently not an approved PCSD course, yet suggested for future consideration by the PCSD School Board.

# EXPLORER COURSES

# CAD Architectural Design 1 (recommended) or CE CAD Architectural Design 1090

Duration:
Grades:
Graduation:
Prerequisite:
Description:

Semester (0.5) 10-12 Qualifies for (CTE) None

The first in a sequence of courses that prepare individuals for careers in the Architecture, Engineering, and Construction (AEC) industry. This course includes instruction in 2D or 3D Computer-Aided Design (CAD) software to draw a small residential home with an emphasis on blueprint reading.

### \*Carpentry 1 or

# **CE Carpentry 1190**

Duration:	Year (1.0)
Grades:	10-12
Graduation:	Qualifies for (CTE)
Prerequisite:	None
Description:	This is the first in a sequence of courses
	that prepares individuals to layout,
	fabricate, erect, install, and repair wooden
	structures and fixtures using hand and
	power tools. Includes instruction in
	common systems of framing, construction
	materials, blueprint reading, concrete
	placing, siding, and mechanical systems.

# \*Construction Trades Foundation

Duration:	Semester (0.5)
Grades:	10-12
Graduation:	Qualifies for (CTE)
Prerequisite:	None
Description:	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. It is
	designed to allow for replica house
	building on a <sup>1</sup> / <sub>4</sub> "=1'-0" scale. This course
	is based on the current National Center
	for construction Education and Research
	(NCCER) task list.



# **CONCENTRATOR COURSES**

# **CAD Architectural Design 2**

Duration:
Grades:
Graduation:
Prerequisite:
Description:

Semester (0.5) 10-12 Qualifies for (CTE) CAD Architectural Design 1 The second in a sequence of courses that prepare individuals for careers in the Architecture, Engineering, and Construction (AEC) industry. This course includes instruction in 3D Computer-Aided Design (CAD) software to design and model a small residential home with an emphasis on residential methods and materials of construction, codes, and Building information Modeling (BIM).

# **COMPLETER COURSES**

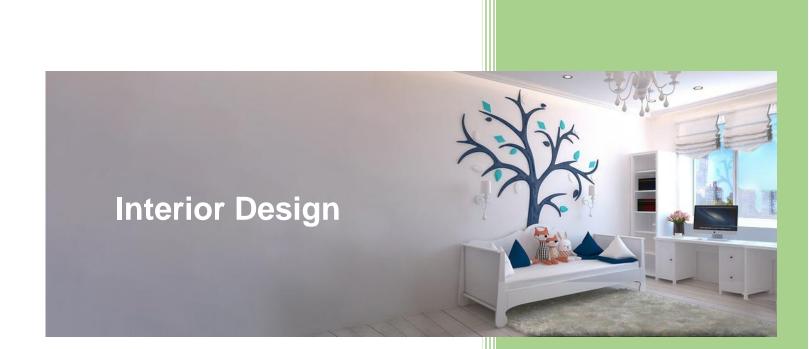
# **CAD Architectural Design 3**

Duration:	Semester (0.5)
Grades:	10-12
Graduation:	Qualifies for (CTE)
Prerequisite:	CAD Architectural Design 1
Description:	The second in a sequence of courses that
-	prepare individuals for careers in the
	Architecture, Engineering, and
	Construction (AEC) industry. This course
	includes instruction in 3D Computer-
	Aided Design (CAD) software to model a
	small commercial building with an
	emphasis on commercial methods and
	materials of construction, codes, and
	Building Information Modeling (BIM).

# **CTE Internship**

	<ul> <li>The second se Second second sec</li></ul>
Duration:	Semester (0.5)
Grades:	11-12
Graduation:	Qualifies for (CTE)
Prerequisite:	Directly related to CCRP & previously or
	currently taking CTE class associated
	with internship
Description:	CTE Internships provide on the job
	training opportunities that are directly
	related to a career goal and course of
	study identified through the College and
	Career Ready Plan (CCRP). Therefore, a
	student must have taken or currently be
	enrolled in a CTE class related to the
	internship opportunity. This Work-Based
	Learning experience is designed to bridge
	the gap between school and work.
	Appropriate supervision by a
	school/district coordinator must be
	maintained.





# Workforce Trends:

According to the U.S. Department of Labor, employment of interior designers is projected to grow 4% nationwide through the year 2028. Economic expansion, growing homeowner wealth, and an increased interest in interior design will increase demand for interior designers. According to the Utah Department of Workforce Services, there are 1,651 architectural and engineering services firms in Utah and 476 specialized design services firms.

# FCCLA – Student Organization:

FCCLA is the CTSO for students in the Interior Design Career Pathway. FCCLA provides students with opportunities to attain the knowledge, skills, and leadership characteristics necessary to succeed in life and careers. Provo High School and Timpview High School have FCCLA Chapters.

# Sample Occupations:

- Photo Stylist
- Architect
- CTE Teacher
- Interior Designer
- Sales Manager
- Set and Exhibit Designer

# Collegiate & Technical Programs:

- LDS Business College
- Salt Lake Community College
- <u>Utah State University</u>
- Weber State University



Career Pathways: Interior Design								
EXPLORER COURSES	CREDITS	PHS	THS	ESCH	MTECH	CE Credits	UVU Title	DE Credits
Interior Design 1 (Recommended)	0.5	~	~					
CAD Architectural Design 1 or CE CAD Architectural Design 1	0.5	4	1			3.0	EGDT 1090	
Digital Graphics Art, Intro	0.5 -1.0	~	~					
Marketing	0.5	~	~					
CONCENTRATOR COURSES								
Interior Design 2	0.5	~	1					
COMPLETER COURSES								
*Interior Design 3	0.5-1.0							
CAPS (Digital Media 2)	1.0	~	1					
CTE Internship	0.5	4	1					

Note: PCSD Pathway Completer Criteria: total earned credits of 3.0 or more, including a required concentrator course. \*Currently not an approved PCSD course, yet suggested for future consideration by the PCSD School Board.

# **EXPLORER COURSES**

# Interior Design 1 (recommended)

Duration:
Grades:
Graduation:
Prerequisite:
Description:

Semester (0.5)9-12 Qualifies for (CTE) None

This course explores the field of interior design through engaging learning activities. Identification and use of the elements and principles of design are emphasized. Other topics are furniture arrangement, floor plan evaluation, space planning and design related careers. Skills learned can be applied to current living environments and future career options. This course will strengthen comprehension of concepts and standards outlined in Science, Technology, Engineering and Math (STEM) education. FCCLA may be an integral part of this course.

# **CAD Architectural Design 1**

Duration:	Semester (0.5)
Grades:	10-12
Graduation:	Oualifies for (CTE)
Prerequisite:	None
Description:	The first in a sequence of courses that
	prepare individuals for careers in the
	Architecture, Engineering, and
	Construction (AEC) industry. This course
	includes instruction in 2D or 3D
	Computer-Aided Design (CAD) software
	to draw a small residential home with an
	emphasis on blueprint reading.

# **Digital Graphic Arts, Intro**

Duration:	Semester (0.5)		
Grades:	9-12		
Graduation:	Qualifies for (CTE)		
Prerequisite:	None		
Description:	This course is designed to provide		
	students with the basic knowledge and		
	skills related to the graphic design		
	industry. It is intended to serve as a		
	starting point for several pathways		
	including Digital Media, Graphics and		
	Printing, 3D Animation and Game		
	Development. This includes instruction		
	and hands-on assignments in the		
	following areas: creative design & layout,		
	typography, color, related software, and		
	computer and professional skills.		

# **Marketing 1**

Duration: Grades: Graduation: Prerequisite: Description:	Semester (0.5) 10-12 Qualifies for (CTE) None Marketing 1 explores the seven core functions of marketing which include: Marketing Planning – why target market and industry affects businesses; Marketing-Information Management – why market research is important; Pricing – how prices maximize profit and affect the perceived value; Product/Service Management – why products live and die;
	1



about products; Channel Management – how products reach the final user; and Selling – how to convince a customer that a product is the best choice. Students will utilize knowledge in hands-on projects which may include: Conducting research, creating a promotional plan, pitching a sales presentation, and introducing an idea for a new product/service. creative design & layout, typography, color, related software, and computer and professional skills.

# **CONCENTRATOR COURSES**

#### **Interior Design 2**

	-
Duration:	Semester (0.5)
Grades:	9-12
Graduation:	Qualifies for (CTE)
Prerequisite:	Interior Design 1
Description:	This course provides students the
-	opportunity to develop skills in applying
	the elements and principles of design to
	interiors. Projects are integrated
	throughout the course to provide
	applications as the students' study:
	architecture, furniture styles and
	constructions, surface treatments and
	backgrounds, design and function of
	space and lighting. This course will
	strengthen comprehension of concepts
	and STRANDSs outlined in Science,
	Technology, Engineering and Math
	(STEM) education. FCCLA may be an

integral part of this course.



# **COMPLETER COURSES**

#### \*Interior Design 3

Duration: Grades: Graduation: Prerequisite: Description: Semester (0.5) to Year (1.0)11-12 Qualifies for (CTE) Interior Design 1 & 2 This course provides students the opportunity to develop industry skills in applying previous content acquired in Interior Design 1 and 2. Projects are integrated throughout the course to provide students with hands on application as they explore careers in interior design, programming and design development, design technology, product specification, sustainability, and universal design. A coordinated project that allows application of interior design skills in a residential, commercial, or school setting may be a component of this course. The study and application of textile and material sciences and technology in this course provide students with laboratorybased experiences that will strengthen their comprehension of concepts and standards outlined in Science, Technology, Engineering and Math (STEM) education. Student leadership and competitive events (FCCLA) may be an integral part of the course.

#### **CTE Internship**

	A second s
Duration:	Semester (0.5)
Grades:	11-12
Graduation:	Qualifies for (CTE)
Prerequisite:	Directly related to CCRP & previously or
	currently taking CTE class associated
	with internship
Description:	CTE Internships provide on the job
	training opportunities that are directly
	related to a career goal and course of
	study identified through the College and
	Career Ready Plan (CCRP). Therefore, a
	student must have taken or currently be
	enrolled in a CTE class related to the
	internship opportunity. This Work-Based
	Learning experience is designed to bridge
	the gap between school and work.
	Appropriate supervision by a
	school/district coordinator must be
	maintained.



# Broadcasting & Digital Media



# Workforce Trends:

Technological improvements in the industry mean greater efficiencies in the workplace. Growth is expected to stem from businesses, schools, and radio and television stations seeking new equipment to improve their audio and video capabilities. According to the U.S. Dept. of Labor, employment of broadcast and sound engineering technicians is projected to increase 8% nationwide through the year 2028.

# SkillsUSA – Student Organization:

SkillsUSA is the CTSO for students in the Broadcasting & Digital Media Career Pathway. SkillsUSA provides quality education experiences for students in leadership, teamwork, citizenship, and character development. Provo High School & Timpview High School both have chapters of SkillsUSA.

# Sample Occupations:

- Video Editor
- Sound Engineering Technician
- Audio Video Equipment Technician
- Broadcast Technician Communication
- Equipment Radio Broadcaster
- Sound Engineering Technician
- Announcer
- Announcer
- Camera Operator
- Film and Video Editor
- Producer and Director

# Collegiate or Technical Programs:

- Brigham Young University
- University of Utah
- Utah Valley University
- Utah State University
- Weber State University



Career Pathways: Broadcasting & Digital Media								
EXPLORER COURSES	CREDITS	PHS	THS	ESCH	MTECH	CE Credits	UVU Title	DE Credits
Computer Science Principles 1 (recommended) or CE Computer Science Principles 1030	0.5	~	4			3.0	CS 1030	
Computer Programming 1 (recommended) or CE Computer Programming 1 1200	1.0	~	1			3.0	INFO 1200	
Digital Graphics Art, Intro (recommended)	0.5 to 1.0	V	√					
Game Development Fundamentals (recommended) or CE Gaming Development Fundemantels 1610	0.5		4			3.0	DGM 1610	
Screen Printing Technology (recommended)	0.5	√	√					
Web Development 1 (recommended) or CE Web Development 1 2420	0.5	V	1			3.0	INFO 2420	
CONCENTRATOR COURSES								
Digital Media 1 or CE Digital Media 1110	0.5	~	~			4.0	DGM 1110	
TV Broadcasting 1	0.5		1					
Video Production 1 or CE Video Production 1061	0.5	~	~			3.0	DGM 1061	
COMPLETER COURSES								
CAPS (Digital Media 2)	1.0	√	~					
TV Broadcasting 2	0.5		1					
Video Production 2 or CE Video Production 2110	0.5		1			3.0	DGM 2110	
CTE Internship	0.5	V	1					

Note: PCSD Pathway Completer Criteria: total earned credits of 3.0 or more, including a required concentrator course. \*Currently not an approved PCSD course, yet suggested for future consideration by the PCSD School Board.

# **EXPLORER COURSES**

# Computer Science Principles 1 or CE Computer Science Principles 1030

Duration: Grades: Graduation: Prerequisite: Description:	Semester (0.5) 10-12 Qualifies for (S, DS, CTE) Digital Literacy An introductory course in program engineering and applications. The course introduces students to the fundamentals of computer programming. Students will learn to design, code, and test their own programs while applying mathematical concepts. Teachers introduce coding concepts and problem-solving skills to beginning students through a programming language such as C++, C#, Java, Python, or JavaScript. Students will also be introduced to more complex data structures and their uses, including arrays and classes. Students will learn to create more powerful programs. (*Semester 2 –
	Language Specific)

# Computer Programming 1 or CE Computer Programming 1200



#### **Digital Graphic Arts Intro**

Duration: Grades: Graduation: Prerequisite: Description: Semester (0.5) or Year (1.0) 9-12 Qualifies for (CTE) None This course is designed to provide students with the basic knowledge and skills related to the graphic design industry. It is intended to serve as a starting point for several pathways including Digital Media, Graphics and Printing, 3D Animation and Game Development. This includes instruction and hands-on assignments in the

following areas: creative design & layout, typography, color, related software, and computer and professional skills.

# Game Development Fundamentals or CE Game Development Fundamentals 1610

0.5
9-12
Qualifies for (CTE)
Intro to Graphics Communication, Digital
Graphic Art, Intro, Digital Media 1,
suggested Computer Programming 1
This course is designed to provide
students with knowledge and project-
based experience of fundamental gaming
development concepts relating to STEM.
These concepts include game design,
scripting, creation of digital assets,
graphic resources, animations,
understanding hardware, problem solving,
critical thinking, collaboration, and
project management.

#### **Screen Printing Technology**

Duration: Semester (0.5) Grades: 10-12 Graduation: Qualifies for (CTE) Prerequisite: None This course is designed to provide Description: students with the knowledge to create, produce and reproduce visual graphics that communicate to an audience. Develop the knowledge and skills relative to the graphic design & screen-printing industries. Includes instruction and handson experiences in design & layout, digital prep of designs, and multiple color printing processes on various substrates. Provides an overview of the screenprinting and print making industries on the commercial level. Instruction includes the use of industry standard graphics software with the Adobe Creative Suite.

# Web Development 1 or CE Web Development 2420

Duration: Grades: Graduation: Prerequisite:	Semester (0.5) 10-12 Qualifies for (DS, CTE) None
Description:	Web Development is a course designed to guide students in a project-based environment, in the development of up-to- date concepts and skills that are used in the development of today's websites. interactive websites. They will learn what it takes for a career in Web Development as they complete projects and create their own web site. Students will learn the fundamentals of how the internet works. They will learn and use the basic building blocks of the World Wide Web; HTML5 coding, Cascading Style Sheets (CSS), and JavaScript. They will follow the steps to create a website by planning, designing, developing, deploying, and maintaining of website projects. Students will learn and use different scripting technologies to create more dynamic and interactive websites. They will learn what it takes for a career in Web Development as they complete projects and create their own website(s).



#### **CONCENTRATOR COURSES**

# Digital Media 1 or CE Digital Media 1110

Duration: Grades: Graduation: Prerequisite: Description: Semester (0.5) 9-12 **Oualifies for (CTE)** Suggested - Art/Drawing Digital Media is the process of analyzing, designing and developing interactive media. Digital media 1 is the first-year digital media course where students will create and learn digital media applications while using elements of text, graphics, animation, sound, video, and digital imaging for various formats. These abilities will prepare students for entrylevel multimedia positions and provide fundamental 21st Century Learning skills beneficial for other occupational & educational endeavors.

#### **TV Broadcasting 1**

Semester (0.5)

10-12

Duration: Grades: Graduation: Prerequisite: Description:

Qualifies for (CTE) None This course is designed to provide students with the basic knowledge and skills related to the television broadcasting industry. Includes instruction and hands-on assignments in the following areas: camera operation, audio systems, lighting systems, preproduction, studio operations, control controlroom operations, visual effects and graphics, and copyright laws.

# Video Production 1 or CE Video Production 1061

Duration:Semester (0.5)Grades:10-12Graduation:Qualifies for (0Prerequisite:NoneDescription:This course is a students with the stude

Qualifies for (CTE) None This course is designed to provide students with the basic knowledge and skills related to the video production industry. This includes instruction and hands-on assignments in the following areas: camera operation, audio systems, lighting systems, pre-production, studio operations, control room operations, visual effects and graphics, and copyright laws. operation, audio systems, lighting systems, pre-production, studio operations, control room operations, visual effects and graphics, and copyright laws.



#### **COMPLETER COURSES**

#### **Digital Media 2**

Duration: Grades: Graduation: Prerequisite: Description:

Year (1.0) 10-12 Qualifies for (CTE) Digital Media 1 Digital Media 2 is a course designed to teach the process of planning, instructional design, development, and publishing of digital media and interactive media projects. Digital media 2 is the second-year course within digital media pathway where students will focus on developing advanced skills to plan, design, and create interactive projects using the elements of text, 2-D and 3-D graphics, animation, sound, video, digital imaging, interactive projects, etc. These skills can prepare students for entry-level positions and other occupational and educational goals.

# **Video Production 2 or**

#### **CE Video Production 2110**

Duration: Grades: Graduation: Prerequisite: Description:	Semester (0.5) 10-12 Qualifies for (CTE) Video Production 1 This course is designed for students who want to further enhance their filmmaking
	knowledge and abilities. It is an
	application of the skills learned in Video
	Production 1 with an additional emphasis
	on advanced techniques in
	cinematography, audio production,
	postproduction, and storytelling. Students
	are expected to create a portfolio by the
	end of the course.

#### **TV Broadcasting 2**

Duration:	Semester (0.5)
Grades:	11-12
Graduation:	Qualifies for (CTE)
Prerequisite:	TV Broadcasting 1
Description:	This course is designed to provide
	students with the advanced knowledge
	and skills related to the television
	broadcasting industry. This includes
	instruction and hands-on assignments in
	the following areas: camera operation,
	audio systems, lighting systems, pre-
	production, studio operations, control
	in the second second second second

#### **CTE Internship**

Duration: Grades:	Semester (0.5) 11-12
Graduation:	Qualifies for (CTE)
Prerequisite:	Directly related to CCRP & previously or
	currently taking CTE class associated
	with internship
Description:	CTE Internships provide on the job
	training opportunities that are directly
	related to a career goal and course of
	study identified through the College and
	Career Ready Plan (CCRP). Therefore, a
	student must have taken or currently be
	enrolled in a CTE class related to the
	internship opportunity. This Work-Based
	Learning experience is designed to bridge
	the gap between school and work.
	Appropriate supervision by a
	school/district coordinator must be
	maintained.

room operations, visual effects and

graphics, and copyright laws.



# Fashion Apparel & Textiles

# Workforce Trends:

Employment growth for fashion designers will stem from a growing population demanding more clothing, footwear, and accessories. The best job opportunities will be in design firms that design mass market clothing sold in department stores and retail chain stores, such as apparel wholesale firms. From theater and dance to music and acting numerous performing arts companies call Utah home, employing individuals in fashion design, fashion merchandising, costuming, technical apparel design, and custom dressmaking.

# FCCLA – Student Organization:

FCCLA is the CTSO for students in the Fashion Apparel and Textiles Career Pathway. FCCLA provides students with opportunities to attain the knowledge, skills, and leadership characteristics necessary to succeed in life and careers.

# Sample Occupations:

- Graphic Designer
- Fashion Design and Merchandising
- CTE Teacher
- Fashion Designer
- Fashion Illustrator
- Textile Scientist

# Collegiate & Technical Programs:

- Bridgerland Technical College
- Salt Lake Community College
- Utah State University
- Weber State University



Career Pathways: Fashion Apparel & Textiles								
EXPLORER COURSES	CREDITS	PHS	THS	ESCH	MTECH	CE Credits	UVU Title	DE Credits
Fashion Design Studio (recommended)	0.5		~					
Sewing Construction and Textiles 1 (recommended)	0.5		1					
*Sports and Outdoor Design 1 (recommended)	0.5							
Digital Graphic Arts, Intro	0.5 to 1.0	1	1					
Screen Printing Technology	0.5	1	1					
CONCENTRATOR COURSES								
Sewing Construction and Textiles 2	0.5		1					
COMPLETER COURSES								
CTE Internship	0.5	1	1					

Note: PCSD Pathwav Completer Criteria: total earned credits of 3.0 or more. including a required concentrator course. \*Currently not an approved PCSD course, yet suggested for future consideration by the PCSD School Board.

