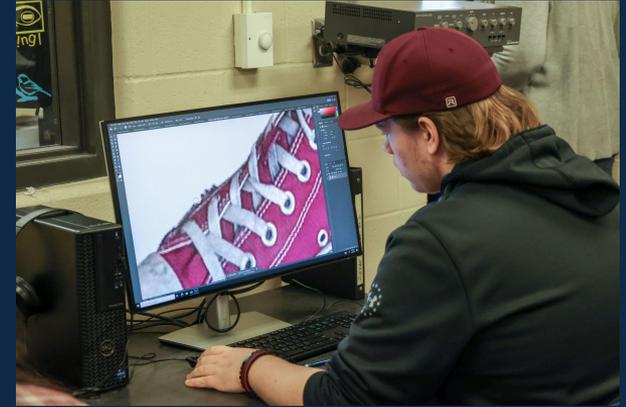




CAREER AND TECHNICAL EDUCATION

ISD 709 Duluth Public Schools
Danette Seboe, CTE Coordinator
February 2024

Career and Technical Education (CTE) programs are a sequence of courses that integrates core academic knowledge with technical and occupational knowledge and skills to provide students a pathway to postsecondary education and careers. CTE teaches transferable workplace skills in applied learning contexts to provide opportunities to explore high-demand career options, and gives students the technology and skills needed for success in adult life



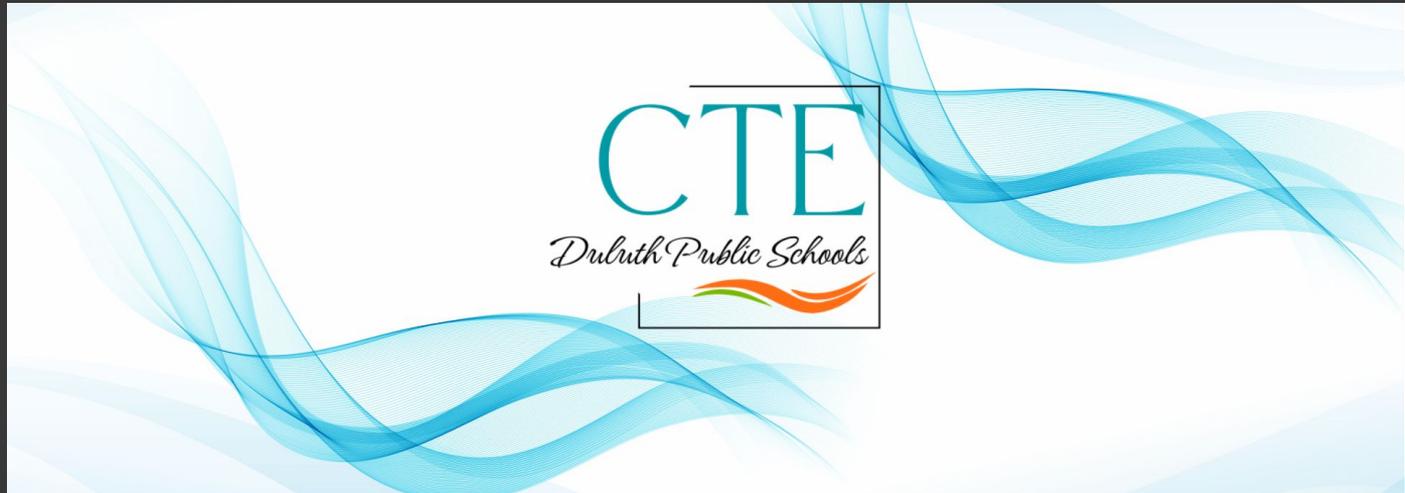
CTE is associated with higher levels of student engagement and reduced rates of dropout. In fact, the average high school graduation rate for CTE concentrators – students who take multiple courses in one CTE program area – is 94% compared to the national rate of 85%.

High school CTE concentrators are more likely than nonconcentrators to be employed full time and have higher median annual earnings 8 years after graduation



In 2021, 90% of Minnesota postsecondary CTE concentrators were employed, pursued further education, or joined the military or Peace Corps immediately after program completion.

MORE THAN 44%
OF ISD 709 IN CTE!



WHAT IS CTE?

A CRITICAL COMPONENT OF ALL CAREERS!



- courses that integrates core academic knowledge with technical and occupational knowledge and skills
- provide students a pathway to postsecondary education and training and careers in all pathways
- teach transferable workplace skills in applied learning contexts
- provide opportunities to explore high-demand career options
- gives students the technology and skills needed for success in adult life

WHO TAKES CTE COURSES?

