Why choose CTE *magnets?*

WEBER SCHOOL DISTRICT
CTE CAREER & TECHNICAL EDUCATION

64 COLLEGE CREDITS

APPRENTICESHIPS & INTERNSHIPS

50+ INDUSTRY PARTNERS

CTE INDUSTRY & COLLEGIATE PARTNERS

- CONSTRUCTION WORKS — WHEN WE WORK TOGETHER
- Autoliv
- RW ENGINEERS
- BORSIGHT
- Chevron
- ELKAY
- FFKR ARCHITECTS
- FRESENIUS MEDICAL CARE
- FUTURA INDUSTRIES — RELIABLE. RESPONSIVE.
- GSC PCC
- HARRIS
- STEM CREATE THE FUTURE!
- HOGAN — CONSTRUCTION MANAGER · GENERAL CONTRACTOR
- HUGHES
- iFLY
- ROCK UTAH
- IVORY FOUNDATION — Click and Choose
- IVORY HOMES — Utah's Number One Homebuilder
- JD MACHINE
- KIER CONSTRUCTION
- KLYMIT
- L3 Technologies
- LIFETIME
- MJSA ARCHITECTURE
- Mindfire Technology
- NU NEUMONT UNIVERSITY
- NORTHROP GRUMMAN
- Ogden UTAH planning
- OKLAND CONSTRUCTION
- Orbital ATK
- PLURALSIGHT
- POWERTEQ
- R&O CONSTRUCTION
- SALOMON
- SARCOS
- SETPOINT
- SMITH
- STACEY CONSTRUCTION
- STAKER | PARSON COMPANIES
- Stanley Consultants
- STREAMLINE PLASTICS
- UTAH MANUFACTURERS ASSOCIATION
- OGDEN-WEBER TECHNICAL COLLEGE
- WADMAN CORPORATION
- whiteclouds
- WC whitaker construction co.
- Williams International
- DAVIS TECH — DAVIS TECHNICAL COLLEGE
- BYU BRIGHAM YOUNG UNIVERSITY
- THE UNIVERSITY OF UTAH
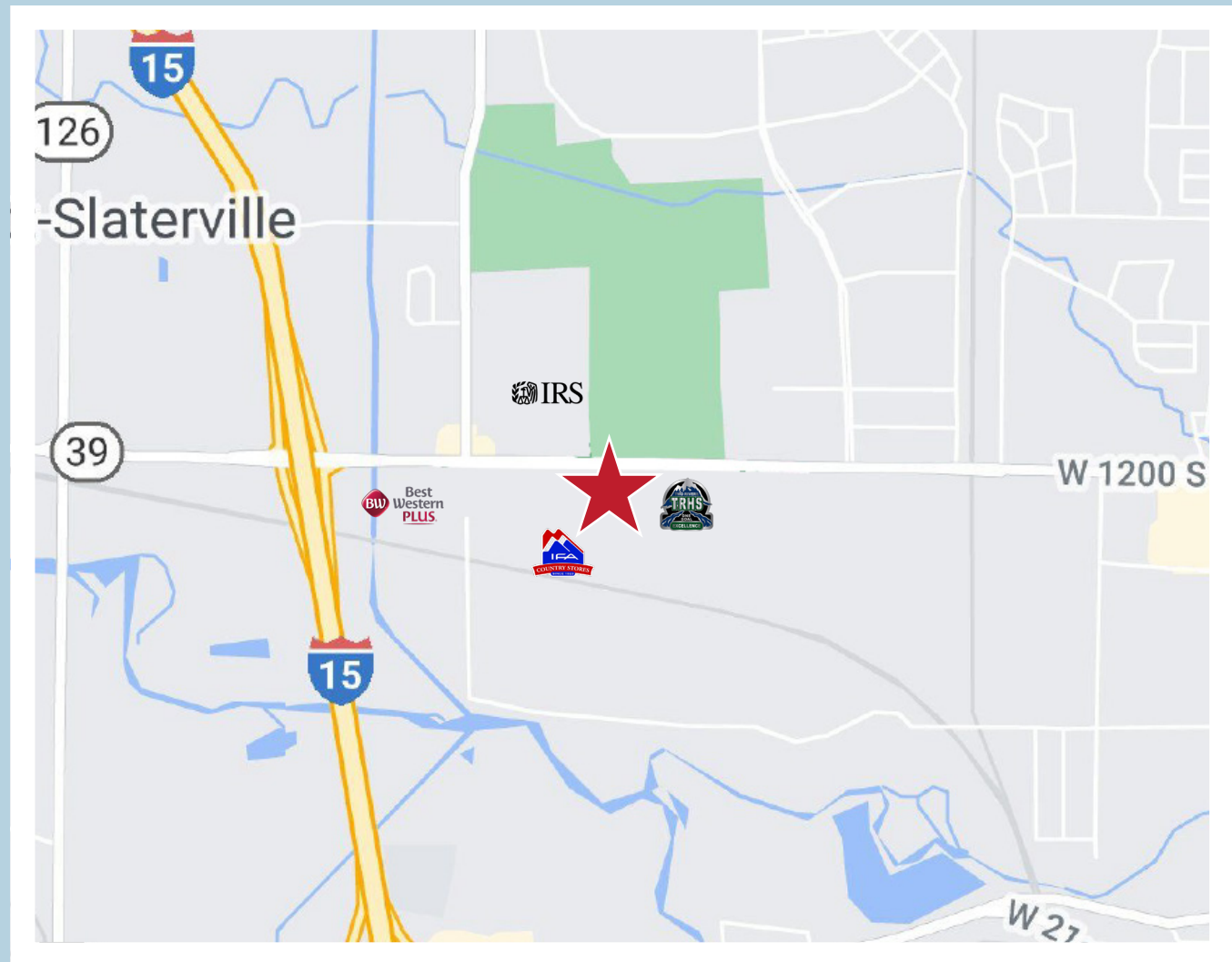- Utah State University
- WEBER STATE UNIVERSITY