#### **EXPLORER COURSES**

#### **Fashion Design Studio**

Semester (0.5)

Duration:
Grades:
Graduation:
Prerequisite:
Description:

9-12 Qualifies for (CTE) Complete the concentrator course This course explores how fashion influences everyday life and introduces students to the fashion industry. Topics covered include: fashion fundamentals, elements and principles of design, textiles, consumerism, and fashion related careers, with an emphasis on personal application. This course will strengthen comprehension of concepts and standards outlined in Sciences, Technology, Engineering and Math (STEM) education. FCCLA and/or DECA may be an integral part of this course.

# Sewing Construction and Textiles 1 (Recommended)

Duration:	Semester (0.5)
Grades:	9-12
Graduation:	Qualifies for (CTE)
Prerequisite:	None
Description:	This course introduces students to basic apparel design and construction skills. These skills prepare students for the exciting global apparel industry and entrepreneurial opportunities. Students will sew apparel and accessory projects. This course will strengthen

comprehension of concepts and standards outlined in Sciences, Technology, Engineering and Math (STEM) education. Student leadership and competitive events (FCCLA) may be integrated into this course.

# \*Sports and Outdoor Design 1

Duration:Semester (0.5)Grades:9-12Graduation:Qualifies for (CTE)Prerequisite:NoneDescription:Students learn basic design and construction skills using technical fabrics to make projects for the outdoor/sports industry. The skills will introduce and prepare students for employment opportunities in the outdoor/sports industry. This course will strengthen comprehension of concepts and standard outlined in Sciences, Technology, Engineering and math (STEM) education Student leadership and competitive event (FCCLA) may be integrated into this course.	ls n.
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------



# **Digital Graphic Arts, Intro**

Duration:	Semester $(0.5)$ or Year $(1.0)$
Grades:	9-12
Graduation:	Qualifies for (CTE)
Prerequisite:	None
Description:	This course is designed to provide
	students with the basic knowledge and
	skills related to the graphic design
	industry. It is intended to serve as a
	starting point for several pathways
	including Digital Media, Graphics and
	Printing, 3D Animation and Game
	Development. This includes instruction

and Game udes instruction and hands-on assignments in the following areas: creative design & layout, typography, color, related software, and computer and professional skills.

# **Screen Printing Technology**

Duration:	Semester (0.5)
Grades:	10-12
Graduation:	Qualifies for (CTE)
Prerequisite:	None
Description:	This course is designed to provide
-	students with the knowledge to create,
	produce and reproduce visual graphics
	that communicate to an audience.
	Develop the knowledge and skills relative
	to the graphic design & screen-printing
	industries. Includes instruction and hands-
	on experiences in design & layout, digital
	prep of designs, and multiple color
	printing processes on various substrates.
	Provides an overview of the screen-
	printing and print making industries on
	the commercial level. Instruction includes
	the use of industry standard graphics
	software with the Adobe Creative Suite.

# **CONCENTRATOR COURSES**

# **Sewing Construction and Textiles 2**

0	
Duration:	Semester (0.5)
Grades:	9-12
Graduation:	Qualifies for (CTE)
Prerequisite:	Sport and Outdoor Product Design 1 must precede this course.
Description:	Students will further strengthen and
	broaden apparel design and production
	techniques. In this course they design and
	construct intermediate level projects using
	various construction techniques. These
	skills prepare students for the exciting
	global apparel industry and
	entrepreneurial opportunities. This course
	will strengthen comprehension of
	concepts and standards outlined in
	Sciences, Technology, Engineering and
	Math (STEM) education. Student
	leadership and competitive events
	(FCCLA) may be integrated into this
	course.

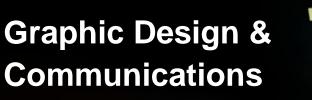


# **COMPLETER COURSES**

# **CTE Internship**

Duration:	Semester (0.5)
Grades:	11-12
Graduation:	Qualifies for (CTE)
Prerequisite:	Directly related to CCRP & previously or currently taking CTE class associated with internship
Description:	CTE Internships provide on the job
Description.	training opportunities that are directly related to a career goal and course of study identified through the College and Career Ready Plan (CCRP). Therefore, a student must have taken or currently be enrolled in a CTE class related to the internship opportunity. This Work-Based Learning experience is designed to bridge the gap between school and work. Appropriate supervision by a school/district coordinator must be
	maintained.





# Workforce Trends:

Graphic Design and Communications is the field of the future and is rapidly growing. Because our global economy is driven by technology, digital media is one of the most in demand fields.

"The talent pool of computer engineers, digital artists and animators in Utah is astounding," said WildWorks CEO Clark Stacey. "The workforce talent here is perennially refreshed not only by in-state colleges and universities, but by seasoned professionals fleeing the congestion and high cost of living in other hub cities like San Francisco and Seattle." *Silicon Slopes Magazine*, Spring 2017.

# FBLA, SkillsUSA, & TSA – Student Organizations:

Students who participate in the Graphic Design and Communications Career Pathway can participate in one or all three of the CTSO organizations: FBLA, SkillsUSA, & TSA. Provo High School and Timpview High School both have chapters in all three CTSO organizations.

# Sample Occupations:

- Commercial Photographer
- Web Developer
- Art Director
- Camera Operator
- Commercial Designer
- Fashion Designer
- Graphic Designer
- Multimedia Animator
- Multimedia Artist
- Multimedia Artist and Animator
- Software Developer
- Web Administrator

# Collegiate & Technical Programs:

- Davis Technical College
- Brigham Young University
- University of Utah
- Utah Valley University
- Utah State University
- Weber State University



Career Pathways: Graphic Design & Communication								
EXPLORER COURSES	CREDITS	PHS	THS	ESCH	MTECH	CE Credits	UVU Title	DE Credits
Commercial Arts 1 (recommended) or CE Commercial Arts 1120	0.5	~	~			3.0	ART 1120	
Digital Graphics Art, Intro (recommended)	0.5	~	~					
Screen Printing Technology	0.5	~	~					
CONCENTRATOR COURSES								
Commercial Arts 2 or CE Commercial Arts 1400	0.5	1	~			3.0	ART 1400	
Commercial Photo 1 or CE Commercial Photo 1050	0.5	~	~			3.0	ART 1050	
Production Graphics 1	0.5	√						
COMPLETER COURSES								
Commercial Photo 2	0.5	√	1					
CAPS (Digital Media 2)	1.0	√	1					
CTE Internship	0.5	~	1					

Note: PCSD Pathway Completer Criteria: total earned credits of 3.0 or more, including a required concentrator course. \*Currently not an approved PCSD course, yet suggested for future consideration by the PCSD School Board.

# **EXPLORER COURSES**

# Commercial Arts 1 (Recommended) or CE Commercial Arts 1120

Duration: Grades: Graduation: Prerequisite: Description:

Semester (0.5) 10-12 Qualifies for (FA, CTE) Design and Visual Communications This is a course in the applied visual arts

that prepares individuals to use artistic techniques to effectively communicate ideas and information to business and consumer audiences via illustrations and other forms of digital or printed media. Instruction includes training in concept design, layout, and techniques such as screen printing, drawing, cartooning, painting, collage, and computer graphics.

# **Digital Graphic Arts, Intro**

Duration:	Semester $(0.5)$ or Year $(1.0)$
Grades:	9-12
Graduation:	Qualifies for (CTE)
Prerequisite:	None
Description:	This course is designed to provide
	students with the basic knowledge and
	skills related to the graphic design
	industry. It is intended to serve as a
	starting point for several pathways
	including Digital Media, Graphics and
	Printing, 3D Animation and Game
	Development. This includes instruction

and hands-on assignments in the following areas: creative design & layout, typography, color, related software, and computer and professional skills.

# **Screen Printing Technology**

	6 67
Duration:	Semester (0.5)
Grades:	10-12
Graduation:	Qualifies for (CTE)
Prerequisite:	None
Description:	This course is designed to provide
-	students with the knowledge to create,
	produce and reproduce visual graphics
	that communicate to an audience.
	Develop the knowledge and skills relative
	to the graphic design & screen-printing
	industries. Includes instruction and hands-
	on experiences in design & layout, digital
	prep of designs, and multiple color
	printing processes on various substrates.
	Provides an overview of the screen-
	printing and print making industries on
	the commercial level. Instruction includes
	the use of industry standard graphics
	software with the Adobe Creative Suite.



# **CONCENTRATOR COURSES**

# Commercial Arts 2 or

# **CE Commercial Arts 1400**

Duration: Grades: Graduation: Prerequisite: Description: Semester (0.5) 10-12 Qualifies for (FA, CTE) Commercial Arts 1 A course in the applied visual arts that focuses on the general principles and techniques for effectively communicating ideas and information, and promoting products to business and consumer audiences. This course prepares individuals in any of the applied art media including: drawing, painting, computer graphics, and others.

# Commercial Photo 1 or CE Commercial Photo 1050

Semester (0.5)

Duration: Grades: Graduation: Prerequisite: Description:

10-12 Qualifies for (FA, CTE) None This course is an introduction to the field of commercial photography. This course will cover a number of basic concepts, including but not limited to: purchasing a digital camera; image capture; image editing; and image output. This course will also feature Adobe Photoshop, its features and use. These concepts will enable the student to be more knowledgeable and prepared to enter the field of commercial photography. Camera Requirement: It is recommended that students have access to a Digital SLR camera. However, Digital Point and Shoot

cameras can be used and will be covered in this course. Minimum equipment requirements for this course are cameras with removable memory cards and adjustable mode settings. Mobile devices may be used to complete some, but not all of the listed objectives.

#### **Production Graphics 1**

Duration:	Semester (0.5)
Grades:	10-12
Graduation:	Qualifies for (F
Prerequisite:	Digital Graphic
Description:	This course is c
	continuation of
	The course prei

10-12 Qualifies for (FA, CTE) Digital Graphics Art, Intro This course is designed to be a continuation of Digital Graphic Arts Intro. The course prepares individuals to apply technical knowledge in the areas of design & layout, related computer and software, safety, printing processes, finishing & binding, and professional skills. The course includes instruction in printing, printing equipment and operation, computer hardware and software, digital imaging, print preparation, and electronic prepress.



# **COMPLETER COURSES**

# **Commercial Photo 2**

Duration: Grades: Graduation: Prerequisite: Description:	Semester (0.5 11-12 Qualifies for (FA, CTE) Commercial Photo 1 This course is designed for students who want to further enhance their photographic knowledge and abilities. It is an application of the skills learned in Commercial Photo 1 with an emphasis on professional jobs and assignments used in commercial photography. A portfolio of each student's work is expected at the end of the course. Camera Requirement: Since there is an industry standard for this type of work, access to a Digital SLR camera is required for the Commercial Photo 2 course. Schools may provide necessary equipment to complete the course. Software Requirement: Adobe Photoshop, Adobe Lightroom
	Libert Light com

# **CTE Internship**

Duration: Grades: Graduation: Prerequisite:	Semester (0.5) 11-12 Qualifies for (CTE) Directly related to CCRP & previously or currently taking CTE class associated with internship
Description:	CTE Internship CTE Internships provide on the job training opportunities that are directly related to a career goal and course of study identified through the College and Career Ready Plan (CCRP). Therefore, a student must have taken or currently be enrolled in a CTE class related to the internship opportunity. This Work-Based Learning experience is designed to bridge the gap between school and work. Appropriate supervision by a school/district coordinator must be maintained.



# Accounting & Finance

# Workforce Trends:

Accountants, those with a CPA, continue to be in demand in both public and private industry audit and tax specialties. Demand is especially high in the tax and healthcare areas. In Utah, the average annual employment growth rate for accountants and auditors is 6% nationwide through the year 2028.

Accountant (CPA) must have a master's degree in accounting and be licensed. The license must be renewed every two years. According to the Utah Department of Workforce Services, the median hourly wage for an experienced auditor and an accountant is \$30.22.

# FBLA – Student Organization:

FBLA is the CTSO for students in the Accounting and Finance Career Pathway. FBLA provides students with opportunities for leadership, community involvement, and career development.

# Sample Occupations:

- Accountant
- Auditor
- CTE Teacher
- Financial Manager
- Loan Officer
- Tax Examiner

# Collegiate & Technical Programs:

- Brigham Young University
- <u>University of Utah</u>
- <u>Utah Valley University</u>
- <u>Utah State University</u>
- Weber State University



Career Pathways: Accounting & Finance								
EXPLORER COURSES	CREDITS	PHS	THS	ESCH	MTECH	CE Credits	UVU Title	DE Credits
Accounting 1 (recommended)	0.5	1	1					
Business Law	0.5	1						
Digital Graphic Arts, Intro	0.5	1	~					
Economics or CE Economics 1010	0.5	1	~			3.0	ECON 1010	
Entrepreneurship	0.5	1	1					
Sports and Entertainment Marketing	0.5	1	1					
Web Development 1 or CE Web Development 1 2420	0.5	1	1			3.0	INFO 2420	
CONCENTRATOR COURSES								
Accounting 2	0.5	1	1					
COMPLETER COURSES								
CAPS (Business & Marketing)	1.0	1	~					
CTE Internship	0.5	1	1					

Note: PCSD Pathway Completer Criteria: total earned credits of 3.0 or more, including a required concentrator course. \*Currently not an approved PCSD course, yet suggested for future consideration by the PCSD School Board.

# **EXPLORER COURSES**

# Accounting 1 (Recommended)

Duration: Grades: Graduation: Prerequisite: Description:	Semester (0.5) 10-12 Qualifies for (ME, CTE) None Students will develop skills beginning with and understanding of the basic elements and concepts of double-entry accounting systems related to service businesses organized as a sole proprietorship. Skills include understanding the accounting equation, analyzing business transactions, entering transactions in journals, posting to ledgers, compiling end-of-period financial statements, preparing closing entries, and
	statements, preparing closing entries, and managing cash.

#### **Business Law**

Duration: Grades:	Semester (0.5) or Year (1.0) 10-12
Graduation:	Qualifies for (CTE)
Prerequisite:	None
Description:	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. The course will include an understanding of the court system at the

local, state, and national level. 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.

# **Digital Graphic Arts, Intro**

Duration: Grades: Graduation: Prerequisite: Description:	Semester (0.5) or Year (1.0) 9-12 Qualifies for (CTE) None This course is designed to provide students with the basic knowledge and
	skills related to the graphic design industry. It is intended to serve as a starting point for several pathways including Digital Media, Graphics and Printing, 3D Animation and Game Development. This includes instruction and hands-on assignments in the following areas: creative design & layout, typography, color, related software, and computer and professional skills.



# Economics or

#### **CE Economics 1010**

Duration: Grades: Graduation: Prerequisite: Description: Semester (0.5) 10-12 Qualifies for (SS, CTE) None Economics is a social science that studies how people satisfy unlimited wants and needs with scarce resources. Characteristics of the market economy of the United States and its function in the world will be explored. Students will learn methods of applying economics to one's life.

#### Entrepreneurship

Duration:
Grades:
Graduation:
Prerequisite:
Description:

Semester (0.5) 10-12 Qualifies for (CTE) None

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 become aware of the traits and characteristics of successful entrepreneurs. Students will gain an awareness of knowledge needed in research, planning and regulations affecting the small business and the means of financing a small business. They will understand the specific strategies of business management and marketing and the economic role of the entrepreneur in the market system.

#### **Sports and Entertainment Marketing**

Duration:	Semester (0.5)
Grades:	10-12
Graduation:	Qualifies for (CTE)
Prerequisite:	None
Description:	This is an introductory course that will
	help students gain an understanding of
	marketing concepts as they apply to the
	sports and entertainment industry. The
	areas this course will cover include: core
	marketing standards, market
	segmentation, target marketing, the event
	marketing triangle (events, fans, and
	sponsors), sports and entertainment
	promotion and marketing plans.

# Web Development 1 or CE Web Development 2420

Duration:	Year (1.0)
Grades:	9-12
Graduation:	Qualifies for (DS, CTE)
Prerequisite:	None
Description:	Web Development is a course designed to
	guide students in a project-based
	environment, in the development of up-to-
	date concepts and skills that are used in
	the development of today's websites.
	Students will learn the fundamentals of
	how the internet works. They will learn
	and use the basic building blocks of the
	World Wide Web; HTML5 coding,
	Cascading Style Sheets (CSS), and
	JavaScript. They will follow the steps to
	create a website by planning, designing,
	developing, deploying, and maintaining of
	website projects. Students will learn and
	use different scripting technologies to
	create more dynamic and interactive
	websites. They will learn what it takes for
	a career in Web Development as they
	complete projects and create their own
	web site



# **CONCENTRATOR COURSES**

# Accounting 2

Duration: Grades: Graduation: Prerequisite: Description:	Semester (0.5) 10-12 Qualifies for (ME, CTE) Accounting 1 Students will develop advanced skills that build upon those acquired in Accounting 1. Students continue applying concepts of double-entry accounting systems related to merchandising businesses. Additional accounting skills will be developed, including preparing and journalizing payroll records, calculating and recording adjusting entries, and interpreting financial information. Exposure to automated accounting procedures is strongly encouraged.
	0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0

# **COMPLETER COURSES**

#### \*Business and Marketing Capstone

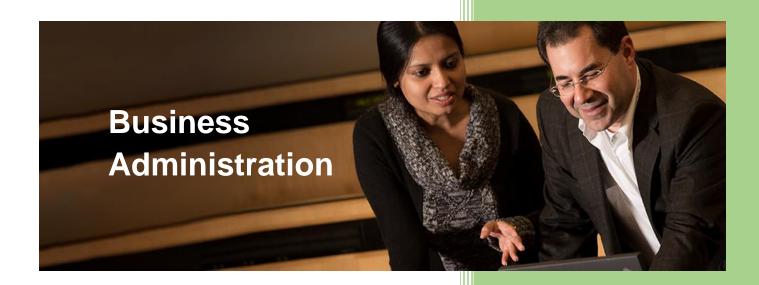
Duration: Grades: Graduation: Prerequisite: Description: Semester (0.5) 11-12 Qualifies for (CTE)

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. The Business Capstone encourages students to think analytically, logically and creatively to integrate experience and knowledge in real world situations. Membership and participation in DECA and FBLA are highly encouraged.

# **CTE Internship**

	· ·
Duration:	Semester (0.5)
Grades:	11-12
Graduation:	Qualifies for (CTE)
Prerequisite:	Directly related to CCRP & previously or currently taking CTE class associated with internship
Description:	CTE Internships provide on the job
	training opportunities that are directly
	related to a career goal and course of
	study identified through the College and
	Career Ready Plan (CCRP). Therefore, a
	student must have taken or currently be
	enrolled in a CTE class related to the
	internship opportunity. This Work-Based
	Learning experience is designed to bridge
	the gap between school and work.
	Appropriate supervision by a
	school/district coordinator must be
	maintained.





# Workforce Trends:

During the next decade a growing number of personal financial advisors will be needed to assist the millions of workers who are expected to retire. In Utah, the average annual employment growth rate for personal financial advisors is 2.4% through the year 2026.

Economists are found in state and federal businesses throughout Utah. According to the Utah Department of Workforce Services, the annual median salary of an economist is \$78,260.

# FBLA – Student Organization:

FBLA is the CTSO for students in the Business Management & Leadership Career Pathway. FBLA provides students with opportunities for leadership, community involvement, and career development. Provo High School and Timpview High School, both have FBLA Chapters.

# Sample Occupations:

- Account Representative
- Consumer Advocate
  - Dispute Resolution Analyst
  - Budget Analyst
  - CTE Teacher
  - Credit Counselor
  - Financial Manager
  - Personal Financial Advisor

# Collegiate & Technical Programs:

- LDS Business College
- Brigham Young University
- <u>University of Utah</u>
- <u>Utah Valley University</u>
- Utah State University
- <u>Weber State University</u>



Career Pathways: Business Administration								
EXPLORER COURSES	CREDITS	PHS	THS	ESCH	MTECH	CE Credits	UVU Title	DE Credits
Accounting 1 (recommended)	1.0	~	1					
Business Law (recommended)	0.5	~						
Entrepreneurship (recommended)	0.5		1					
Leadership Principles 1 (recommended) or CE Student Govern Leadership Principles 1250 or DE Leadership Principles 1250	0.5		~			3.0	MGMT 1250	3.0
Marketing 1 (recommended)	1.0	~	1					
Economics or CE Economics 1010	0.5	√	1			3.0	ECON 1010	
Sports and Entertainment Marketing	0.5	√	1					
Web Development 1 or CE Web Development 1 2420	0.5	√	1			3.0	INFO 2420	
CONCENTRATOR COURSES							· · · ·	
Business Management or CE Business Management 1 2420	0.5	~	1			3.0	MGMT 1010	
Leadership Principles 2	0.5		1					
COMPLETER COURSES								
CAPS (Business & Marketing)	1.0	√	1					
CTE Internship	0.5	√	1					

Note: PCSD Pathway Completer Criteria: total earned credits of 3.0 or more, including a required concentrator course.