For more information, contact:
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jfdonley@wsd.net

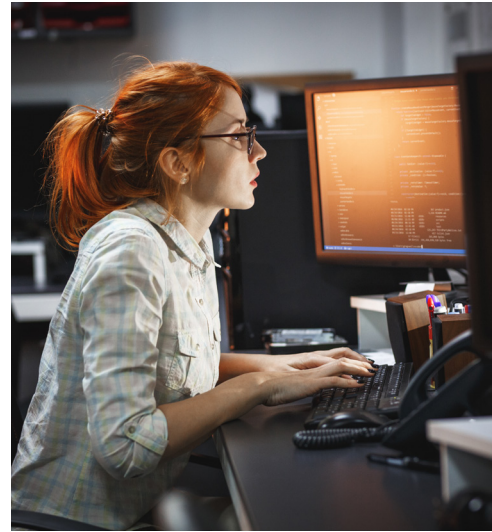Weber Innovation Center
1007 W 12th Street
Ogden, Utah

wsd.net/cte/magnets

WEBER SCHOOL DISTRICT
CTE CAREER & TECHNICAL EDUCATION

MAGNET PROGRAM

Experience the Future NOW!

Interactive Computer Arts (ICA)

Class	HS Credit	CE Credit
Creative Apps	0.5 Digital Studies 0.83 Core Science 1.0 CTE	WSU CS 1030 (4 cr) WSU CS 1010 (3 cr)
Applications	1.33 Core Science 0.5 Digital Studies 0.5 CTE	WSU CS 1400 (4 cr) WSU WEB 1400 (3 cr)
Algorithms	2.66 CTE	WSU CS 1410 (4 cr) WSU CS 2420 (4 cr)
Cyber Security	2.0 CTE	WSU NET 2200 (3 cr) WSU NET 2300 (3 cr)

ICA Creative Apps
Students develop basic skills of app creation using a variety of programming languages: MIT App Inventor, Python, HTML, & CSS to design and develop a wide variety of custom apps and games.

ICA Applications
You will learn how to design & develop websites and complex programs and algorithms. Students will use Java, HTML, CSS, java script, and object oriented programming to meet specific design requirements.

ICA Algorithms
Students will learn Object Oriented Programming using C++ to control systems such as robotics and automated processes. This completes the **Programming Essentials Certificate** at Weber State University.

ICA Cybersecurity
Students will learn network and computer security along with computer repair and maintenance. This completes the **Cybersecurity Essentials Certificate** at Weber State University.

Construction

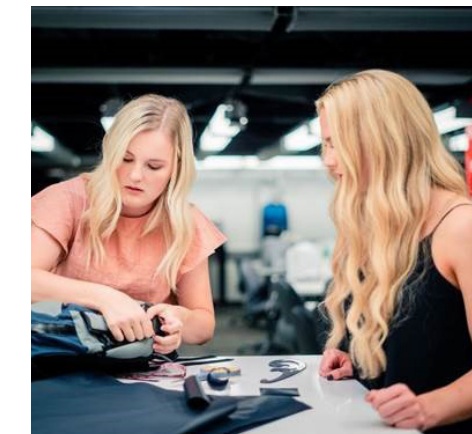| Class	HS Credit	CE Credit
Construction Management 2/3	2.33 CTE	WSU CMT 1150 (3 cr) WSU CMT 1310 (4 cr)

Construction Management 2 & 3
In this class students learn every part of construction (Framing, Roofing, Siding, Electrical, Plumbing, HVAC, Sheet rocking, Interior Design, and Finish Work) by building a "Tiny Home" start to finish.

Foundation Course Options
POE - IED - DE

Specialty Course Options
AE - CEA - RA

Senior Capstone
EDD

Project Lead the Way (PLTW)

Class	HS Credit	CE Credit
Principles of Engineering (POE)	1.0 Science Elective OR 1.0 CTE	WSU ENGR 1000 (2 cr)
Intro. to Engineering Design (IED)	1.0 CTE	WSU PDD 1010 (3 cr)
Digital Electronics (DE)	2.0 Science Elective OR 2.0 CTE	WSU EET 1110 (2 cr) WSU EET 1130 (4 cr)
Aerospace Engineering (AE)	1.0 CTE	
Robotics and Automation (RA)	1.0 CTE	
Civil Engineering & Architecture (CEA)	2.33 CTE	WSU BDC 1350 (3 cr) WSU CMT 2360 (4 cr)
Engineering Design & Development (EDD)	1.0 CTE	WSU PDD 2830 (3 cr)

Principles of Engineering (POE)
POE is a building and investigating class! Students explore a broad range of engineering topics such as mechanisms, structural strength, energy, automation of devices, and ballistics.

Introduction to Engineering Design (IED)
Students use the design process to create a variety of projects. Students use 3D modeling software, 3D printers, & a laser engraver.

Digital Electronics (DE)
Students are exposed to basic electronic principles (number systems, logic gates, integrated circuits, PLD's, sequential logic) and how to create circuits to solve problems.

Aerospace Engineering (AE)
Students explore a broad range of Aerospace topics such as drones, rockets, flight simulators, composites, robotics, programming, space travel, helicopters, aircraft and gliders.

Robotics and Automation (RA)
Students will design injection molds, program robots, create automated manufacturing processes, use 3D printers and CNC machines to produce models of their 3D CAD designs. Prerequisite: IED

Civil Engineering & Architecture (CEA)
This course introduces students to the interdependent fields of civil engineering and architecture. We use industry standard software (Revit) for 3D modeling, 3D renderings, and laser engraved models.

Engineering Design & Development (EDD)
The knowledge and skills acquired throughout the PLTW and ICA programs come together as students work through the design process to identify a problem, research the problem and possible solutions, design & test solutions, and present their product to a panel of engineers.

Weber School District does not discriminate on the basis of race, color, religion, sex, age, national origin, or disability.

Health Sciences

Class	HS Credit	CE Credit
Medical Anatomy & Physiology	1.0 Science Elective OR 1.0 CTE	
Medical Terminology	0.5 CTE	WSU HTHS 1101 (2 cr)
Medical Forensics	1.0 Science Elective OR 1.0 CTE	
Intro to Physical Therapy	1.0 CTE	

Medical Anatomy & Physiology
Through hands on labs, students learn about the medical anatomy of all body systems and how they work together. Students dissect hearts, eyes, kidneys, suture and visit the anatomy lab at WSU.

Medical Terminology
CE course that give students the ability to break down medical terms into common terms that everyone can understand.

Medical Forensics
Develops the ability to identify, analyze, and process logically using deductive reasoning and problem solving to help solve crimes through hands on labs and guest speakers.

Intro to Physical Therapy
This class covers therapy treatments, terminology, history, and ethical considerations that will prepare students for a career in Physical Therapy through hands on labs and clinical observations.

Family & Consumer Sciences

Class	HS Credit	CE Credit
Adult Roles & Financial Literacy	0.5 Gen. Fin. Lit 0.5 CTE	WSU CHF 2400 (3 cr)
Baking & Pastry	0.5 CTE	
Outdoor Product Design	1.0 CTE	
Nutrition	1.0 CTE	WSU NUT 1020 (3 cr)

Adult Roles & Financial Literacy
This course prepares students to understand human relationships involving individuals and families integrated with general financial literacy.

Baking & Pastry
Students will learn about yeast breads, pastries, puff and pastry cream, Cakes, Confectionary, and Cookies. Students will make products for catering and retail. Food Handlers Permit is Required.

Outdoor Product Design
This course will focus on the importance of textiles in society, explore how textiles are produced and how appropriate performance characteristics are incorporated with a focus on Sports and Outdoor Products.

Nutrition
Students learn the basics of human nutrition, functions of nutrients, and how the body works. Prepares students for careers in the Medical field, Dietetics, and Athletic Trainers.