\*Currently not an approved PCSD course, yet suggested for future consideration by the PCSD School Board.

# **EXPLORER COURSES**

#### Accounting 1 (recommended)

Duration:	Semester (0.5)
Grades:	10-12
Graduation:	Qualifies for (ME, CTE)
Prerequisite:	None
Description:	Students will develop skills beginning
	with and understanding of the basic
	elements and concepts of double-entry
	accounting systems related to service
	businesses organized as a sole
	proprietorship. Skills include
	understanding the accounting equation,
	analyzing business transactions, entering
	transactions in journals, posting to
	ledgers, compiling end-of-period financial
	statements, preparing closing entries, and
	managing cash.

#### **Business Law (recommended)**

Duration:	Semester $(0.5)$ or Year $(1.0)$
Grades:	10-12
Graduation:	Qualifies for (CTE)
Prerequisite:	None
Description:	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. The course will include an understanding of the court system at the local, state, and national level. 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.



#### Entrepreneurship (recommended)

Duration: Grades: Graduation: Prerequisite: Description: Semester (0.5) 10-12 Qualifies for (CTE) None

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 become aware of the traits and characteristics of successful entrepreneurs. Students will gain an awareness of knowledge needed in research, planning and regulations affecting the small business and the means of financing a small business. They will understand the specific strategies of business management and marketing and the economic role of the entrepreneur in the market system.

#### Leadership Principles 1 (recommended) CE or DL Leadership Principles 1250

Duration: Grades: Graduation: Prerequisite: Description: Semester (0.5) 10-12 Qualifies for (CTE) None

This class teaches how to be an effective leader. Concepts include leadership history, goal setting, time management, effective communication, diversity, and decision making. Students may be eligible to receive three (3) credits of concurrent enrollment at Utah Valley University.

#### Marketing 1 (recommended)

Duration: Grades: Graduation: Prerequisite: Description: Semester (0.5) 10-12 Qualifies for (CTE) None Marketing 1 explores the seven core functions of marketing which include: marketing Planning – why target market and industry affects businesses; Marketing-information Management why market research is important; Pricing - how prices maximize profit and affect the perceived value; product/Service Management – why products live and die; Promotion - how to inform customers about products; Channel Management how products reach the final user; and Selling - how to convince a customer that a product is the best choice. Students will utilize knowledge in hands-on projects which may include: Conducting research, creating a promotional plan, pitching a

sales presentation, and introducing an idea for a new product/services.

#### **Economics**

Duration: Grades: Graduation: Prerequisite: Description:	Semester (0.5) 10-12 Qualifies for (SS, CTE) None Economics is a social science that studies how people satisfy unlimited wants and needs with scarce resources. Characteristics of the market economy of the United States and its function in the world will be explored. Students will learn methods of applying economics to one's life.
	one's life.

#### Sports and Entertainment Marketing

Duration:	Semester (0.5)
Grades:	10-12
Graduation:	Qualifies for (CTE)
Prerequisite:	None
Description:	This is an introductory course that will
	help students gain an understanding of
	marketing concepts as they apply to the
	sports and entertainment industry. The
	areas this course will cover include: core
	marketing standards, market
	segmentation, target marketing, the event
	marketing triangle (events, fans, and
	sponsors), sports and entertainment
	promotion and marketing plans.

# Web Development 1 or

#### **CE Web Development 2420**

	The second s
Duration:	Year (1.0)
Grades:	9-12
Graduation:	Qualifies for (DS, CTE)
Prerequisite:	None
Description:	Web Development is a course designed to guide students in a project-based environment, in the development of up-to- date concepts and skills that are used in the development of today's websites. Students will learn the fundamentals of how the internet works. They will learn and use the basic building blocks of the World Wide Web; HTML5 coding, Cascading Style Sheets (CSS), and JavaScript. They will follow the steps to create a website by planning, designing, developing, deploying, and maintaining of website projects. Students will learn and use different scripting technologies to create more dynamic and interactive websites. They will learn what it takes for a career in Web Development as they complete projects and create their own web site.



#### **CONCENTRATOR COURSES**

# Business Management or

#### **CE Business Management 1010**

Duration: Grades: Graduation: Prerequisite: Description: Semester (0.5)10-12 Qualifies for (CTE) None This Business Management course seeks to develop sound management concepts within students, as management plays a role in any future employment opportunity. Students are able to analyze, synthesize, and evaluate data from the other functional areas of business (e.g., marketing, finance, and production/operation). Effective management requires decision-making abilities, long-range planning knowledge, human relations expertise, and motivational skills. Students learn the four basic functions of management: planning, organizing, directing, and controlling.

#### **Leadership Principles 2**

Duration:	Semester (0.5)
Grades:	10-12
Graduation:	Qualifies for (CTE)
Prerequisite:	Leadership Principles 1
Description:	This class teaches how to be an effective
	leader. Concepts include power, team
	management, dealing with change, and
	ethics. Students will also be in charge of
	organizing and implementing a class
	project. Students may be eligible to
	receive three (3) credits of concurrent
	enrollment at Utah Valley University.

#### **COMPLETER COURSES**

#### \*Business and Marketing Capstone

	0
Duration:	Semester (0.5)
Grades:	11-12
Graduation:	Required (CTE)
Prerequisite:	TBD
Description:	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. The Business
	Capstone encourages students to think
	analytically, logically and creatively to
	integrate experience and knowledge in
	real world situations. Membership and
	participation in DECA and FBLA are
	highly encouraged.

Duration:	Semester (0.5)			
Grades:	11-12			
Graduation:	Qualifies for (CTE)			
Prerequisite:	Directly related to CCRP & previously or currently taking CTE class associated with internship			
Description:	CTE Internships provide on the job			
	training opportunities that are directly			
	related to a career goal and course of study identified through the College and			
	Career Ready Plan (CCRP). Therefore, a			
	student must have taken or currently be			
	enrolled in a CTE class related to the			
	internship opportunity. This Work-Based			
	Learning experience is designed to bridge			
	the gap between school and work.			
	Appropriate supervision by a			
	school/district coordinator must be			
	maintained.			



# Business Information Management



# Workforce Trends:

According to the Utah Department of Workforce Services, professional and business services makeup nearly 13% of Utah's employment base. There are 23 million small businesses in the U.S., with women owning about 9.1 million.

In 2018: Amazon named Utah the #1 state for entrepreneurs. Forbes named Utah the #2 best state for business (Utah has been ranked #1 six out of the past nine years.) CNBC named Utah the #3 best state for business. WalletHub named Utah the #2 best state to start a business.

# FBLA – Student Organization:

FBLA is the CTSO for students in the Business Information Management Career Pathway. FBLA provides students with opportunities for leadership, community involvement, and career development. Provo High School and Timpview High School, both have FBLA Chapters.

# Sample Occupations:

- Desktop Publisher
- Legal Assistant/Paralegal
- Web Developer
- General and Operations Manager
- Marketing Manager
- Management Analyst
- Operations Manager
- Sales Manager

- LDS Business College
- Brigham Young University
- University of Utah
- Utah Valley University
- Utah State University
- Weber State University



Career Pathways: Business Information Management								
EXPLORER COURSES	CREDITS	PHS	THS	ESCH	MTECH	CE Credits	UVU Title	DE Credits
Information Technology, Intro (recommended)				1				
Accounting 1	1.0	~	1					
Business Law	0.5	~						
Digital Graphic Arts, Intro	0.5	√	1					
Economics or CE Economics 1010	0.5	√	1			3.0	ECON 1010	
Entrepreneurship	0.5		1					
Web Development 1 or CE Web Development 1 2420	0.5	√	1			3.0	INFO 2420	
CONCENTRATOR COURSES								
Business Office Specialist	0.5	√	1					
COMPLETER COURSES								
CAPS (Business & Marketing)	1.0	√	~					
CTE Internship	0.5	√	√					

#### EXPLORER COURSES

#### Information Technology, Intro

Duration:
Grades:
Graduation:
Prerequisite:
Description:

Semester (0.5) 9-12 Qualifies for (CTE) Digital Literacy The Intro to IT course is for students interested in pursuing a career in the field of Information Technology. Students will be introduced to the different aspects of information technology to determine their interests. Students will complete assignments and projects in IT careers, digital media, hardware & operating systems, communications & networks, software development, databases, and

#### Accounting 1

Duration:	Semester (0.5)
Grades:	10-12
Graduation:	Qualifies for (ME, CTE)
Prerequisite:	None
Description:	Students will develop skills beginning
	with and understanding of the basic
	elements and concepts of double-entry
	accounting systems related to service
	businesses organized as a sole
	proprietorship. Skills include
	understanding the accounting equation,
	analyzing business transactions, entering
	transactions in journals, posting to

new & emerging technologies.

ledgers, compiling end-of-period financial statements, preparing closing entries, and managing cash.

#### **Business Law**

Duration: Grades: Graduation: Prerequisite: Description:	Semester (0.5) or Year (1.0) 10-12 Qualifies for (CTE) None 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. The course will include an understanding of the court system at the local, state, and national level. 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.



#### **Digital Graphic Arts, Intro**

Duration: Grades: Graduation: Prerequisite: Description: Semester (0.5) or Year (1.0) 9-12 Qualifies for (CTE) None This course is designed to provide students with the basic knowledge and skills related to the graphic design industry. It is intended to serve as a starting point for several pathways including Digital Media, Graphics and Printing, 3D Animation and Game Development. This includes instruction and hands-on assignments in the following areas: creative design & layout, typography, color, related software, and

computer and professional skills.

#### Economics or

#### **CE Economics 1010**

Duration:	Semester (0.5)
Grades:	10-12
Graduation:	Qualifies for (SS, CTE)
Prerequisite:	None
Description:	Economics is a social science that studies
	how people satisfy unlimited wants and
	needs with scarce resources.
	Characteristics of the market economy of
	the United States and its function in the
	world will be explored. Students will
	learn methods of applying economics to
	one's life.

#### Entrepreneurship

Entrepreneursnip			
Duration:	Semester (0.5)		
Grades:	10-12		
Graduation:	Qualifies for (CTE)		
Prerequisite:	None		
Description:	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 become aware of the traits and		
	characteristics of successful		
	entrepreneurs. Students will gain an		
	awareness of knowledge needed in		
	research, planning and regulations		
	affecting the small business and the		
	means of financing a small business. They		
	will understand the specific strategies of		
	business management and marketing and		
	the economic role of the entrepreneur in		
	the market system.		

#### Web Development 1 or CE Web Development 2420

	•
Duration:	Year (1.0)
Grades:	9-12
Graduation:	Qualifies for (DS, CTE)
Prerequisite:	None
Description:	Web Development is a co
	• • • • • • • •

velopment is a course designed to guide students in a project-based environment, in the development of up-todate concepts and skills that are used in the development of today's websites. Students will learn the fundamentals of how the internet works. They will learn and use the basic building blocks of the World Wide Web; HTML5 coding, Cascading Style Sheets (CSS), and JavaScript. They will follow the steps to create a website by planning, designing, developing, deploying, and maintaining of website projects. Students will learn and use different scripting technologies to create more dynamic and interactive websites. They will learn what it takes for a career in Web Development as they complete projects and create their own web site.



#### **CONCENTRATOR COURSES**

#### **Business Office Specialist**

Duration:	Semester (0.5)
Grades:	9-12
Graduation:	Qualifies for (DS, CTE)
Prerequisite:	None
Description:	This course applies advanced concepts
	and principles using word processing,
	spreadsheets, databases, and electronic
	presentation software. Students may have
	the opportunity to obtain a Microsoft
	Office Specialist industry certificate
	through Microsoft and Certiport per
	district discretion. The certification is
	recognized worldwide as the best method
	for employers to validate computer skill
	proficiency. Students will integrate
	applications learned. This course builds
	on skills included in Digital Literacy.

#### **COMPLETER COURSES**

#### \*Business and Marketing Capstone

Duration:
Grades:
Graduation:
Prerequisite:
Description:

Semester (0.5) 11-12 Qualifies for (CTE)

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. The Business Capstone encourages students to think analytically, logically and creatively to integrate experience and knowledge in real world situations. Membership and participation in DECA and FBLA are highly encouraged.

	- Frank State Stat
Duration:	Semester (0.5)
Grades:	11-12
Graduation:	Qualifies for (CTE)
Prerequisite:	Directly related to CCRP & previously or
	currently taking CTE class associated
	with internship
Description:	CTE Internships provide on the job
	training opportunities that are directly
	related to a career goal and course of
	study identified through the College and
	Career Ready Plan (CCRP). Therefore, a
	student must have taken or currently be
	enrolled in a CTE class related to the
	internship opportunity. This Work-Based
	Learning experience is designed to bridge
	the gap between school and work.
	Appropriate supervision by a
	school/district coordinator must be
	maintained.



# Marketing

# Workforce Trends:

In Utah, the average annual employment growth rate projected for market research analysts and marketing specialists is 20% nationwide through the year 2028. The Utah Department of Workforce Services lists the median salary for a public relations specialist as \$52,360.

In 2017, CNBC ranked Provo, Ogden, and Salt Lake City as one of the top twenty best places to start a business. Each metro area was hailed as a small-business hot spot. According to the Utah Business magazine, the top three public relations firms in Utah are: Fusion 360, Penna Powers, and Method Communications.

# FBLA – Student Organization:

FBLA is the CTSO for students in the Marketing Career Pathway. FBLA provides students with opportunities for leadership, community involvement, and career development. Provo High School and Timpview High School, both have FBLA Chapters.

# Sample Occupations:

- Art Director
- CTE Teacher
- Editor
- Graphic Designer
- Marketing Manager
- Market Research Analyst
- Marketing Specialist
- Public Relations specialist
- Sales Manager

- LDS Business College
- Brigham Young University
- University of Utah
- Utah Valley University
- Utah State University
- Weber State University



Career Pathways: Marketing								
EXPLORER COURSES	CREDITS	PHS	THS	ESCH	MTECH	CE Credits	UVU Title	DE Credits
*Entrepreneurship (recommended)	0.5							
Marketing 1 (recommended)	0.5	~	~					
Sports & Entertainment Marketing (recommended)	0.5	~	~					
Accounting 1	1.0	√	~					
Business Law	0.5	~						
Digital Graphic Arts, Intro	0.5	~	~					
Economics or CE Economics 1010	0.5	~	~			3.0	ECON 1010	
Web Development 1 or CE Web Development 2420	0.5	~	1			3.0	INFO 2420	
CONCENTRATOR COURSES								
* Digital Marketing	0.5							
COMPLETER COURSES								
CAPS (Business & Marketing)	1.0	√	~					
CTE Internship	0.5	1	1					

#### **EXPLORER COURSES**

#### **Entrepreneurship (recommended)**

Duration:
Grades:
Graduation:
Prerequisite:
Description:

Semester (0.5)10-12 Qualifies for (CTE) None 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 become aware of the traits and characteristics of successful entrepreneurs. Students will gain an awareness of knowledge needed in research, planning and regulations affecting the small business and the means of financing a small business. They will understand the specific strategies of business management and marketing and the economic role of the entrepreneur in the market system.

#### Marketing 1 (recommended)

	(
Duration: Grades: Graduation: Prerequisite: Description:	Semester (0.5) 10-12 Qualifies for (CTE) None Marketing 1 explores the seven core functions of marketing which include: marketing Planning – why target market and industry affects businesses; Marketing—information Management – why market research is important; Pricing – how prices maximize profit and affect the perceived value; product/Service Management – why products live and die; Promotion – how to inform customers about products; Channel Management – how products reach the final user; and Selling – how to convince a customer that a product is the best choice. Students will utilize knowledge in hands-on projects which may include: Conducting research, creating a promotional plan, pitching a sales presentation, and introducing an idea for a new product/services.



# Sports and Entertainment Marketing (recommended)

Duration: Grades: Graduation: Prerequisite: Description: Semester (0.5) 10-12 Qualifies for (CTE) None This is an introductory course that will help students gain an understanding of marketing concepts as they apply to the sports and entertainment industry. The areas this course will cover include: core marketing standards, market segmentation, target marketing, the event marketing triangle (events, fans, and sponsors), sports and entertainment promotion and marketing plans.

#### **Accounting 1**

Duration: Grades: Graduation: Prerequisite: Description: Semester (0.5) 10-12 Qualifies for (ME, CTE) None Students will develop skills

Students will develop skills beginning with and understanding of the basic elements and concepts of double-entry accounting systems related to service businesses organized as a sole proprietorship. Skills include understanding the accounting equation, analyzing business transactions, entering transactions in journals, posting to ledgers, compiling end-of-period financial statements, preparing closing entries, and managing cash.

#### **Business Law**

Duration: Grades: Graduation: Prerequisite: Description: Semester (0.5) or Year (1.0)10 - 12Qualifies for (CTE) None 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. The course will include an understanding of the court system at the local, state, and national level. 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.

#### **Digital Graphic Arts, Intro**

Duration: Grades: Graduation: Prerequisite: Description:	Semester (0.5) or Year (1.0) 9-12 Qualifies for (CTE) None This course is designed to provide students with the basic knowledge and skills related to the graphic design industry. It is intended to serve as a starting point for several pathways including Digital Media, Graphics and Printing, 3D Animation and Game Development. This includes instruction and hands-on assignments in the following areas: creative design & layout, typography, color, related software, and
	typography, color, related software, and computer and professional skills.

#### **Economics or**

#### **CE Economics 1010**

Duration: Grades: Graduation: Prerequisite: Description:	Semester (0.5) 10-12 Qualifies for (SS, CTE) None Economics is a social science that studies how people satisfy unlimited wants and needs with scarce resources. Characteristics of the market economy of the United States and its function in the world will be explored. Students will

#### Web Development 1 or CE Web Development 2420

Duration: Grades: Graduation:	Year (1.0) 9-12 Qualifies for (DS, CTE)
Prerequisite:	None
Description:	Web Development is a course designed to
	guide students in a project-based
	environment, in the development of up-to-
	date concepts and skills that are used in
	the development of today's websites.
	Students will learn the fundamentals of
	how the internet works. They will learn
	and use the basic building blocks of the
	World Wide Web; HTML5 coding,
	Cascading Style Sheets (CSS), and
	JavaScript. They will follow the steps to
	create a website by planning, designing,
	developing, deploying, and maintaining of
	website projects. Students will learn and
	use different scripting technologies to
	create more dynamic and interactive
	websites. They will learn what it takes for
	a career in Web Development as they

complete projects and create their own

website.



#### **CONCENTRATOR COURSES**

#### **Digital Marketing**

Duration: Semester (0.5)Grades: 11-12 Graduation: Qualifies for (CTE) Prerequisite: None Description: The Digital Marketing course is designed to give students a general background in digital marketing and an introduction to the rapidly growing and evolving career field. Students will be exposed to the fundamental concepts and principles of the digital experience, focus on the learning tools and skills necessary for solving business problems, and developing marketing opportunities. This course will provide practical experience in, but not limited to: eCommerce, media planning, branding, online advertising, display advertising, digital campaigns, social media marketing, and mobile media.

#### **COMPLETER COURSES**

#### \*Business and Marketing Capstone

Duration: Grades: Graduation: Prerequisite: Description:

		in b
Semester (0.5)	Duration:	Semester (0.5)
11-12	Grades:	11-12
Qualifies for (CTE)	Graduation:	Qualifies for (CTE)
TBD	Prerequisite:	Directly related to CCRP & previously or
The purpose of this course is to research		currently taking CTE class associated
and solve real world business needs. This		with internship
course is designed for advanced business	Description:	CTE Internships provide on the job
students to further their business	•	training opportunities that are directly
knowledge and skills. The Business		related to a career goal and course of
Capstone encourages students to think		study identified through the College and
analytically, logically and creatively to		Career Ready Plan (CCRP). Therefore, a
integrate experience and knowledge in		student must have taken or currently be
real world situations. Membership and		enrolled in a CTE class related to the
participation in DECA and FBLA are		internship opportunity. This Work-Based
highly encouraged.		Learning experience is designed to bridge
8 9 1 1 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2		the gap between school and work.
		Appropriate supervision by a
		school/district coordinator must be
		maintained.





# Workforce Trends:

According to the U.S. Department of Labor, employment of information security analysts is projected to grow 32% nationwide through the year 2028. Demand is expected to be very high, as these analysts will be needed to create innovative solutions to prevent hackers from stealing critical information or causing problems for computer networks.

In 2018, the Information Technology and Innovation Foundation (ITIF) ranked Utah's state government website (Utah.gov) #1 for security, and 17<sup>th</sup> overall. "Government websites should be fast, secure, mobile-friendly, and accessible to everyone, said Daniel Castro, ITIF vice president

# FBLA, SkillsUSA, TSA – Student Organization:

Students who participate in the Cybersecurity Career Pathway choose among the following CTSOs: FBLA, SkillsUSA, & TSA. Provo High School and Timpview High School, both have chapters in FBLA, SkillsUSA, & TSA.

# Sample Occupations Requiring:

- Computer Network Support Specialist
- CTE Teacher
- Computer and Information Systems Manager
- Computer Programmer
- Information Security Analyst

- <u>Stevens Henager College</u>
- Brigham Young University
- University of Utah
- Utah Valley University
- <u>Utah State University</u>
- Weber State University



Career Pathways: Cybersecurity								
EXPLORER COURSES	CREDITS	PHS	THS	ESCH	MTECH	CE Credits	UVU Title	DE Credits
Computer Programming 1 or CE Computer Programming 1200	1.0	1	1			3.0	INFO 1200	
Computer Science Principles 1 or CE Computer Science Principles 1030	0.5	~	1			3.0	CS 1030	
Web Development 1 or CE Web Development 2420	0.5	1	1			3.0	INFO 2420	
CONCENTRATOR COURSES								
*Linux Fundamentals or CE Linux Fundamentals 1510	1.0					3.0	IT 1510	
COMPLETER COURSES								
Cybersecurity Forensics	0.5		1					
*Cloud Computing	0.5							
CAPS (Digital Medida 2)	1.0	1	1					
CTE Internship	0.5	√	1					

#### **EXPLORER COURSES**

# Computer Programming 1 or CE Computer Programming 1200

	<b>o o</b>
Duration:	Year (1.0)
Grades:	9-12
Graduation:	Qualifies for (DS, ME, CTE)
Prerequisite:	Digital Literacy
Description:	The course places emphasis on the
	principles of computer science rather than
	just programming. Big ideas and concepts
	include: (1) Computing is a creative
	activity. (2) Abstraction reduces
	information and detail to facilitate focus
	on relevant concepts. (3) Data and
	information facilitate the creation of
	knowledge. (4) Algorithms are used to
	develop and express solutions to
	computational problems. (5)
	Programming enables problem solving,
	human expression, and creation of
	knowledge. 96) The Internet pervades
	modern computing. (7) Computing has
	global impacts. This fulfills the Digital
	Studies graduation requirement.

#### Computer Science Principles 1 or CE Computer Science Principles 1030

e = eempare	
Duration:	Semester (0.5)
Grades:	10-12
Graduation:	Qualifies for (S, DS, CTE)
Prerequisite:	Digital Literacy
Description:	An introductory course in program
	engineering and applications. The course
	introduces students to the fundamentals of
	computer programming. Students will
	learn to design, code, and test their own
	programs while applying mathematical
	concepts. Teachers introduce coding
	concepts and problem-solving skills to
	beginning students through a
	programming language such as C++, C#,
	Java, Python, or JavaScript. Students will
	also be introduced to more complex data
	structures and their uses, including arrays
	and classes. Students will learn to create
	more powerful programs. (*Semester 2 –
	Language Specific)



#### Web Development 1 or CE Web Development 2420

Year (1.0)

9-12

Duration: Grades: Graduation: Prerequisite: Description:

Qualifies for (DS, CTE) None Web Development is a course designed to guide students in a project-based environment, in the development of up-todate concepts and skills that are used in the development of today's websites. Students will learn the fundamentals of how the Internet works. They will learn and use the basic building blocks of the World Wide Web; HTML5 coding, Cascading Style Sheets (CSS), and JavaScript. They will follow the steps to create a website by planning, designing, developing, deploying, and maintaining of website projects. Students will learn and use different scripting technologies to create more dynamic and interactive websites. They will learn what it takes for a career in Web Development as they complete projects and create their own web site.

#### **CONCENTRATOR COURSES**

#### \*Linux Fundamentals or CE Linux Fundamentals 1510

Year (1.0)
10-12
Qualifies for (CTE)
Suggested – Introduction to Information
Technology
The CompTIA Linux+ (Powered by LPI)
certification is a vendor neutral credential.
In order to receive CompTIA Linux+
certification, a candidate must pass two
exams. The successful junior level Linux
administrator should be able to: Work at
the Linux command line; Perform easy
maintenance tasks including assisting
users, adding users to a larger system,
executing backup & restore, shutdown &
reboot; Install and configure a
workstation (including X) and connect it
to a LAN, or a stand-alone PC via modem
to the Internet.



## **COMPLETER COURSES**

# \*Cyber Forensics

Duration:	Semester (0.5)
Grades:	9-12
Graduation:	Qualifies for (CTE)
Prerequisite:	Digital Literacy
Description:	Computer hacking forensic investigation
	is the process of detecting hacking attacks
	and properly extracting evidence to report
	the crime and conduct audits to prevent
	future attacks.

Duration:	Semester (0.5)
Grades:	11-12
Graduation:	Qualifies for (CTE)
Prerequisite:	Directly related to CCRP & previously or
	currently taking CTE class associated
	with internship
Description:	CTE Internships provide on the job
	training opportunities that are directly
	related to a career goal and course of
	study identified through the College and
	Career Ready Plan (CCRP). Therefore, a
	student must have taken or currently be
	enrolled in a CTE class related to the
	internship opportunity. This Work-Based
	Learning experience is designed to bridge
	the gap between school and work.
	Appropriate supervision by a
	school/district coordinator must be
	maintained.



# Programming & Software Development

# Workforce Trends:

Demand continues for programmers who can help organizations keep up with changing technology. Prospects are best for those who have the knowledge of various programming languages. In Utah, the average annual employment growth rate for software developers is 7.1% through the year 2026.

Silicon Slopes was formed to promote Utah's growing technology community and is home to more than 5,000 tech companies that has generated 142,500 jobs. From Ogden to Provo, technology companies dot the landscape. Pluralsight, Insidesales.com, Qualtrics, Vivint, Entrata, HealthCatalyst all started in Utah.

# FBLA, SkillsUSA, & TSA – Student Organizations:

Students who participate in the Programming and Software Development Career Pathway choose among the following CTSOs: FBLA, SkillsUSA, & TSA. Provo High School and Timpview High School both have chapters in FBLA, SkillsUSA, & TSA.

# Sample Occupations:

- Web Developer
- CTE Teacher
- Computer Programmer
- Computer Systems Analyst
- Computer Systems Engineers/Architect
- Software Developer
- Video Game Designer

- Davis Technical College
- Brigham Young University
- University of Utah
- Utah Valley University
- Utah State University
- Weber State University



Career Pathways: Programming & Software Development								
EXPLORER COURSES	CREDITS	PHS	THS	ESCH	MTECH	CE Credits	UVU Title	DE Credits
Computer Programming 1 or CE Computer Programming 1 1200	1.0	1	~			3.0	INFO 1200	
Computer Science Principles 1 or CE Computer Science Principles 1030	0.5	1	1			3.0	CS 1030	
Game Development Fundamentals 1 or CE Game Development Fundamentals 1610	0.5		1			3.0	DGM 1610	
Information Technology, Intro	0.5			1				
CONCENTRATOR COURSES								
Computer Programming 2	1.0	√	~					
Mobile Development Fundamentals	0.5		~					
COMPLETER COURSES								
*Algorithms and Data Structures or CE Algorithms and Data Structures 2420	1.0					3.0	CS 2420	
Computer Programming, Advanced or CE Computer Programming, Advanced 1410	1.0	1	1			3.0	CS 1410	
CAPS (Digital Media 2)	1.0	1	~					
CTE Internship	0.5	1	1					

#### **EXPLORER COURSES**

## Computer Programming 1 or CE Computer Programming 1200

Duration: Grades: Graduation: Prerequisite: Description: Year (1.0) 9-12 Qualifies for (DS, ME, CTE) **Digital Literacy** The course places emphasis on the principles of computer science rather than just programming. Big ideas and concepts include: (1) Computing is a creative activity. (2) Abstraction reduces information and detail to facilitate focus on relevant concepts. (3) Data and information facilitate the creation of knowledge. (4) Algorithms are used to develop and express solutions to computational problems. (5) Programming enables problem solving, human expression, and creation of knowledge. 96) The Internet pervades modern computing. (7) Computing has global impacts. This fulfills the Digital Studies graduation requirement.

#### Computer Science Principles 1 or CE Computer Science Principles 1030

Students will learn to design, code, and test their own programs while applying mathematical concepts. Teachers introduce coding concepts and problem- solving skills to beginning students through a programming language such as C++, C#, Java, Python, or JavaScript. Students will also be introduced to more complex data structures and their uses, including arrays and classes. Students will learn to create more powerful programs. (*Semester 2 – Language Specific)	Duration: Grades: Graduation: Prerequisite:	test their own programs while applying mathematical concepts. Teachers introduce coding concepts and problem- solving skills to beginning students through a programming language such as C++, C#, Java, Python, or JavaScript. Students will also be introduced to more complex data structures and their uses, including arrays and classes. Students will learn to create more powerful programs.
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



# Game Development Fundamentals 1 or CE Game Development Fundamentals 1610

Duration:	Semester (0.5)
Grades:	9-12
Graduation:	Qualifies for (CTE)
Prerequisite:	Digital Graphic Art, Intro, Digital Media 1,
	suggested Computer Programming 1
Description:	This course is designed to provide
	students with knowledge and project-
	based experience of fundamental gaming
	development concepts relating to STEM.
	These concepts include game design,
	scripting, creation of digital assets,
	graphic resources, animations,
	understanding hardware, problem solving,
	critical thinking, collaboration, and
	project management.

# Information Technology, Intro

Duration: Grades: Graduation: Prerequisite: Description:	Semester (0.5) 9-12 Qualifies for (CTE) Digital Literacy The Intro to IT course is for students interested in pursuing a career in the field of Information Technology. Students will be introduced to the different aspects of information technology to determine their interests. Students will complete assignments and projects in IT careers, digital media, hardware & operating systems, communications & networks, software development. databases. and
	systems, communications & networks, software development, databases, and new & emerging technologies.

#### **CONCENTRATOR COURSES**

# **Computer Programming 2**

Duration:	Semester (0.5)
Grades:	9-12
Graduation:	Qualifies for (ME, CTE)
Prerequisite:	Computer Programming 1 Suggested,
	Digital Literacy, Computer Science
	Principles, or Teacher Approval
Description:	This course reviews and builds on the
	concepts introduced in Computer
	Programming 1. This course introduces
	students to more complex data structures
	and their uses. Including sequential files,
	arrays, and classes. Students will learn to
	create more powerful programs within a
	specific programming language. Java,
	Python, C++, C#, Swift

#### **Mobile Development Fundamentals 1**

Duration: Grades: Graduation: Prerequisite:	Semester (0.5) 9-12 Qualifies for (CTE) Computer Programming 1, Computer Science Principles, Web Development 1, HTML 5
Description:	This course is designed to teach skills to develop apps for phones, tablets, and other devices that run on a variety of operating systems. Students will learn core mobile development skills. Before taking this course, students should have solid foundational knowledge of the following topics: c#, Visual Studio, .NET, HTML5, SQLite, CSS, JavaScript, ASP.NET MVC, Swift, and other phone operating system tools.



#### **COMPLETER COURSES**

#### \*Algorithms and Data Structures or CE Algorithms and Data Structures 2420

Year (1.0)

Duration: Grades: Graduation: Prerequisite: Description:

10-12 Qualifies for (ME, CTE) Computer Programming 1 & 2 This course builds on the object-oriented programming principles taught in Computer Programming 1,2, and 3. A solid understanding of these concepts is assumed and required in this course. This course presents the ideas, tools, structure, syntax, libraries and object-oriented design techniques for developing wellformed programs using data structures. Students study and strengthen their concepts such as problem solving, program structure, classes, methods, data types, control constructs, file and console I/O. Students will also learn other important principles in designing objectoriented programs containing data structures. Students will design and use common data structures including arrays, hash tables, stacks, queues, linked lists, binary trees, multiway trees, graphs. Students will define and use common algorithms including traversals, searching, sorting, compression and paths. Students will write several programs that demonstrate their understanding of these concepts using an appropriate programming language including: C++, C#, Java, Python, and Swift.

#### **Computer Programming, Advanced or**

#### **CE Computer Programming 1410**

Duration:	Year (1.0)
Grades:	10-12
Graduation:	Required (ME, CTE)
Prerequisite:	Computer Programming 1, 2, & Computer
-	Programming, Advanced
Description:	This is an advanced course in computer
	programming/software engineering and
	applications. It reviews and builds on the
	concepts introduced in Computer
	Programming 1 and 2. It introduces
	students to dynamic data structures,
	advanced utilization of classes, and
	applications of recursion through the
	application of mathematical concepts.
	This course will also highlight the
	differences between the many different
	languages of computer programming.

Duration: Grades: Graduation: Prerequisite:	Semester (0.5) 11-12 Qualifies for (CTE) Directly related to CCRP & previously or currently taking CTE class associated with internship
Description:	CTE Internship CTE Internships provide on the job training opportunities that are directly related to a career goal and course of study identified through the College and Career Ready Plan (CCRP). Therefore, a student must have taken or currently be enrolled in a CTE class related to the internship opportunity. This Work-Based Learning experience is designed to bridge the gap between school and work. Appropriate supervision by a school/district coordinator must be maintained.





# Workforce Trends:

The World Wide Web has changed the way we communicate and consume information. With more than 1 billion websites the need for Web developers is high. According to the Utah Department of Workforce Services, the average annual employment growth rate for Web developers is 4.2% through the year 2026.

Utah has deep consumer software roots. Ancestry.com, Overstock.com, Backcountry.com, and Vivint.com all started in the Beehive State. "People in Utah want to contribute. Just walking down the street you can sense the desire to build and create, to make a mark. That kind of 'beehive' energy is exactly what a consumer startup needs . . . " said Chatbooks CEO Nate Quigley, *Silicon Slopes Magazine*, Spring 2017.

# FBLA, SkillsUSA, & TSA – Student Organizations:

Students who want to participate in the Wb Development Career Pathway can choose among the following CTSOs: FBLA, SkillsUSA, & TSA. Provo High School and Timpview High School, both have chapters in FBLA, SkillsUSA, and TSA.

# Sample Occupations:

- Web Developer
- CTE Teacher
- Computer and Information Systems Manager
- Computer Programmer
- Database Administrator
- Graphic Designer
- Multimedia Artists and Animators
- Software Developer

- <u>University of Utah</u>
- Brigham Young University
- University of Utah
- <u>Utah Valley University</u>
- <u>Utah State University</u>
- Weber State University



Career Pathways: Web Development								
EXPLORER COURSES	CREDITS	PHS	THS	ESCH	MTECH	CE Credits	UVU Title	DE Credits
Computer Science Principles 1 or CE Computer Science Principles 1030	0.5	~	~			3.0	CS 1030	
Digital Graphic Arts, Intro	0.5	~	1					
Entrepreneurship	0.5		1					
Information Technology, Intro	0.5			1				
Web Development 1 or CE Wweb Development 1	0.5	1	1			3.0	INFO 2420	
CONCENTRATOR COURSES								
*Web Development 2	0.5							
*(GIS) Remote Sensing								
COMPLETER COURSES								
CAPS (Digital Media 2)	1.0	1	1					
CTE Internship	0.5	1	1					

#### **EXPLORER COURSES**

#### Computer Science Principles 1 or CE Computer Science Principles 1030

CE Compute	er Science Principles 1030
Duration:	Semester (0.5)
Grades:	9-12
Graduation:	Qualifies for (DS, CTE)
Prerequisite:	Digital Literacy
Description:	An introductory course in program
	engineering and applications. The course
	introduces students to the fundamentals of
	computer programming. Students will
	learn to design, code, and test their own
	programs while applying mathematical
	concepts. Teachers introduce coding
	concepts and problem-solving skills to
	beginning students through a
	programming language such as C++, C#,
	Java, Python, or JavaScript. Students will
	also be introduced to more complex data
	structures and their uses, including arrays
	and classes. Students will learn to create
	more powerful programs. (*Semester 2 –
	Language Specific)

#### **Digital Graphic Arts, Intro**

Duration:
Grades:
Graduation:
Prerequisite:
Description:

Semester (0.5) or Year (1.0) 9-12 Qualifies for (CTE) None This course is designed to provide students with the basic knowledge and skills related to the graphic design industry. It is intended to serve as a starting point for several pathways including Digital Media, Graphics and Printing, 3D Animation and Game Development. This includes instruction and hands-on assignments in the following areas: creative design & layout, typography, color, related software, and computer and professional skills.

#### Information Technology, Intro

Duration: Grades: Graduation: Prerequisite: Description:	Semester (0.5) 9-12 Qualifies for (CTE) Digital Literacy The Intro to IT course is for students interested in pursuing a career in the field of Information Technology. Students will be introduced to the different aspects of information technology to determine their interests. Students will complete assignments and projects in IT careers,
	interests. Students will complete



#### **Entrepreneurship**

Duration: Grades: Graduation: Prerequisite: Description: Semester (0.5) 10-12 Qualifies for (CTE) None

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 become aware of the traits and characteristics of successful entrepreneurs. Students will gain an awareness of knowledge needed in research, planning and regulations affecting the small business and the means of financing a small business. They will understand the specific strategies of business management and marketing and the economic role of the entrepreneur in the market system.

#### Web Development 1 or CE Web Development 2420

CL WED DEV	
Duration:	Year (1.0)
Grades:	9-12
Graduation:	Qualifies for (DS, CTE)
Prerequisite:	None
Prerequisite: Description:	None Web Development is a course designed to guide students in a project-based environment, in the development of up-to- date concepts and skills that are used in the development of today's websites. Students will learn the fundamentals of how the Internet works. They will learn and use the basic building blocks of the World Wide Web; HTML5 coding, Cascading Style Sheets (CSS), and JavaScript. They will follow the steps to
	create a website by planning, designing, developing, deploying, and maintaining of website projects. Students will learn and use different scripting technologies to create more dynamic and interactive websites. They will learn what it takes for a career in Web Development as they complete projects and create their own web site.

#### **CONCENTRATOR COURSES**

#### \*Web Development 2

Duration:	Semester (0.5)
Grades:	9-12
Graduation:	Qualifies for (
Prerequisite:	Web Developn
Description:	Web Developm

Qualifies for (CTE) Web Development 1 Web Development is a course designed to guide students in a project-based environment, in the development of up-todate concepts and skills that are used in the development of today's websites. Students will learn the fundamentals of how the Internet works. They will learn and use the basic building blocks of the World Wide Web; HTML5 coding, Cascading Style Sheets (CSS), and JavaScript. They will follow the steps to create a website by planning, designing, developing, deploying, and maintaining of website projects. Students will learn and use different scripting technologies to create more dynamic and interactive websites. They will learn what it takes for a career in Web Development as they complete projects and create their own web site.



#### **COMPLETER COURSES**

#### \*Web Development Capstone

Duration:
Grades:
Graduation:
Prerequisite:
Description:

Semester (0.5) 10-12 Qualifies for (CTE) Web Development 1 & 2 Web Development is a course designed to guide students in a project-based environment in the development of up-todate concepts and skills that are used in the development of today's websites. Some concepts for discovery and mastery include: Front-end (HTML5, CSS3, Bootstrap, JavaScript, jQuery, jQuery mobile), Foundation paradigms (OOPS, Design Patterns, Object Modeling, JSON, AJAX), MEAN Stack (MongoDB, Express Framework, AngularJS, Node.js) Data Exchange (HTTP, Websockets), Development Environment & Tools, DISHA (Resume & Interview prep package)

#### \*Geographic Information Systems (GIS) Remote Sensing

Duration:	Semester (0.5)
Grades:	11-12
Graduation:	Qualifies for (CTE)
Prerequisite:	TBD
Description:	TBD

Duration:	Semester (0.5)
Grades:	11-12
Graduation:	Qualifies for (CTE)
Prerequisite:	Directly related to CCRP & previously or
	currently taking CTE class associated
	with internship
Description:	CTE Internships provide on the job
	training opportunities that are directly
	related to a career goal and course of
	study identified through the College and
	Career Ready Plan (CCRP). Therefore, a
	student must have taken or currently be
	enrolled in a CTE class related to the
	internship opportunity. This Work-Based
	Learning experience is designed to bridge
	the gap between school and work.
	Appropriate supervision by a
	school/district coordinator must be
	maintained.



# Pre-K: Early Childhood Education

# Workforce Trends:

According to the Utah Department of Workforce Services, the annual growth rate for childcare workers is projected to increase 4% through the year 2026. Large concentrations of this occupation are found in the following industries: private households, social services, and educational services both public and private.

Elementary, middle, and secondary school teachers are in high demand across the state of Utah. There are four ways to earn a teaching license in Utah: 1. Outof-state licensure, 2. University licensure program, 3. ARL-alternative route to licensure program, and 4. The APT-academic pathway to teaching. In Utah, an elementary, middle, and secondary school teacher must be licensed.

# FCCLA – Student Organization:

FCCLA is the CTSO for students in the Pre-K: Early Childhood Education Career Pathway. FCCLA provides students with opportunities to attain the knowledge, skills, and leadership characteristics necessary to succeed in life and careers. Provo High School and Timpview High School, both have a FCCLA chapter.

# Sample Occupations:

- Teacher Assistant
- Education Administrator, Preschool
- Preschool Teacher Assistant
- CTE Teacher
- Elementary Education Teacher
- Special Education Teacher
- Social Worker

- <u>Care Courses School</u>
- Brigham Young University
- <u>University of Utah</u>
- <u>Utah Valley University</u>
- Utah State University
- Weber State University



Career Pathways: Pre-K: Early Childhood Education								
EXPLORER COURSES	CREDITS	PHS	THS	ESCH	MTECH	CE Credits	UVU Title	DE Credits
Early Childhood Education 1 (recommended)	0.5	√	1					
Child Development	0.5	√	1					
Food and Nutrition 1	1.0	V	1					
CONCENTRATOR COURSES								
Early Childhood Education 2	0.5	V	1					
COMPLETER COURSES								
Early Childhood Education 3	0.5	V	1					
CTE Internship	0.5	√	1					

#### EXPLORER COURSES

#### Early Childhood Education 1 (recommended)

Duration: Grades: Graduation: Prerequisite: Description:	Semester (0.5) 10-12 Qualifies for (CTE) Child Development This semester course introduces students to child-related careers and the Child Development Associate Credential (CDA). Instruction is given regarding developmentally appropriate practices (DAP) and curriculum and facility design for young children. Early Childhood Education lab training may be a part of the course. This course will strengthen comprehension of concepts and standards outlined in Science, Technology, Engineering and Math (STEM) education. Student leadership and competitive events (FCCLA) may be integrated into this course. Pravious completion of the Child
	1 1

#### **Child Development**

Duration:	Semester (0.5)
Grades:	9-12
Graduation:	Qualifies for (CTE)
Prerequisite:	None
Description:	Students will understand the aspects of
	child growth and development, positive
	guidance techniques, and child-related

issues. Learning activities, observation techniques, and lab experiences in working with young children may be included. This course will strengthen comprehension of concepts and standards outlined in Science, Technology, Engineering and Math (STEM) education. Family, Career and Community Leaders of America (FCCLA) supports student leadership and has competitive events that may be an integral part of the course.

#### Food and Nutrition 1

Duration: Grades: Graduation: Prerequisite: Description:	Semester (0.5) 9-12 Qualifies for (CTE) None This course is designed to focus on the science of food and nutrition. Experiences will include food safety and sanitation, culinary technology, food preparation and dietary analysis to develop a healthy life style with pathways to career readiness. Laboratory based experiences strengthen comprehension of concepts and standards outlined in Sciences, Technology, Engineering and Math (STEM) education. Student leadership and competitive events (FCCLA) may be integrated into this course.



#### **CONCENTRATOR COURSES**

#### **Early Childhood Education 2**

-	
Duration:	
Grades:	
Graduation:	
Prerequisite:	
Description:	,

Semester (0.5) 10-12 Oualifies for (CTE) Early Childhood Education 1 This semester course provides students an opportunity to work with children in a professional lab setting. Instruction given includes: applying developmentally appropriate practices (DAP) and teaching lessons to children, maintaining a healthy environment for children, and developing positive relationships with children. Students will continue preparing for the Child Development Associate Credential (CDA). This course will strengthen comprehension of concepts and standards outlined in Science, Technology, Engineering and Math (STEM) education. Student leadership and competitive events (FCCLA) may be integrated into this course. The Child Development and Early Childhood Education 1 courses are required prerequisites.

#### **COMPLETER COURSES**

#### **Early Childhood Education 3**

Grades:

Duration: Semester (0.5) 11-12 Graduation: Oualifies for (CTE) Prerequisite: Early Childhood Education 2 Description: This semester course provides students an opportunity to work with children in a professional lab setting. Students enrolled in this course will: teach young children, demonstrate positive employment skills, maintain a healthy environment for children, and develop positive relationships with children. Onsite lab experiences will be a major component of the course. Students will continue preparing for the Child Development Associate Credential (CDA). This course will strengthen comprehension of concepts and standards outlined in Science, Technology, Engineering and Math (STEM) education. Student leadership and competitive events (FCCLA) may be integrated into this course. Child Development, Early Childhood Education 1 and Early Childhood Education 2 courses are required prerequisites.

Duration: Grades: Graduation: Prerequisite:	Semester (0.5) 11-12 Qualifies for (CTE) Directly related to CCRP & previously or currently taking CTE class associated with internship
Description:	CTE Internships provide on the job training opportunities that are directly related to a career goal and course of study identified through the College and Career Ready Plan (CCRP). Therefore, a student must have taken or currently be enrolled in a CTE class related to the internship opportunity. This Work-Based Learning experience is designed to bridge the gap between school and work. Appropriate supervision by a school/district coordinator must be maintained.



# K-12:Teaching as a Profession

# Workforce Trends:

In Utah, individuals who would like to teach but don't have a Utah license can obtain one through the Alternative Route to Licensure (ARL). The ARL Program is a teacher preparation program for individuals who want to earn a Level 1 teaching license, or who are licensed and want to earn another type of teaching license.

# Educators Rising – Student Organization:

Educators Rising is the CTSO for students in the K-12: Teaching as a Profession. Educators Rising offers resources and opportunities that integrate directly into the academic programs for teacher education at the high school level. It is dedicated to ensuring that the future is full of high-quality educators. This is a new CTSO as of SY 2020-21.

# Sample Occupations:

- Elementary School Teacher
- Kindergarten Teacher
- Middle School Teacher
- Secondary School Teacher
- Special Education Teacher
- Adjunct Professor
- Researcher
- Daycare Coordinator
- Online Teacher
- Tutoring
- Company Trainer

- Brigham Young University
- <u>University of Utah</u>
- <u>Utah Valley University</u>
- <u>Utah State University</u>
- <u>Weber State University</u>



Career Pathways: K-12: Teaching as a Profession								
EXPLORER COURSES	CREDITS	PHS	THS	ESCH	MTECH	CE Credits	UVU Title	DE Credits
Teaching as a Profession (recommended)	0.5	~	~					
CE College Writing 1010	1.0	1	~			3.0	ENGL 1010	
CE College Algebra 1050	0.5	1	~			3.0	MAT 1050	
DE Human Development 1100	0.5	1	~				PSY 1100	3.0
CONCENTRATOR COURSES								
Teaching as a Profession 2	0.5	1						
COMPLETER COURSES	·		·	•	•			
CTE Internship	0.5	1	1					

#### **EXPLORER COURSES**

#### **Teaching as a Profession 1**

Duration: Grades: Graduation: Prerequisite: Description:	Semester (0.5) 9-12 Qualifies for (CTE) None A course designed to help students learn about the role and characteristics of an effective educator. Students will observe and participate with teachers and students in the classroom. Major topics include exploring current teaching methods and instructional strategies, assessments and when/how to use them, and how students learn and what instructional strategies can
	when/how to use them, and how students learn and what instructional strategies can be implemented to assist all learners.

#### **CE College Writing 1010**

Duration: Grades:	Year (1.0) 12
Graduation:	Qualifies for (E, LA)
Prerequisite:	Eligibility Requirements and Admittance to UVU
Description:	This is a concurrent enrollment course through UVU's English Department that will provide high school senior English credit. The class focuses on developing critical thinking, reading, and writing skills useful for other college courses. Texts for analysis will include literature and media.
	Upon successful completion of the course, students will receive three (3) transferable college credits. The following eligibility requirements must be met prior to enrollment in the course: ACT English and Reading scores of 19+, or UVU qualifying exams; must be a senior; B average in completed English courses; registration to

UVU. Register for English 12 until prerequisites are met.

#### CE College Algebra 1050

Duration:	Fall & Spring
Graduation Credit:	1 0
Collegiate Credit:	3.0
Grades:	9-12
Graduation:	Qualifies for (M, ME, CTE)
Prerequisite:	Minimum 3.0 GPA, Completion of
	high school SM 1,2, and 3 with C
	average or better, and ACT Math score
	of 23 or higher or qualifying
	Accuplacer score, which can be taken
	at the UVU Testing Services Center.
Description:	This course meets the basic math
	requirement for an Associate or
	Bachelor of Arts Degree. It studies
	inequalities, functions and their graphs,
	polynomial and rational functions,
	exponential and logarithmic functions,
	conic sections, systems of linear and
	nonlinear equations, matrices and
	determinants, arithmetic and geometric
	sequences, and the Binomial Theorem.

#### **DE Human Development 1100**

UVU Course Title:	PSY 1100
Duration:	Fall
Graduation Credit:	0.5
Collegiate Credit:	3.0
Grades:	11-12
Graduation:	Required (SS, CTE)
Prerequisite:	Minimum 3.0 GPA
Description:	This class covers the development of
	the human from the first stages of life
	in the womb through old age. It
	discusses the norms and abnormalities



of human development from a biological and social point of view. This course fulfills the required Behavioral Science for Nursing and other medical fields.

## **CONCENTRATOR COURSES**

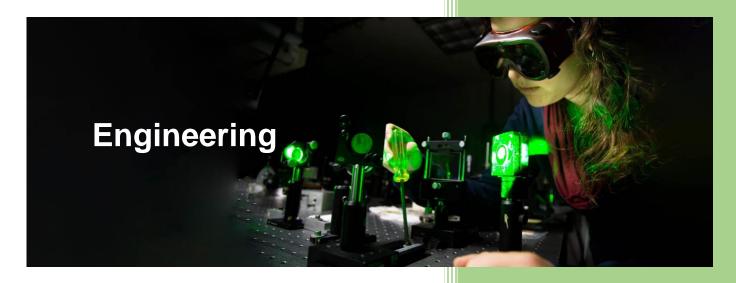
# Teaching as a Profession 2

Duration: Grades:	Semester (0.5) 9-12
Graduation:	Qualifies for (CTE)
Prerequisite:	Teaching as a Profession 1
Description:	This course is designed for students to
	learn, observe, and experience how an
	educator uses instructional strategies to
	successfully manage a classroom. Students
	will learn the importance of teaching as a
	profession. Students will learn to apply
	instructional strategies and create learner
	appropriate activities that inspire each
	student to enjoy learning.

#### **COMPLETER COURSES**

Duration:	Semester (0.5)
Grades:	11-12
Graduation:	Qualifies for (CTE)
Prerequisite:	Directly related to CCRP & previously or
	currently taking CTE class associated
	with internship
Description:	CTE Internships provide on the job
	training opportunities that are directly
	related to a career goal and course of
	study identified through the College and
	Career Ready Plan (CCRP). Therefore, a
	student must have taken or currently be
	enrolled in a CTE class related to the
	internship opportunity. This Work-Based
	Learning experience is designed to bridge
	the gap between school and work.
	Appropriate supervision by a
	school/district coordinator must be
	maintained.





# Workforce Trends:

Employment of engineers will be limited by computer-aided design and other technologies that increase productivity. Job opportunities will be best for those individuals who have an associate degree or extensive job training.

# TSA – Student Organization:

TSA is the CTSO for students in the Engineering Career Pathway. TSA fosters personal growth, leadership, and opportunities in science, technology, engineering, and mathematics (STEM). Provo High School and Timpview High School, both have chapters of TSA.

# Sample Occupations:

- Machine Operator
- Production Technician
- Electro-Mechanical Technicians
- Electronics Equipment Assembler
- Automation Engineer
- CTE Teacher
- Electrical Engineer
- Electronics Drafter
- Electronics Engineer
- Engineer
- Industrial Engineer
- Manufacturing Engineer
- Robotics Engineer

- <u>MTECH</u>
- Brigham Young University
- <u>University of Utah</u>
- <u>Utah Valley University</u>
- <u>Utah State University</u>
- <u>Weber State University</u>



Career Pathways: Engineering								
EXPLORER COURSES	CREDITS	PHS	THS	ESCH	MTECH	CE Credits	UVU Title	DE Credits
Electronics 1 (recommended) or CE Electronics 1130	0.5	1	1			3.0	EART 1130	
Engineering Principles 1 (recommended)	0.5		1					
Robotics 1 (recommended)	0.5	√	1					
CAD Architectural Design 1 or CE CAD Architectural Design 1 or CE CAD Architectural Design 1090	0.5	V	4			3.0	EGDT 1090	
CAD Mechanical Design 1 or CE CAD Mechanical Design 1040	0.5	1	1			3.0	EGDT 1040	
WeldingTechnician, Entry Level	0.5	~	1					
Woods 1	0.5	1	1					
CONCENTRATOR COURSES								
Electronics 2	0.5	1						
Engineering Principles 2 or CE Engineering Principles 1000	0.5		1			3.0	ENGR 1000	
Robotics 2	0.5	~	1					
COMPLETER COURSES								
CAPS (Engineering)	1.0	√	1					
CTE Internship	0.5	√	1					

## **EXPLORER COURSES**

#### Electronics 1 (recommended) or CE Electronics 1130

Duration:	Sem
Grades:	10-1
Graduation:	Qua
Prerequisite:	Non
Description:	The
-	pren

Semester (0.5) 10-12 Qualifies for (CTE) None The first in a sequence of courses that prepares individuals to apply technical knowledge and skills to assemble and operate electrical/electronic equipment used in business, industry, and manufacturing. Instruction includes training in safety, electrical theory, parallel & series circuits, Kirchoff's Laws, schematic diagrams, electrical components, and soldering.

#### **Engineering Principles 1 (recommended)**

Duration: Grades: Graduation: Prerequisite: Description:	Semester (0.5) 10-12 Qualifies for (SE, CTE) None The first in a sequence of "hands on" courses that tie 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.
	opportunities.



#### **Robotics 1 (recommended)**

Duration: Grades: Graduation: Prerequisite: Description: Semester (0.5) 10-12 Qualifies for (SE, CTE) None The first in a sequence of the first in a sequence o

The first in a sequence of courses that prepares individuals with a lab-based, hands-on curriculum combining electrical, mechanical and engineering principles. Students will learn to design, build, program, and control robotic devices. 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 engineer documentation.

#### CAD Architectural Design 1 or CE CAD Architectural Design 1090

	· · · · · · · · · · · · · · · · · · ·
Duration:	Semester (0.5)
Grades:	10-12
Graduation:	Qualifies for (CTE)
Prerequisite:	None
Description:	The first in a sequence of courses that
	prepare individuals for careers in the
	Architecture, Engineering, and
	Construction (AEC) industry. This course
	includes instruction in 2D or 3D
	Computer-Aided Design (CAD) software
	to draw a small residential home with an

emphasis on blueprint reading.

#### CAD Mechanical Design 1 or CE CAD Mechanical Design 1040

Duration:	Semester (0.5)
Grades:	10-12
Graduation:	Qualifies for (CTE)
Prerequisite:	None
Description:	The first in a sequence of courses that
	prepares individuals to develop technical
	knowledge and skills required to plan and
	prepare scale pictorial interpretations and
	technical documentation of engineering

knowledge and skills required to plan and prepare scale pictorial interpretations and technical documentation of engineering and design concepts. This includes instruction in the use of 2D Computer-Aided Design (CAD) software, sketching, drawing layout, geometric construction, orthographic projection, and dimensioning.

#### Welding Technician – Entry Level Duration: Year (1.0)

Duration:
Grades:
Graduation:
Prerequisite:
Description:

10-12 Qualifies for (CTE) None 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. In this course, students will learn and practice knowledge, attitude, skills, and habits required for performing tasks autonomously, including the selection and use of appropriate techniques and equipment with minimum supervision.

# Woods 1

Duration: Grades: Graduation: Prerequisite: Description: Semester (0.5) 10-12 Qualifies for (CTE) None This is the first ins

This is the first instructional course in a sequence that prepares individuals to apply technical knowledge and skills to lay out and shape stock; assemble projects; saw and sand projects; and stresses the safe use of a variety of hand and power tools and machinery. Recommended projects would be anything that would allow students to incorporate all joints and tools, e.g. a nightstand.



#### **CONCENTRATOR COURSES**

#### **Electronics 2**

Duration:
Grades:
Graduation:
Prerequisite:
Description:

Semester (0.5) 10-12 Qualifies for (CTE) Electronics 1 The second in a sequence of courses that prepares individuals to apply technical knowledge and skills to assemble and operate electrical/electronic equipment used in business, industry, and manufacturing. Instruction includes training in safety, numbering systems, Boolean algebra, logic diagrams, digital

devices, and combinational logic circuits.

# Engineering Principles 2 or

## **CE Engineering Principles 1000**

Duration:	Semester (0.5)
Duration.	Semester (0.5)
Grades:	10-12
Graduation:	Qualifies for (SE, CTE)
Prerequisite:	Engineering Principles 1
Description:	The second in a sequence of "hands on"
	courses that tie 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

opportunities.

skills in a laboratory environment, students will develop skills and attitudes that impact and expand occupational

#### **Robotics 2**

Semester (0.5)

Duration:
Grades:
Graduation:
Prerequisite:
Description:

10-12 Qualifies for (SE, CTE) Robotics 1 The second in a sequence of courses that prepares individuals with a lab-based, hands-on curriculum combining electrical, mechanical and engineering principles. Students will learn to design, build, program, and control robotic devices. 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.

#### **COMPLETER COURSES**

#### \*Engineering Capstone

0	0	
Duration:	Year (1.0)	Duration:
Grades:	12	Grades:
Graduation:	Qualifies for (CTE)	Graduation:
Prerequisite:	CAD Mechanical Design 2, and	Prerequisite:
	Engineering Principles 2	
Description:	As members of an engineering team,	
	students apply science, technology, and	Description:
	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.	

# CTE Internship Duration: Semester (0.5)

uration.	Bennester (0.5)
rades:	11-12
raduation:	Qualifies for (CTE)
rerequisite:	Directly related to CCRP & previously or
	currently taking CTE class associated
	with internship
Description:	CTE Internships provide on the job
-	training opportunities that are directly
	related to a career goal and course of
	study identified through the College and
	Career Ready Plan (CCRP). Therefore, a
	student must have taken or currently be
	enrolled in a CTE class related to the
	internship opportunity. This Work-Based
	Learning experience is designed to bridge
	the gap between school and work.
	Appropriate supervision by a
	school/district coordinator must be
	maintained.



# Mechanical Design (CAD

# Workforce Trends:

Industrial growth and increasingly complex designs will spur growth in drafting services. As technology advances, opportunities will be best for drafters with at least two years of postsecondary training, and computer-aided design systems experience.

According to the Utah Department of Workforce Services, 620 mechanical drafters are employed by more than 3,000 businesses throughout the state. The annual median salary for an experienced mechanical drafter is \$51,690.

# TSA – Student Organization:

TSA is the CTSO for students in the Mechanical Design (CAD) Career Pathway. TSA fosters personal growth, leadership, and opportunities in science, technology, engineering, and mathematics (STEM). Provo High School and Timpview High School, both have chapters of TSA.

# Sample Occupations:

- Engineering Technician
- Mechanical Drafter
- Mechanical Engineering Technician
- Aerospace Engineer
- CTE Teacher
- Civil Engineer
- Industrial Designer
- Mechanical Engineer
- Secondary Education Teacher

- Davis Technical College
- Brigham Young University
- University of Utah
- <u>Utah Valley University</u>
- Utah State University
- <u>Weber State University</u>



Caree	r Pathwa	ys: Mech	anical D	esign (C	AD)			
EXPLORER COURSES	CREDITS	PHS	THS	ESCH	MTECH	CE Credits	UVU Title	DE Credits
CAD Mechanical Design 1 or CE CAD Mechanical Design 1040	0.5	4	1			3.0	EGDT 1040	
WeldingTechnician, Entry Level	0.5	√	1					
Woods 1	0.5	√	1					
CONCENTRATOR COURSES								
CAD Mechanical Design 2 or CE CAD Mechanical Design 1070	0.5	1	1			3.0	ENGR 1000	
COMPLETER COURSES								
CAD Mechanical Design 3 or CE CAD Mechanical Design 1071	0.5	1				3.0	EGDT 1071	
CAPS (Engineering)	1.0	1	1					
CTE Internship	0.5	1	1					

#### EXPLORER COURSES

# CAD Mechanical Design 1 (Recommended) or CE CAD Mechanical Design 1040

Duration: Grades: Graduation: Prerequisite: Description: Semester (0.5) 10-12 Qualifies for (CTE) None

The first in a sequence of courses that prepares individuals to develop technical knowledge and skills required to plan and prepare scale pictorial interpretations and technical documentation of engineering and design concepts. This includes instruction in the use of 2D Computer-Aided Design (CAD) software, sketching, drawing layout, geometric construction, orthographic projection, and dimensioning.

#### Welding Technician, Entry Level Duration: Year (1.0)

Duration:
Grades:
Graduation:
Prerequisite:
Description:

10-12 Qualifies for (CTE) None 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. In this course, students will learn and practice knowledge, attitude, skills, and habits required for performing tasks autonomously, including the selection and use of appropriate techniques and equipment with minimum supervision.

Semester (0.5)

**Oualifies for (CTE)** 

10-12

#### Woods 1

Duration:
Grades:
Graduation:
Prerequisite:
Description:

None This is the first instructional course in a sequence that prepares individuals to apply technical knowledge and skills to lay out and shape stock; assemble projects; saw and sand projects; and stresses the safe use of a variety of hand and power tools and machinery. Recommended projects would be anything that would allow students to incorporate all joints and tools, e.g. a nightstand.



#### **CONCENTRATOR COURSES**

## CAD Mechanical Design 2 or CE CAD Mechanical Design 1070

Duration: Grades: Graduation: Prerequisite: Description: Semester (0.5) 10-12 Qualifies for (CTE) CAD Mechanical Design 1 The second in a sequence of courses that prepares individuals with an emphasis in developing technical knowledge and skills to develop 3D models in support of mechanical and industrial engineers, and related professionals. This includes instruction in the use of 3D Computer-Aided Design (CAD) software, model creation, and technical communication.

#### **COMPLETER COURSES**

#### CAD Mechanical Design 3 or CE CAD Mechanical Design 1071

Duration:	Semester (0.5)
Grades:	11-12
Graduation:	Qualifies for (CTE)
Prerequisite:	CAD Mechanical Design 2
Description:	The third in a sequence of courses that
	prepares individuals with an emphasis in
	developing technical knowledge and skills
	to develop working drawings in support
	of mechanical and industrial engineers,
	and related professionals. This includes
	instruction in the use of 3D Computer-
	Aided Design (CAD) software, threads &
	fasteners, welding symbols, geometric
	dimensioning & tolerancing and
	assemblies.

	· · · · · · · · · · · · · · · · · · ·
Duration:	Semester (0.5)
Grades:	11-12
Graduation:	Qualifies for (CTE)
Prerequisite:	Directly related to CCRP & previously or currently taking CTE class associated with internship
Description:	CTE Internships provide on the job
	training opportunities that are directly
	related to a career goal and course of
	study identified through the College and
	Career Ready Plan (CCRP). Therefore, a
	student must have taken or currently be
	enrolled in a CTE class related to the
	internship opportunity. This Work-Based
	Learning experience is designed to bridge
	the gap between school and work.
	Appropriate supervision by a
	school/district coordinator must be
	maintained.



# Health Science



# Workforce Trends:

According to the Utah Department of Workforce Services, healthcare occupations are expected to make up seven of the 20 fastest growing occupations by the year 2030. Utah is known for its medical innovations, such as the Kolff artificial heart and genetic research. The Utah Population Database (UPDB) is one of the world's richest sources of in-depth information supporting research on genetics, epidemiology, demography, and public health. (Governor's Office of Economic Development [GOED])

# HOSA – Student Organization:

HOSA is the CTSO for students in the Health Science Career Pathway. HOSA enhances the delivery of compassionate, quality health care by providing opportunities for knowledge, skill and leadership development of all health science education students.

# Sample Occupations:

- Clinical Lab Technician
- Certified Nurse Assistant
- Emergency Medical Technician
- Medical Assistant
- Clinical Lab Technologist
- Dental Hygienist
- Occupational Therapy Assistant
- Registered Nurse (RN)
- Athletic Trainer
- Forensic Science Technician
- Microbiologist

- <u>MTECH</u>
- Brigham Young University
- University of Utah
- Utah Valley University
- Utah State University
- Weber State University



C	Career Pa	thways:	Health S	Science				
EXPLORER COURSES	CREDITS	PHS	THS	ESCH	MTECH	CE Credits	UVU Title	DE Credits
Medical Anatomy and Physiology	0.5	~	1					
Medical Terminology or CE Medical Terminology 1300	0.5	1	1			2.0	HLTH 1300	
CONCENTRATOR COURSES								
Biotechnology or CE Biotechnology 1010	0.5	√				3.0	BTEC 1010	
Dental Assistant	0.5				1			
Emergency Medical Response or CE Emergency Medical Response 1200	0.5	1				2.0	HLTH 1200	
Exercise Science/Sports Medicine or CE Exercise Science/Sports Medicine 2400	0.5	4	1			2.0	PES 2400	
Medical Assistant	0.5		1	1	1			
Nurse Assistant (CNA)	0.5				1			
Pharmacy Technician	0.5			1	1			
COMPLETER COURSES								
CAPS (Health Science Adv.)	1.0	√	~					
CTE Internship	0.5	~	~					

Note: PCSD Pathway Completer Criteria: total earned credits of 3.0 or more, including a required concentrator course. \*Currently not an approved PCSD course, yet suggested for future consideration by the PCSD School Board.

#### **EXPLORER COURSES**

#### Medical Anatomy & Physiology

Duration:
Grades:
Graduation:
Prerequisite:
Description:

Year (1.0) 10-12 Qualifies for (SE, H, CTE) None This full-year course provides students with an in-depth study of healthcare careers including actual clinical experience in a variety of areas. Instruction includes intermediate anatomy & physiology, medical terminology, diseases and disorders, medical ethics and first aid. The class is designed to prepare students for the Advanced Health Science course and/or for a variety of health technology programs.

#### Medical Terminology or CE Medical Terminology 1300

Duration:	Semester (0.5)
Grades:	11-12
Graduation:	Qualifies for (CTE)
Prerequisite:	Secondary Math 2 PLUS a health science
	course
Description:	An instructional program that prepares
	students with skills to compute
	mathematical equations related to
	healthcare. The course integrates medical-
	physiological concepts and mathematics.
	Students will engage in math activities
	including problem solving, reasoning and
	proof, communication, connections, and
	representations.



#### **CONCENTRATOR COURSES**

#### Biotechnology or CE Biotechnology 1010

Duration:Year (1.0)Grades:11-12Graduation:Qualifies for (SE, CTE)Prerequisite:Biology or ChemistryDescription:Biotechnology is an exploratory course<br/>designed to introduce students to methods<br/>and technologies that support bioscience<br/>research and practice. Students are also<br/>introduced to career possibilities in the<br/>field of biotechnology.

## Emergency Medical Response or

#### **CE Emergency Medical Response 1200**

Duration:	Semeste
Grades:	11-12
Graduation:	Qualifie
Prerequisite:	

Description:

Semester (0.5) 11-12 Qualifies for (CTE)

Emergency medical Responder is a dynamic 56-hour course featuring lecture, video, simulated emergency situations, discussion and hands-on skill practice based on the national EMS curriculum requirements and educational standards. While (EMR) does not provide state licensure or certification as an EMR, this course is ideal to receive training similar to the training EMS professionals receive as they look to enter careers in healthcare, public safety, or law enforcement.

#### Exercise Science/Sports Medicine or CE Exercise Science/Sports Medicine 2400

Duration:	Year (1.0)
Grades:	11-12
Graduation:	Qualifies for (CTE)
Prerequisite:	Medical Anatomy and Physiology
Description:	This full-year course is designed to teach
	students components of exercise
	science/sports medicine; including
	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.

#### **Medical Assistant**

Duration:	Year (1.0)
Grades:	12
Graduation:	Qualifies for (SE, H, CTE)
Prerequisite:	Medical Anatomy and Physiology
Description:	An instructional program that prepares
Description.	individuals to support physicians by providing assistance during patient examinations, treatment administration and monitoring; by keeping patient and related health record information; and by performing clinical, administrative, and laboratory duties.

#### **COMPLETER COURSES**

Duration:	Semester (0.5)
Grades:	11-12
Graduation:	Qualifies for (CTE)
Prerequisite:	Directly related to CCRP & previously or currently taking CTE class associated with internship
Description:	CTE Internships provide on the job
	training opportunities that are directly related to a career goal and course of study identified through the College and Career Ready Plan (CCRP). Therefore, a student must have taken or currently be enrolled in a CTE class related to the internship opportunity. This Work-Based Learning experience is designed to bridge the gap between school and work. Appropriate supervision by a school/district coordinator must be
	maintained.



## **Culinary Arts**

#### Workforce Trends:

In Utah, job openings for chefs and head cooks are projected to increase 3.1% through the year 2026; however, competition should be fierce for jobs in the top kitchens of higher-end restaurants. According to the National Restaurant Association, in Utah restaurant and food service jobs represent 10% of employment in the state. Through the year 2026, growth is projected at 13.3%. In 2018, sales in Utah restaurants totaled \$5.5 billion. Restaurant jobs represent 9% of employment in Utah.

#### FCCLA – Student Organization:

FCCLA is the CTSO for students in the Culinary Arts Career Pathway. FCCLA provides students with opportunities to attain the knowledge, skills, and leadership characteristics necessary to succeed in life and careers.

#### Sample Occupations:

- Baker/Pastry Chef
- Sous Chef
- Restaurant Manager
- CTE Teacher
- Culinary Arts Instructor
- Executive Chef

#### Collegiate & Technical Programs:

- <u>Park City Culinary Institute</u>
- Brigham Young University Idaho
- <u>University of Utah</u>
- <u>Utah Valley University</u>

Career Pathways: Culinary Arts								
EXPLORER COURSES	CREDITS	PHS	THS	ESCH	МТЕСН	CE Credits	UVU Title	DE Credits
*Culinary Arts (recommended) or CE Culinary Arts 1110	1.0					3.0	HM 1110	
ProStart 1 (recommended) or CE ProStart 1110	1.0	~	~			3.0	HM 1110	
Food and Nutrition 1	0.5	1	√					
CONCENTRATOR COURSES								
*Culinary Arts 2 or CE Culinary Arts 1180	1.0					3.0	HM 1180	
ProStart 2	1.0	1	√					
COMPLETER COURSES								
CTE Internship	0.5	√	1					

Note: PCSD Pathway Completer Criteria: total earned credits of 3.0 or more, including a required concentrator course. \*Currently not an approved PCSD course, yet suggested for future consideration by the PCSD School Board.

#### EXPLORER COURSES

#### \*Culinary Arts 1 (recommended) or CE Culinary Arts 1110

Year (1.0)

Duration: Grades: Graduation: Prerequisite: Description:

11-12 Required (CTE) Food and Nutrition 1 & 2 Students will be trained for career opportunities in the food service/culinary arts industry. Students will have the opportunity to learn and practice safety and sanitation procedures, and to 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. This course will strengthen comprehension of concepts and standards outlined in Sciences, Technology, Engineering and math (STEM) education. Student leadership and competitive events (FCCLA) may be integrated into this course.

## ProStart 1 (recommended) or

#### CE ProStart 1110

Duration:	Year (1.0)
Grades:	11-12
Graduation:	Required (CTE)
Prerequisite:	Food and Nutrition 1 & 2; ProStart 2 can
-	be taken before ProStart 1

Description:

The ProStart 1 is a program of the National Restaurant Association Educational Foundation that introduces students to career opportunities in the restaurant and foodservice industry and provides them with foundational skills in culinary arts and restaurant management that will jump-start their post-secondary experience, in college and/or careers. In Utah, FCCLA may complement this course.

#### Food and Nutrition 1



#### **CONCENTRATOR COURSES**

#### \*Culinary Arts 2 or CE Culinary Arts 1180

Year (1.0) 11-12 Qualifies (CTE) Food and Nutrition 1 & 2 Students will receive additional training for career opportunities in Culinary Arts and the Hospitality Industry. Students will have the opportunity to learn and practice safety and sanitation procedures, and maintain food service equipment. Students will perform quantity food preparation as it relates to catering, bakery, restaurant, hospitality, and quick service business operations. Greater emphasis will be placed on employment skills, management operations, and business and marketing practices. This course will strengthen comprehension of concepts and standards outlined in Sciences, Technology, Engineering and Math (STEM) education. Student leadership and competitive events (FCCLA) may be integrated into this course.

ProStart 2	
Duration:	Year (1.0)
Grades:	11-12
Graduation:	Qualifies (CTE)
Prerequisite:	Food and Nutrition 1 & 2, and ProStart 1
	are recommended. ProStart 2 can be taken
	before ProStart 1.
Description:	ProStart 2 is a companion to ProStart 1
	from the National Restaurant Association
	Educational Foundation. The ProStart is a
	program of the National Restaurant
	Association Educational Foundation that
	introduces students to career opportunities
	in the restaurant and foodservice industry
	and provides them with foundational
	skills in culinary arts and restaurant
	management that will jump-start their
	post-secondary experience, in college
	and/or careers.

#### **COMPLETER COURSES**

#### \*Baking and Pastry (State ready by SY 2021-22)

Duration:	TBD
Grades:	TBD
Graduation:	Qualifies for (CTE)
Prerequisite:	TBD
Description:	TBD

Duration: Grades: Graduation: Prerequisite:	Semester (0.5) 11-12 Qualifies for (CTE) Directly related to CCRP & previously or currently taking CTE class associated with internship
Description:	CTE Internships provide on the job training opportunities that are directly related to a career goal and course of study identified through the College and Career Ready Plan (CCRP). Therefore, a student must have taken or currently be enrolled in a CTE class related to the internship opportunity. This Work-Based Learning experience is designed to bridge the gap between school and work. Appropriate supervision by a school/district coordinator must be maintained.





## Workforce Trends:

According to the U.S. Department of Labor, travel and tourism is one of the largest and fastest growing industries in the world. Annual sales exceed a half-trillion dollars. According to the Utah Department of Workforce Services. 567 individuals are employed as travel agents throughout Utah, with 263 travel arrangement and reservation services businesses.

## FBLA – Student Organization:

FBLA is the CTSO for students in the Hospitality and Tourism Career Pathway. FBLA provides students with opportunities for leadership, community involvement, and career development. Provo High School and Timpview High School, both have chapters of FBLA.

## Sample Occupations:

- CTE Teacher
- Marketing Manager
- Meeting, Convention, and Event Planner
- Tour Agent
- Tour Guide
- Sales Manager

## Collegiate & Technical Programs:

- University of Utah
- Brigham Young University
- Brigham Young University
- University of Utah
- <u>Utah Valley University</u>
- Utah State University
- Weber State University

Career Pathways: Hospitality and Tourism								
EXPLORER COURSES	CREDITS	PHS	THS	ESCH	MTECH	CE Credits	UVU Title	DE Credits
*Culinary Arts (recommended) or CE Culinary Arts 1110	1.0					3.0	HM 1110	
Marketing 1 (recommended)	0.5	1	1					
Accounting 1	1.0	1	1					
Business Law	0.5	1						
Digital Graphics Arts, Intro	0.5	1	1					
Economics or CE Economics 1010	0.5	1	1			3.0	ECON 1010	
Web Development 1 or CE Web Development 1 2420	0.5	1	~			3.0	INFO 2420	
CONCENTRATOR COURSES								
*Event Planning and Management	0.5							
COMPLETER COURSES	·							
CAPS (Business & Marketing)	1.0	1	1					
CTE Internship	0.5	√	1					

Note: PCSD Pathway Completer Criteria: total earned credits of 3.0 or more, including a required concentrator course. \*Currently not an approved PCSD course, yet suggested for future consideration by the PCSD School Board.

#### **EXPLORER COURSES**

### \*Culinary Arts 1 (recommended) or CE Culinary Arts 1110

Duration:	Year (1.0)
Grades:	11-12
Graduation:	Qualifies for (CTE)
Prerequisite:	Food and Nutrition 1 & 2
Description:	Students will be trained for career
	opportunities in the food service/culinary
	arts industry. Students will have the
	opportunity to learn and practice safety
	and sanitation procedures, and to 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. This course will
	strengthen comprehension of concepts
	and standards outlined in Sciences,
	Technology, Engineering and math
	(STEM) education. Student leadership
	and competitive events (FCCLA) may be
	integrated into this course.

### Marketing 1 (recommended)

•	
Duration:	Semester (0.5)
Grades:	10-12
Graduation:	Qualifies for (CTE)
Prerequisite:	None
Description:	Marketing 1 explores the seven core
	functions of marketing which include:
	marketing Planning – why target market
	and industry affects businesses;
	Marketing-Information Management –
	why market research is important; Pricing
	- how prices maximize profit and affect
	the perceived value; product/Service
	Management – why products live and die;
	promotion – how to inform customers
	about products; Channel management -
	how products reach the final user; and
	Selling – how to convince a customer that
	a product is the best choice. Students will
	utilize knowledge in hands-ln projects
	which may include: Conducting research,
	creating a promotional plan, pitching a
	sales presentation, and introducing an idea
	for a new product/service.
	-



#### **Accounting 1**

Duration: Grades: Graduation: Prerequisite: Description: Semester (0.5) 10-12 Qualifies for (ME, CTE) None Students will develop skills beginning with and understanding of the basic elements and concepts of double-entry accounting systems related to service businesses organized as a sole proprietorship. Skills include understanding the accounting equation, analyzing business transactions, entering transactions in journals, posting to ledgers, compiling end-of-period financial statements, preparing closing entries, and managing cash.

#### **Business Law**

Duration:
Grades:
Graduation:
Prerequisite:
Description:

Semester (0.5) or Year (1.0) 10-12 Qualifies for (CTE) None Students will gain an unders

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. The course will include an understanding of the court system at the local, state, and national level. 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.

#### **Digital Graphic Arts, Intro**

•	
Duration:	Semester $(0.5)$ or Year $(1.0)$
Grades:	9-12
Graduation:	Qualifies for (CTE)
Prerequisite:	None
Description:	This course is designed to provide
	students with the basic knowledge and
	skills related to the graphic design
	industry. It is intended to serve as a
	starting point for several pathways
	including Digital media, Graphics and
	Printing, 3D Animation and Game
	Development. This includes instruction
	and hands-on assignments in the
	following areas: creative design & layout,
	typography, color, related software, and
	computer and professional skills.

#### Economics or

#### **CE Economics 1010**

needs with scarce resources.	Duration: Grades: Graduation: Prerequisite: Description:	Characteristics of the market economy of the United States and its function in the world will be explored. Students will learn methods of applying economics to
------------------------------	----------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------

#### Web Development 1 or CE Web Development 2420

	-
Duration:	Year (1.0)
Grades:	9-12
Graduation:	Qualifies for (DS, CTE)
Prerequisite:	None
Prerequisite: Description:	None Web Development is a course designed to guide students in a project-based environment, in the development of up-to- date concepts and skills that are used in the development of today's websites. Students will learn the fundamentals of how the Internet works. They will learn and use the basic building blocks of the World Wide Web; HTML5 coding, Cascading Style Sheets (CSS), and JavaScript. They will follow the steps to create a website by planning, designing, developing, deploying, and maintaining of website projects. Students will learn and use different scripting technologies to create more dynamic and interactive websites. They will learn what it takes for a career in Web Development as they complete projects and create their own
	web site.



#### **CONCENTRATOR COURSES**

#### \*Event Planning and Management

Duration:	Semester (0.5)
Grades:	10-12
Graduation:	Qualifies for (CTE)
Prerequisite:	None
Description:	The Event Planning and Management
	course is designed for students interested
	in learning about this multi-billion-dollar
	industry. Students are introduced to many
	facets of event planning including: site
	selection, budgeting, promotion, and
	catering. Students will organize, plan, and
	evaluate various meetings and events.
	Examples include, but not limited to,
	conferences, sporting events, weddings,

and workshops.

#### **COMPLETER COURSES**

### \*Business and Marketing Capstone

Duration:	Semester (0.5)
Grades:	11-12
Graduation:	Qualifies for (CTE)
Prerequisite:	None
Description:	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. The Business and
	Marketing Capstone encourages students
	to think analytically, logically and
	creatively to integrate experience and
	knowledge in real world situations.
	Membership and participation in DECA

and FBLA is highly encouraged.

Duration:	Semester (0.5)
Grades:	11-12
Graduation:	Qualifies for (CTE)
Prerequisite:	Directly related to CCRP & previously or currently taking CTE class associated with internship
Description:	CTE Internships provide on the job
	training opportunities that are directly related to a career goal and course of study identified through the College and Career Ready Plan (CCRP). Therefore, a student must have taken or currently be enrolled in a CTE class related to the internship opportunity. This Work-Based Learning experience is designed to bridge the gap between school and work. Appropriate supervision by a school/district coordinator must be maintained.
	mamameu.





## Workforce Trends:

According to the Utah Department of Workforce Services, there are 1,097 personal care services businesses throughout Utah employing 88.1% of individuals practicing in this profession.

In Utah, an electrologist and a nail technician (manicurist and pedicurist) must be licensed.

## SkillsUSA – Student Organization:

**Services** 

SkillsUSA is the CTSO for students in the Personal Care Services Career Pathway. SkillsUSA provides quality education experiences for students in leadership, teamwork, citizenship, and character development. Provo High School and Timpview High School, both have chapters of SkillsUSA.

### Sample Occupations:

- Manicurists and Pedicurists •
- Skincare Specialist (Esthetician) •
- Entrepreneur

## Collegiate & Technical Programs:

- MTECH
- Davis Technical College
- Skin Science Institute of Laser and Esthetics in Orem
- Mandalyn Academy
- Aveda Institute of Provo



Career Pathways: Personal Care Services								
EXPLORER COURSES	CREDITS	PHS	THS	ESCH	MTECH	CE Credits	UVU Title	DE Credits
Accounting 1	0.5	~	1					
Business Management or CE Business Management 1010	0.5	~	1			3.0	MGMT 1010	
CONCENTRATOR COURSES								
Cosmetology					1			
Basic Esthetician and Skin Care					1			
Nail Technician/Specialist Manicurist					1			
COMPLETER COURSES				•				
CTE Internship	0.5	√	1					

Note: PCSD Pathway Completer Criteria: total earned credits of 3.0 or more, including a required concentrator course. \*Currently not an approved PCSD course, yet suggested for future consideration by the PCSD School Board.

#### **EXPLORER COURSES**

#### **Accounting 1**

Duration: Grades: Graduation: Prerequisite: Description: Semester (0.5) 10-12 Qualifies for (ME, CTE) None Students will develop skills beginning with and understanding of the basic elements and concepts of double-entry accounting systems related to service businesses organized as a sole proprietorship. Skills include understanding the accounting equation, analyzing business transactions, entering transactions in journals, posting to ledgers, compiling end-of-period financial statements, preparing closing entries, and managing cash.

#### **Business Management**

	•
Duration:	Semester (0.5)
Grades:	10-12
Graduation:	Qualifies for (CTE)
Prerequisite:	None
Description:	This Business Management course seeks
-	to develop sound management concepts
	within students, as management plays a
	role in any future employment
	opportunity. Students are able to analyze,
	synthesize, and evaluate data from the
	other functional areas of business (e.g.,
	marketing, finance, and
	production/operation). Effective
	management requires decision-making
	abilities, long-range planning knowledge,
	human relations expertise, and
	motivational skills. Students learn the four
	basic functions of management: planning,
	organizing, directing, and controlling.

#### **CONCENTRATOR COURSES**

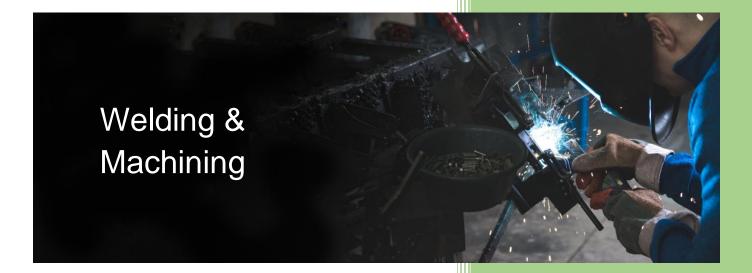
The courses are available at MTECH.



#### **COMPLETER COURSES**

Duration:	Semester (0.5)
Grades:	11-12
Graduation:	Qualifies for (CTE)
Prerequisite:	Directly related to CCRP & previously or currently taking CTE class associated with internship
Description:	CTE Internships provide on the job
Description.	training opportunities that are directly related to a career goal and course of study identified through the College and Career Ready Plan (CCRP). Therefore, a student must have taken or currently be enrolled in a CTE class related to the internship opportunity. This Work-Based Learning experience is designed to bridge the gap between school and work. Appropriate supervision by a
	school/district coordinator must be maintained.





## Workforce Trends:

In Utah, the occupation projection for welders, cutters, solderers, and brazers is 290 annual openings. Job prospects should be excellent for skilled candidates. From construction sites to automotive body shops, from farms to manufacturing plants, welders are found in numerous industries throughout Utah. According to the Utah Department of Workforce Services, the median hourly wage for welders, cutters, solderers and brazers is \$18.64.

## SkillsUSA – Student Organization:

SkillsUSA is the CTSO for students in the Welding and Machining Career Pathway. SkillsUSA provides quality education experiences for students in leadership, teamwork, citizenship, and character development.

## Sample Occupations:

- Tool and Die Maker
- Tool Maker
- Welder
- Machine Tool Technician
- Welding Technician
- CTE Teacher
- Machine Tool Engineer
- Welding Engineer

## Collegiate & Technical Programs:

- Bridgerland Applied Technology
- Davis Applied Technology
- <u>MTECH</u>
- Clearfield Job Corps Center
- Salt Lake Community College
- <u>Utah State University</u>



Career Pathways: Welding & Machining								
EXPLORER COURSES	CREDITS	PHS	THS	ESCH	MTECH	CE Credits	UVU Title	DE Credits
Machining 1	1.0				~			
Welding Technician, Entry Level	1.0	1	√					
CONCENTRATOR COURSES								
Machining 2	1.0				~			
Welding Technician, Intermediate Level	1.0	1	√					
COMPLETER COURSES								
*American Welding Society Level Welder (Certification)								
CAPS (Engineering)	1.0	1	√					
CTE Internship	0.5	1	√					

Note: PCSD Pathway Completer Criteria: total earned credits of 3.0 or more, including a required concentrator course. \*Currently not an approved PCSD course, yet suggested for future consideration by the PCSD School Board.

#### **EXPLORER COURSES**

## Welding Technician, Entry Level

_	
Duration:	Year (1.0)
Grades:	10-12
Graduation:	Qualifies for (CTE)
Prerequisite:	None
Description:	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. In this course,
	students will learn and practice
	knowledge, attitude, skills, and habits
	required for performing tasks
	autonomously, including the selection and
	use of appropriate techniques and
	equipment with minimum supervision.

#### **CONCENTRATOR COURSES**

#### Welding Technician, Intermediate Level

Duration:	Year (1.0)
Grades:	10-12
Graduation:	Qualifies for (CTE)
Prerequisite:	Welding Technician, Entry Level
Description:	This is an intermediate level course that
	will teach the next level of welding skills.
	This course will prepare students to apply
	technical knowledge and skill in the
	workplace and in project construction. In
	this course, students will learn and
	practice knowledge, attitude, skills, and
	habits required for performing tasks

autonomously, including the selection and use of appropriate techniques and equipment with minimum supervision.



#### COMPLETER COURSES

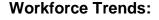
#### Welding Technician, Advanced Level

Duration: Year (1.0) 11-12 Grades: Qualifies for (CTE) Graduation: Welding Technician, Intermediate Level Prerequisite: Description: 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. In this course, students will learn and practice knowledge, attitude, skills, and habits required to perform tasks autonomously and with minimum supervision, including the selection and use of appropriate techniques and equipment.

	the second se
Duration:	Semester (0.5)
Grades:	11-12
Graduation:	Qualifies for (CTE)
Prerequisite:	Directly related to CCRP & previously or currently taking CTE class associated
	with internship
Description:	CTE Internships provide on the job
	training opportunities that are directly
	related to a career goal and course of
	study identified through the College and
	Career Ready Plan (CCRP). Therefore, a
	student must have taken or currently be
	enrolled in a CTE class related to the
	internship opportunity. This Work-Based
	Learning experience is designed to bridge
	the gap between school and work.
	Appropriate supervision by a
	school/district coordinator must be
	maintained.







Job opportunities in the automotive industry are very good for persons with formal training in automotive body repair and mechanics. According to the Utah Department of Workforce Services, more than 1,500 individuals are employed as automotive body and related repairers. Those employees with experience make an annual salary of \$41,950.

### SkillsUSA – Student Organization:

SkillsUSA is the CTSO for students in the Auto Mechanics & Repairs Career Pathway. SkillsUSA provides quality education experiences for students in leadership, teamwork, citizenship, and character development. Provo High School and Timpview High School, both have SkillsUSA chapters.

### Sample Occupations:

- Automotive Service Technician ASE (Automotive Service Excellence) <u>www.ase.com/</u> is a national certification for automotive service technicians.
- CTE Teacher

## Collegiate & Technical Programs:

- MTECH
- Bridgerland Applied Technology
- Davis Technical College
- <u>Clearfield Job Corps</u>
- Brigham Young University
- Utah Valley University
- Utah State University
- <u>Weber State University</u>



Career Pathways: Auto Mechanics and Logistics								
EXPLORER COURSES	CREDITS	PHS	THS	ESCH	MTECH	CE Credits	UVU Title	DE Credits
Automotive, Intro (recommended) or CE Automotive, Intro 1000	0.5	~	1			3.0	AUT 1000	
Collision 1 (recommended) of CE Collision 1120	0.5		1			3.0	CRT 1120/112L	
Electronics 1 or CE Electronics 1130	1.0	√	1			3.0	EART 1130	
Machining 1	1.0				1			
Welding Technician, Entry Level	1.0	√	1					
CONCENTRATOR COURSES								
ASE Chassis MLR or CE ASE Chassis MLR 1130/113L	0.5 to 1.0					3.0	AUT 1130/113L	
*Collision 2	0.5							
COMPLETER COURSES								
ASE Engine MLR or CE ASE Engine MLR AUT 1230/123L	0.5	1	1			3.0	AUT 1230/123L	
Collision 3 or CE Collision 3 1130/113L	0.5		1			3.0	CRT 1130/113L	
CAPS (Engineering)	1.0	√	1					
CTE Internship	0.5	√	1					

Note: PCSD Pathway Completer Criteria: total earned credits of 3.0 or more, including a required concentrator course.

\*Currently not an approved PCSD course, yet suggested for future consideration by the PCSD School Board.

#### **EXPLORER COURSES**

#### Automotive, Intro (recommended) or CE Automotive, Intro 1000

Duration: Grades: Graduation: Prerequisite: Description:	Semester (0.5) 10-12 Qualifies for (CTE) None This is an entry-level course in Automotive Service. Through demonstrations, lectures, research and practical experiences is designed to introduce the student to a broad experience in the use of: equipment, tools, materials, processes and techniques of

## Collision 1 (recommended) or CE Collision 1120

Duration: Grades: Graduation: Prerequisite: Description:	Semester (0.5) 10-12 Qualifies for (CTE) None This course prepares individuals to perform non-structural repair, replacement, and adjustment of automotive outer body panels and uni- body components. This course is based on the Automotive Service Excellence (ASE) automotive collision task list and the I- CAR training program. Work ethics and productivity are an integral part of the classroom and laboratory activities of this
	productivity are an integral part of the classroom and laboratory activities of this program.



#### Electronics 1 or CE Electronics 1130

Duration:	
Grades:	
Graduation:	
Prerequisite:	
Description:	

Semester (0.5) 10-12 Qualifies for (CTE) None The first in a sequence of courses that prepares individuals to apply technical knowledge and skills to assemble and operate electrical/electronic equipment used in business, industry, and manufacturing. Instruction includes training in safety, electrical theory, parallel & series circuits, Kirchoff's Laws, schematic diagrams, electrical

components, and soldering.

Semester (0.5) minimum

#### Welding Technician, Entry Level

Duration:	
Grades:	
Graduation:	
Prerequisite:	
Description:	

Year (1.0) 10-12 Qualifies for (CTE) None 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. In this course, students will learn and practice knowledge, attitude, skills, and habits required for performing tasks autonomously, including the selection and use of appropriate techniques and equipment with minimum supervision.

#### **CONCENTRATOR COURSES**

#### **ASE Chassis MLR**

Duration: Grades: Graduation: Prerequisite: Description:

11-12 Qualifies for (CTE) Introduction to Automotive This is an advanced-level course in Automotive Service that deals with the overall chassis of a vehicle. Through demonstrations, lectures, research and practical experiences dealing with chassis, this course is designed to assist students in broadening their experience, through the use of equipment, tools, materials, processes and techniques in inspecting, diagnosing, and servicing of automobiles.

#### \*Collision 2

Duration: Grades: Graduation: Prerequisite: Description:	Semester (0.5) 10-12 Qualifies for (CTE) Collision 1 This course prepares individuals to perform structural repairs on automobile uni-bodies, fixed glass, and frames. This course is based on the Automotive Service Excellence (ASE) automotive collision task list and the I-CAR training program. Work ethics and productivity are an integral part of the classroom and laboratory activities of this program.
	laboratory activities of this program.



#### **COMPLETER COURSES**

#### **ASE Engine MLR**

Duration: Grades: Graduation: Prerequisite: Description: Semester (0.5) minimum 11-12 Qualifies for (CTE) Introduction to Automotive This is an advanced-level course in Automotive Service that deals with the engine and related components. Through demonstrations, lectures, research and practical experiences dealing with the engine, this course is designed to assist students in broadening their experience, through the use of equipment, tools, materials, processes and techniques in inspecting, diagnosing, and servicing of automobiles.

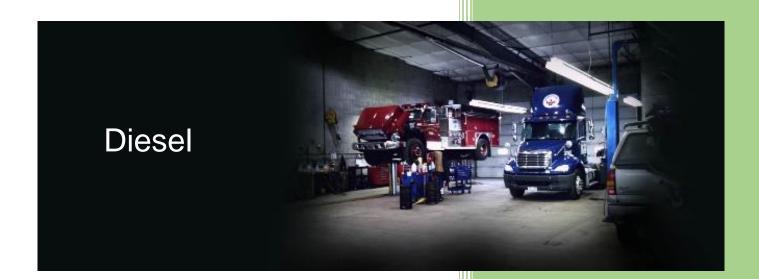
#### **Collision 3**

Duration:
Grades:
Graduation:
Prerequisite:
Description:

Semester (0.5) 10-12 Qualifies for (CTE) Collision 1 & 2 This course prepares individuals to safely prepare, mask, prime, seal, and paint vehicles and parts; use and maintain spray guns, booths, and equipment; address paint defects; mix, match, tint, and blend paint; store and dispose of hazardous materials; understand the corrosion protection process; and sand, buff, and detail a refinished vehicle. Work ethics and productivity are an integral part of the classroom and laboratory activities of this program.

Duration:	Semester (0.5)
Grades:	11-12
Graduation:	Qualifies for (CTE)
Prerequisite:	Directly related to CCRP & previously or
	currently taking CTE class associated
	with internship
Description:	CTE Internships provide on the job
	training opportunities that are directly
	related to a career goal and course of
	study identified through the College and
	Career Ready Plan (CCRP). Therefore, a
	student must have taken or currently be
	enrolled in a CTE class related to the
	internship opportunity. This Work-Based
	Learning experience is designed to bridge
	the gap between school and work.
	Appropriate supervision by a
	school/district coordinator must be
	maintained.





### Workforce Trends:

Employment growth will result from the increased manufacturing of buses and trucks powered by durable, economical diesel engines. Opportunities are good for those with formal diesel mechanic training and experience with electronic and diagnostic equipment.

Utah high school seniors have the opportunity to participate in the Utah Diesel Technician Pathways program. The program was created by industry to open opportunities for young men and women who are interested in the diesel technician field.

## SkillsUSA – Student Organization:

SkillsUSA is the CTSO for students in the Diesel Career Pathway. SkillsUSA provides quality education experiences for students in leadership, teamwork, citizenship, and character development. Provo High School and Timpview High School, both have SkillsUSA chapters.

## Sample Occupations:

- Automotive Service Technician ASE (Automotive Service Excellence) <u>www.ase.com/</u> is a national certification for automotive service technicians.
- CTE Teacher

## Collegiate & Technical Programs:

- <u>MTECH</u>
- <u>Bridgerland Technical College</u>
- Davis Technical College
- <u>Clearfield Job Corps</u>
- <u>Utah Valley University</u>
- <u>Utah State University</u>
- Weber State University



Career Pathways: Diesel								
EXPLORER COURSES	CREDITS	PHS	THS	ESCH	MTECH	CE Credits	UVU Title	DE Credits
Automotive, Intro (recommended) or CE Automotive, Intro 1000	0.5	~	1			3.0	AUT 1000	
Electronics 1 or CE Electronics 1130	1.0	~	~			3.0	EART 1130	
Welding Technician, Entry Level	1.0	~	~					
CONCENTRATOR COURSES								
Diesel 1	1	√			1			
COMPLETER COURSES								
Diesel 2	1				1			
CTE Internship	0.5	√	1					

Note: PCSD Pathway Completer Criteria: total earned credits of 3.0 or more, including a required concentrator course. \*Currently not an approved PCSD course, yet suggested for future consideration by the PCSD School Board.

#### **EXPLORER COURSES**

## Automotive Intro (recommended) or CE Automotive, Intro 1000

Duration: Semester (0.5) Grades: 10-12 Qualifies for (CTE) Graduation: Prerequisite: None Description: This is an entry-level course in Automotive Service. Through demonstrations, lectures, research and practical experiences is designed to introduce the student to a broad experience in the use of: equipment, tools, materials, processes and techniques of automotive service.

#### Welding, Entry Level

	V (1.0)
Duration:	Year (1.0)
Grades:	10-12
Graduation:	Qualifies for (CTE)
Prerequisite:	None
Description:	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. In this course,
	students will learn and practice
	knowledge, attitude, skills, and habits
	required for performing tasks
	autonomously, including the selection and
	use of appropriate techniques and
	equipment with minimum supervision.

## Electronics 1 or

#### **CE Electronics 1130**

<b>D</b>	
Duration:	Semester (0.5)
Grades:	10-12
Graduation:	Qualifies for (CTE)
Prerequisite:	None
Description:	The first in a sequence of courses that
	prepares individuals to apply technical
	knowledge and skills to assemble and
	operate electrical/electronic equipment
	used in business, industry, and
	manufacturing. Instruction includes
	training in safety, electrical theory,
	parallel & series circuits, Kirchoff's
	Laws, schematic diagrams, electrical
	components, and soldering.



#### **CONCENTRATOR COURSES**

The equivalent to the Diesel 1 course is taught at MTECH.

#### **COMPLETER COURSES**

The equivalent to the Diesel 2 course is taught at MTECH.

Duration:	Semester (0.5)
Grades:	11-12
Graduation:	Qualifies for (CTE)
Prerequisite:	Directly related to CCRP & previously or
	currently taking CTE class associated
	with internship
Description:	CTE Internships provide on the job
	training opportunities that are directly
	related to a career goal and course of
	study identified through the College and
	Career Ready Plan (CCRP). Therefore, a
	student must have taken or currently be
	enrolled in a CTE class related to the
	internship opportunity. This Work-Based
	Learning experience is designed to bridge
	the gap between school and work.
	Appropriate supervision by a
	school/district coordinator must be
	maintained.



## **Explanatory Notes**

The **asterisk** "\*" next to a course title in the completer career pathway tables indicates it is a course that is:

- As of this version of the PCSD High School Planning Guide SY 2021-22, not currently an approved PCSD course and/or
- In the new course application phase to the Provo City School Board and/or
- Suggested to be considered by the Provo City School Board, in the future, to help meet the guidelines for the specific PCSD completer pathway

**TBD** stands for "to be determined". As of this version of the PCSD High School Planning Guide SY 2021-22, the State was in the process of completing a massive revamping of the State CTE Career Pathways and applicable CTE course descriptions. The TBD areas will be replaced with the necessary information as it becomes available from the State, in updated versions of the Guide.

# **Other PCSD CTE Courses**

Back to Top

#### **Business & Marketing**

#### Marketing 2

Duration: Grades: Graduation: Prerequisite: Description: Semester (0.5) 9-12 Qualifies for (CTE) Marketing 1

This project-based course allows students to develop and demonstrate management level marketing skills. Students will learn advanced marketing principles then demonstrate proficiency by completing a marketing project. The majority of class time should be spent by students completing their marketing project.

#### Word Processing

Duration:	Semester (0.5)
Grades:	10-12
Graduation:	Qualifies for (CTE)
Prerequisite:	None
Description:	Students will create a variety of
	documents, increase efficiency,
	productivity, quality, and creativity
	through the use of basic and advanced
	software features. Instruction on proper
	keyboarding technique and recommended
	styles for business documents will
	coincide with their software training.
Description:	documents, increase efficiency, productivity, quality, and creativity through the use of basic and advanced software features. Instruction on proper keyboarding technique and recommended styles for business documents will

## Computer Science and Information Technology

#### **AP Computer Science**

Duration: Year (1.0) Grades: 10-12 Graduation: Qualifies for (S, DS, CTE) Prerequisite: Computer Programming 1 Description: AP Computer Science is equivalent to a first semester college level course in computer science. The course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design using Java language.

#### **Family and Consumer Sciences**

#### Adult Roles and Responsibilities

Duration: Grades: Graduation: Prerequisite: Description:	Semester (0.5) 11-12 Qualifies for (CTE) None This course prepares students to understand human relationships involving individuals and families. Topics include career and workforce preparation, family, parenting, money management, decision- making skills, communication skills, self- awareness, crisis management, and individual roles and responsibilities within the family, community and workforce. This course will strengthen comprehension of concepts and standards outlined in Science, Technology, Engineering and Math (STEM) education. Student leadership and competitive events (FCCLA) may be an integral part of the
	(FCCLA) may be an integral part of the course.

#### **Fashion Design Merchandising**

Duration: Grades: Graduation: Prerequisite: Description:	Semester (0.5) 10-12 Qualifies for (CTE) Fashion Design Studio The Fashion Design Merchandising course is an introductory course that teaches the concepts of entry-level business and fashion fundamentals. The following list of skill standards prepares the student in fashion merchandising with the fundamentals of: basic fashion concepts and marketing terminology, fashion cycles, key components of the fashion industry, retail merchandise categories, fashion promotion and fashion careers. This course will strengthen comprehension of concepts and standards outlined in Sciences, Technology, Engineering and Math (STEM) education. Student leadership and competitive events (FCCLA and/or DECA) may be an integral part of the course.



#### **Production Graphics 2**

Duration: Grades: Graduation: Prerequisite: Description: Semester (0.5) 10-12 Qualifies for (CTE)

Create, produce and reproduce visual graphics that communicate to an audience. Develop knowledge and skills relative to the graphic design and printing industries. Apply effective principles and techniques to project designs.

#### **Health Sciences**

#### **Introduction to Health Science**

Duration: Grades: Graduation:	Semester (0.5) 9-12 Qualifies for (CTE)
Prerequisite:	None
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 health
	science and health technology programs.
	Instruction includes beginning anatomy
	and physiology, medical terminology,
	medical ethics, diseases, and disorders.
	The course prepares students for the
	Medical Anatomy and Physiology course
	and/or for a variety of health technology
	programs.

#### **Protective Services**

#### Law Enforcement

Duration:	Semester (0.5)
Grades:	10-12
Graduation:	Qualifies for (CTE)
Prerequisite:	None
Description:	This course prepares individuals to
	perform the duties of police and public
	security officers, including patrol and
	investigative activities, traffic control,
	crowd control, public relations, witness
	interviewing, evidence collection and

management, court procedures and the law in general. Basic crime prevention methods, weapon and equipment operation, equipment maintenance, and other routine law enforcement responsibilities are also included.

#### **Skilled and Technical Sciences**

#### **ASE Brakes**

Duration: Grades: Graduation: Prerequisite: Description:	Semester (0.5) 11-12 Qualifies for (CTE) Introduction to Automotive This course is part of a sequence that prepares individuals to engage in the servicing and maintenance of all types of automobiles. Instruction includes: training in safety, the diagnosis of malfunctions, and repair of braking systems. This course is based on the Automotive Service Excellence (ASE) task list. Work ethics and productivity are an integral part of the

#### **ASE Electrical/Electronics**

Duration:	Semester (0.5)
Grades:	11-12
Graduation:	Qualifies for (CTE)
Prerequisite:	Introduction to Automotive
Description:	This course is part of a sequence that
	prepares individuals to engage in the
	servicing and maintenance of all types of
	automobiles. Instruction includes training
	in safety, the diagnosis of malfunctions
	and repair of electrical systems. This
	course is base on the Automotive Service
	Excellence (ASE) task list. Work ethics
	and productivity are an integral part of the
	classroom and lab activities of this course.

#### **ASE Steering & Suspension**

Duration: Grades: Graduation: Prerequisite: Description:	10-12 Qualifies for (CTE) Introduction to Automotive This course is part of a sequence that prepares individuals to engage in the servicing and maintenance of all types of automobiles. Instruction includes training in safety, the diagnosis of malfunctions and repair of steering and suspension systems. This course is based on the Automotive Service Excellence (ASE) task list. Work ethics and productivity are an integral part of the classroom and lab activities of this course.
----------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



#### **Metalworking 1**

Duration:Semester (0.5)Grades:10-12Graduation:Qualifies for (CTE)Prerequisite:Welding Technician – Intermediate LevelDescription:This is an entry-level course in<br/>Metalworking. Through demonstrations,<br/>lectures, research and practical<br/>experiences it is designed to introduce the<br/>student to a broad experience in the use<br/>of: equipment, tools, materials, processes

#### Woods 2

Duration: Grades: Graduation: Prerequisite: Description: Semester (0.5)

10-12

instruction.

Qualifies for (CTE) Woods 1 The second instructional course in a sequence that prepares individuals to apply technical knowledge and skills to prepare and execute furniture design projects; assemble and finish furniture articles; repair furniture; and stresses the safe use of a variety of hand and power tools and machinery. Recommended projects would be anything that would allow students to incorporate all joints and tools, e.g. a chest of drawers.

and techniques of metalworking trades. This is a one-semester course of

#### Woods 3

Duration: Grades: Graduation: Prerequisite: Description: Semester (0.5) 10-12 Qualifies for (CTE) Woods 1 The third instructional course in a sequence of courses that prepares individuals to apply technical knowledge and skills, set up and operate industrial woodworking machinery, and use such machinery to design and fabricate custom cabinets and architectural millwork. It stresses the safe use of trade hand and power tools and machinery used in the production of millwork items. Cabinets, such as kitchen and vanities are constructed, finished, and installed as part of this program.

## Center for Advanced Professional Studies (CAPS)

Duration: Grades: Graduation: Prerequisite Description: Semester (1.0) 11-12 Qualifies for (CTE)

Provo CAPS is a new course for juniors and seniors that gives students the opportunity to work on real projects from local businesses in the following areas:

- Business, Marketing & Entrepreneurship (CAPS-Business & Marketing)
- Digital Design & Software Development (CAPS-Digital Media 2)
- Engineering & Industrial Design (CAPS-Engineering)
- Medicine & Health Science (CAPS-Health Science, Advanced)

Students spend the semester in collaborative groups completing actual projects in a profession-based learning environment and gives them the opportunity to work for local business and community partners.



## **Discontinued CTE Courses**

Advanced Web Page Design ASE General Service Tech Basic Film Photography Computer Technology Computer Technology 2 Desktop Publishing Industrial Maintenance Technician Medical Principles & Practices Metals 2 Physics with Technology Robotics and Automation Small Engine Repair Small Engines M/T Web Page Design Wood Turning

# **New Titles / Combined CTE Courses**

Old Title and/or Combined Titles	New Title
Advanced Commercial Photography	Commercial Photo 2
Advanced Production Graphics	Production Graphics 2
Apparel Design & Production 2 or Designer Sewing 2	Sewing Construction & Textiles 2
Apparel Design & Production or Designer Sewing 1	Sewing Construction & Textiles 1
Auto 1	Introduction to Automotive
Basic Digital Photography	Commercial Photo 1
Cabinetmaking	Woods 3
Collision Refinishing & Painting	Collision 3
Collision Repair	Collision 1
Commercial and Advertising Art	Commercial Art 1
Computer Programming 3	Advanced Computer Programming
CTE Internship + Workplace Skills	CTE Internship
Design & Visual Communication	Commercial Art 2
Early Childhood Education 1A	Early Childhood Education 1
Early Childhood Education 1B	Early Childhood Education 2
Early Childhood Education 2	Early Childhood Education 3
Furniture Design & Manufacturing	Woods 2
Intermediate Graphic Communications	Production Graphics 1
Graphics Art or Graphics	Digital Graphic Arts Intro
Metals 1	Metalworking 1
Vocational Welding 1 or Welding 1	Welding Technician, Entry
Vocational Welding 1 or Welding 1	Welding Technician, Intermediate
Woodworking	Woods 1

## **Suggested Order of CTE Courses**

#### Auto

- 1. Introduction to Automotive
- 2. ASE Brakes
  - a. ASE Steering & Suspension
  - b. ASE Electrical/Electronics
- 3. ASE Engine Performance
- 4. ASE Chassis MLR

#### **Computer Programming**

- 1. Computer Science Principles or AP CS Principles
- 2. Computer Programming 1
- 3. Computer Programming 2
- 4. Advanced Computer Programming

#### **Digital Graphic Art**

- 1. Digital Graphic Art Intro
- 2. Production Graphics 1
- 3. Production Graphics 2

#### Woodworking

- 1. Woods 1: Woodworking
- 2. Woods 2: Furniture Design & Manufacturing
- 3. Woods 3: Cabinetmaking (or)
- 4. Carpentry (Construction emphasis)

# Index of Course Titles Alphabetically

## Index

٠	Accounting 1	
	<ul> <li>Accounting &amp; Finance</li> </ul>	
	o Business Administration	
	<ul> <li>Business Information Management</li> </ul>	
	• Marketing	
	<ul> <li>Hospitality &amp; Tourism</li> </ul>	
	• Personal Care Services	83
•	Accounting 2	
	<ul> <li>Accounting &amp; Finance</li> </ul>	34
•	Adult Roles and Responsibilities	
	• Other CTE Courses	97
٠	Algorithm and Data Structures	
	<ul> <li>Programming &amp; Software Development</li> </ul>	54
•	AP Computer Science	
	• Other CTE Courses	97
•	ASE Brakes	
	• Other CTE Courses	
•	ASE Chassis MLR	
	<ul> <li>Auto Mechanics &amp; Logistics</li></ul>	
•	ASE Electrical/Electronics	
	• Other CTE Courses	
•	ASE Engine MLR	
-	<ul> <li>Auto Mechanics &amp; Logistics</li> </ul>	91
•	ASE Steering & Suspension	
-	• Other CTE Courses	98
•	Automotive, Intro	
•	<ul> <li>Automotive, into</li> <li>Auto Mechanics &amp; Logistics</li> </ul>	80
	<ul> <li>Auto Mechanics &amp; Logistics</li> <li>Diesel</li> </ul>	
•	Baking and Pastry o Culinary Arts	77
	•	
•	Biotechnology	74
_	• Health Services	/4
•	Business and Marketing Capstone	24
	• Accounting & Finance	
	Business Administration	
	Business Information Management	
	Hospitality & Tourism	
	• Marketing	40
•	Business Law	22
	<ul> <li>Accounting &amp; Finance</li> <li>Designed A lasisi testing</li> </ul>	
	<ul> <li>Business Administration</li> </ul>	
	Business Information Management	
	Hospitality & Tourism	
	• Marketing	45
•	Business Management	<b>a</b> -
	• Business Administration	
	• Personal Care Services	83
•	Business Office Specialist	
	<ul> <li>Business Information Management</li> </ul>	42



٠	CAD Architectural Design 1	
	• Architectural Design (CAD)	12
	• Engineering	
	• Interior Design	15
•	CAD Architectural Design 2	
	• Architectural Design (CAD)	13
٠	CAD Architectural Design 3	
	• Architectural Design (CAD)	13
•	CAD Mechanical Design 1	
	• Engineering	67
	<ul> <li>Mechanical Design (CAD)</li> </ul>	
•	CAD Mechanical Design 2	
	<ul> <li>Mechanical Design (CAD)</li> </ul>	
•	CAD Mechanical Design 3	
	<ul> <li>Mechanical Design (CAD)</li> </ul>	71
•	Carpentry 1	
•	• Architectural Design (CAD)	12
•	CE College Algebra 1050	12
•	<ul> <li>K-12: Teaching as a Profession</li> </ul>	63
		03
•	CE College Writing 1010	(2
	• K-12: Teaching as a Profession	03
•	Child Development	(0)
	• Pre-K: Early Childhood Education	60
•	Collision 1	00
	• Auto Mechanics & Logistics	
•	Collision 2	0.0
	• Auto Mechanics & Logistics	90
٠	Collision 3	
	<ul> <li>Auto Mechanics &amp; Logistics</li> </ul>	91
٠	Commercial Arts 1	
	Graphic Design & Communications	
٠	Commercial Arts 2	
	<ul> <li>Graphic Design &amp; Communications</li> </ul>	29
٠	Commercial Photo 1	
	Graphic Design & Communications	29
٠	Commercial Photo 2	
	<ul> <li>Graphic Design &amp; Communications</li> </ul>	30
٠	Computer Programming 1	
	• Cybersecurity	
	<ul> <li>Programming &amp; Software Development</li> </ul>	
٠	Computer Programming 2	
	Programming & Software Development	53
٠	Computer Programming, Advanced	
	<ul> <li>Programming &amp; Software Development</li> </ul>	54
٠	Computer Science Principles 1	
	• Broadcasting & Digital Media	19
	• Cybersecurity	
	• Programming & Software Development	
	• Web Development	
•	Construction Trades Foundation	
	• Architectural Design (CAD)	12



• C	TE Internship
-----	---------------

	0	Food Science, Dietetics & Nutrition	.10
	0	Architectural Design (CAD)	.13
	0	Interior Design	.17
	0	Broadcasting & Digital Media	.22
	0	Fashion Apparel & Textiles	.26
	0	Graphic Design & Communications	.30
	0	Accounting & Finance	.34
	0	Business Administration	.38
	0	Business Information Management	.42
	0	Marketing	.46
	0	Cybersecurity	.50
	0	Programming & Software Development	
	0	Web Development	
	0	Pre-K: Early Childhood Education	
	0	K-12: Teaching as a Profession	
	0	Engineering	
	0	Mechanical Design (CAD)	
	0	Health Science	
	0	Culinary Arts	
	0	Hospitality & Tourism	
	0	Personal Care Services	
	0	Welding & Machining	
	0	Auto Mechanics & Repairs	
	0	Diesel	
•	Culinar		
	0	Culinary Arts	.76
	0	Hospitality & Tourism.	
•	Culinary		
	0 0	Culinary Arts	77
•	-	curity Forensics	• • •
	0	Cybersecurity	50
•	-	ndation of Nutrition	
•	0	Food Science, Dietetics & Nutrition	9
•	-	nan Development 1100	)
•	OE Hui	Food Science, Dietetics & Nutrition	Q
	0	K-12: Teaching as a Profession	0 64
•	Dietetic		-04
•		s Food Science, Dietetics & Nutrition	0
_			9
•	-	Graphic Arts, Intro	22
	0	Accounting & Finance	
	0	Broadcasting & Digital Media	
	0	Business Information Management	
	0	Fashion Apparel and Textiles	
	0	Graphic Design & Communications	
	0	Hospitality & Tourism	
	0	Interior Design	
	0	Marketing	
_	O	Web Development	. 30
•	-	Marketing	10
	0	Marketing	.46
•	Digital		<b>.</b> .
	0	Broadcasting & Digital Media	.21
•	Digital		_
	0	Broadcasting & Digital Media	.22



٠	Early Childhood Education 1	
	<ul> <li>Pre-K: Early Childhood Education</li> </ul>	60
•	Early Childhood Education 2	
	• Pre-K: Early Childhood Education	61
•	Early Childhood Education 3	
	• Pre-K: Early Childhood Education	61
•	Economics	
	• Accounting & Finance	
	• Business Administration	
	• Business Information Management	
	<ul> <li>Hospitality &amp; Tourism.</li> </ul>	
	<ul> <li>Marketing</li> </ul>	
•	Electronics 1	
-	• Engineering	66
	<ul> <li>Auto Mechanics &amp; Logistics</li></ul>	
	<ul> <li>Auto incentances de Logistices</li> <li>Diesel</li> </ul>	
•	Electronics 2	
•		(0
	• Engineering	08
•	Emergency Medical Responder	74
	Health Services	
•	Engineering Capstone	
	• Engineering	68
٠	Engineering Principles 1	
	• Engineering	66
٠	Engineering Principles 2	
	o Engineering	68
•	Entrepreneurship	
	• Accounting & Finance	
	• Business Administration	
	<ul> <li>Business Information Management</li> </ul>	41
	• Marketing	
	• Web Development	
•	Exercise Science/Sports Medicine	
	• Health Services	74
•	Event Planning and Management	
•	<ul> <li>Hospitality &amp; Tourism</li> </ul>	<b>Q</b> 1
-		
•	Fashion Design Merchandising • Other CTE Courses	07
		97
•	Fashion Design Studio	24
	• Fashion Apparel and Textiles	24
•	Food and Nutrition 1	
	<ul> <li>Culinary Arts</li> </ul>	
	<ul> <li>Food Science, Dietetics &amp; Nutrition</li> </ul>	
	• Pre-K: Early Childhood Education	60
٠	Food and Nutrition 2	
	<ul> <li>Food Science, Dietetics &amp; Nutrition</li> </ul>	9
•	Food Science	
	<ul> <li>Food Science, Dietetics &amp; Nutrition</li> </ul>	9
•	Foundation of Nutrition	-
	<ul> <li>Food Science, Dietetics &amp; Nutrition</li> </ul>	9
•	Game Development Fundamentals 1	///////////////////////////////////////
-	<ul> <li>Programming &amp; Software Development</li> </ul>	53
	Geographic Information Systems (GIS) Remote Sensing	
•		<b>E</b> 0
	• Web Development	



Information Technology, Intro	
<ul> <li>Business Information Management</li> </ul>	
• Programming & Software Development	
Interior Design 1	
<ul> <li>Interior Design</li> </ul>	
Interior Design 2	
<ul> <li>Interior Design</li> </ul>	16
Interior Design 3	
<ul> <li>Interior Design</li> <li>O Interior Design</li> </ul>	17
Introduction to Health Science	
	09
• Other CTE Courses	
Law Enforcement	00
• Other CTE Courses	
Leadership Principles 1	
<ul> <li>Business Administration</li> </ul>	
Leadership Principles 2	
<ul> <li>Business Administration</li> </ul>	
Linux Fundamentals	
• Cybersecurity	
Marketing 1	
• Business Administration	
<ul> <li>Hospitality &amp; Tourism</li> </ul>	
• Interior Design	
• Marketing	
Marketing 2	
• Other CTE Courses	97
Medical Anatomy and Physiology	······································
<ul> <li>Food Science, Dietetics &amp; Nutrition</li> </ul>	0
<ul> <li>Health Services</li></ul>	
Medical Assistant	74
• Health Services	
Medical Terminology	
• Health Services	
Metalworking 1	
• Other CTE Courses	
Mobile Development Fundamentals	
<ul> <li>Programming &amp; Software Development</li> </ul>	
Production Graphics 1	
<ul> <li>Graphic Design &amp; Communications</li> </ul>	
Production Graphics 2	
• Other CTE Courses	98
ProStart 1	
	76
• Culinary Arts	
ProStart 2	
• Culinary Arts	77
Robotics 1	
• Engineering	
Robotics 2	
• Engineering	
Screen Printing Technology	
• Broadcasting & Digital Media	
<ul> <li>Fashion Apparel and Textiles</li> </ul>	
<ul> <li>Graphic Design &amp; Communications</li> </ul>	



٠	Sewing Construction & Textiles 1	
	• Fashion Apparel and Textiles	
٠	Sewing Construction & Textiles 2	
	• Fashion Apparel and Textiles	25
٠	Sports and Entertainment Marketing	
	<ul> <li>Accounting &amp; Finance</li> </ul>	
	<ul> <li>Business Administration</li> </ul>	
	• Marketing	45
٠	Sports and Outdoor Design 1	
	<ul> <li>Fashion Apparel and Textiles</li> </ul>	24
٠	Teaching as a Profession 1	
	• K-12: Teaching as a Profession	63
٠	Teaching as a Profession 2	
	• K-12: Teaching as a Profession	64
٠	TV Broadcasting 1	
	<ul> <li>Broadcasting &amp; Digital Media</li> </ul>	
٠	TV Broadcasting 2	
	<ul> <li>Broadcasting &amp; Digital Media</li> </ul>	
٠	Video Production 1	
	<ul> <li>Broadcasting &amp; Digital Media</li> </ul>	
٠	Video Production 2	
	<ul> <li>Broadcasting &amp; Digital Media</li> </ul>	
٠	Web Development 1	
	<ul> <li>Accounting &amp; Finance</li> </ul>	
	<ul> <li>Broadcasting &amp; Digital Media</li> </ul>	
	<ul> <li>Business Administration</li> </ul>	
	<ul> <li>Business Information Management</li> </ul>	
	• Cybersecurity	
	<ul> <li>Hospitality &amp; Tourism</li> </ul>	
	o Marketing	
	• Web Development	57
٠	Web Development 2	
	• Web Development	57
٠	Web Development Capstone	
	• Web Development	
٠	Welding Technician, Entry Level	
	<ul> <li>Auto Mechanics &amp; Logistics</li> </ul>	
	o Diesel	
	• Engineering	
	• Mechanical Design (CAD)	
	<ul> <li>Welding &amp; Machining</li> </ul>	86
٠	Welding Technician, Intermediate Level	
	<ul> <li>Welding &amp; Machining</li> </ul>	86
٠	Welding Technician, Advanced Level	
	Welding & Machining	
٠	Woods 1	
	<ul> <li>Engineering</li> </ul>	
	<ul> <li>Mechanical Design (CAD)</li> </ul>	70
٠	Woods 2	
	• Other CTE Courses	
٠	Woods 3	
	• Other CTE Courses	
٠	Word Processing	
	• Other CTE Courses	97