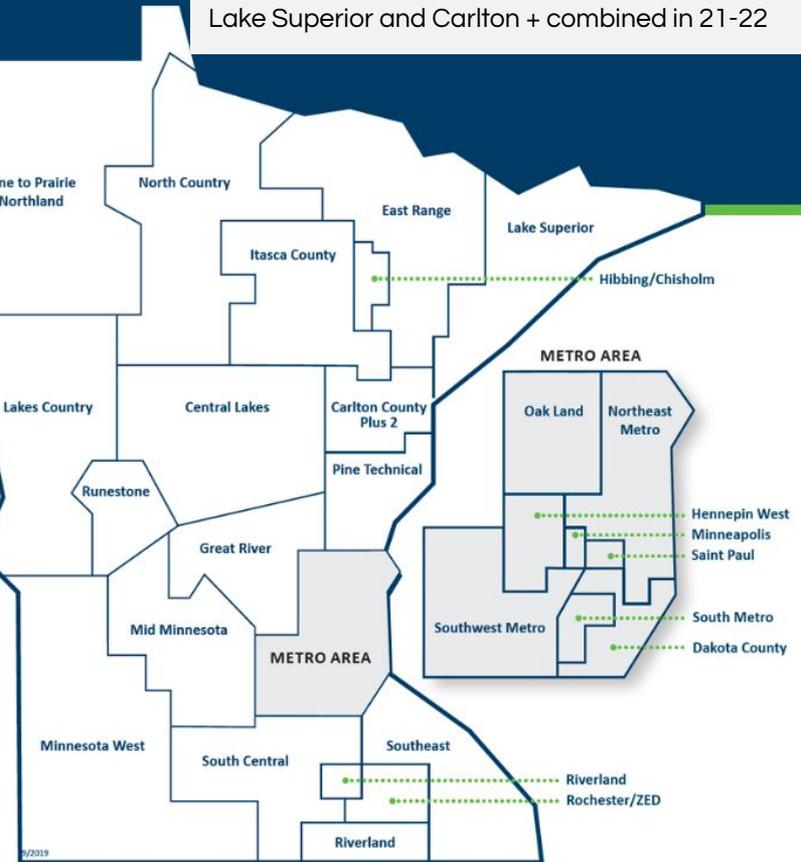
ALL STUDENTS!



- Those who have no idea what they want to do after high school.
- Students who want to attend a 2 or 4 year college or university.
- Students who plan to enlist in the military.
- Students who want to go straight to work.
- Students who want to go into an apprenticeship or training program.
- **EVERYONE BENEFITS FROM CTE COURSES!**

Perkins Consortia

Lake Superior and Carlton + combined in 21-22



LAKE SUPERIOR CONSORTIUM

LEAH BOTT, NORTHERN SCHOOLS SECONDARY
COORDINATOR

JILL MURRAY, SOUTHERN SCHOOLS (CARLTON +2)
SECONDARY COORDINATOR, POST-SECONDARY
COORDINATOR

MEMBER SCHOOLS

BARNUM	DULUTH EAST	PROCTOR
CARLTON	ESKO	SILVER BAY
CLOQUET	FOND DU LAC	TWO HARBORS
COOK COUNTY	HERMANTOWN	WRENSHALL
CROMWELL-WRIGHT	MCGREGOR	DENFELD
MOOSE LAKE	LAKE SUPERIOR COLLEGE (LSC)	

Minnesota Career Fields and Clusters

[Link to Full MN Career Fields, Clusters & Pathways Map](#)



ISD 709 PROGRAMS OF STUDY

Duluth Public Schools

2024-2025 School Year



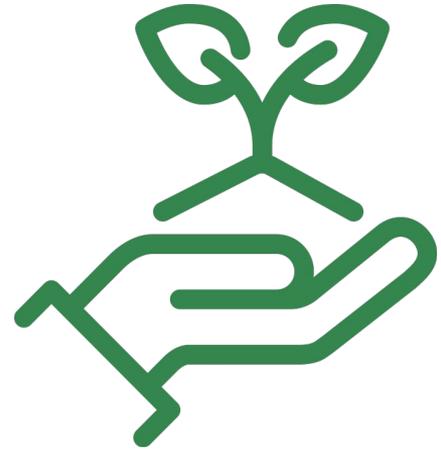
AERONAUTICS CAREERS

- ****NEW**** Introduction to Aviation, Aerospace History, and Aerospace Engineering Design
- Aerospace Physics
 - *Fulfills 1.0 Physics Requirement*



AGRICULTURE, FOODS, AND NATURAL RESOURCES

- Intro to Agriculture/Food/ Natural Resource Sciences
- Plant Science Fall and Spring
- Plant Science: Greenhouse 1
 - (open to all, located at East)
- Plant Science: Greenhouse 2
 - (open to all, located at East)



ARTS, COMMUNICATION, AND INFORMATION SYSTEMS

- Graphic Arts I
- Graphic Arts II
- Graphic Arts III



These courses satisfy the arts requirement.

AUTOMOTIVE CAREERS

- Automotive Basics: Brakes and Engines
- Automotive Basics: Transmissions and Suspensions
- Advanced Automotive

(All 2 hr blocks open to all, located at Denfeld)



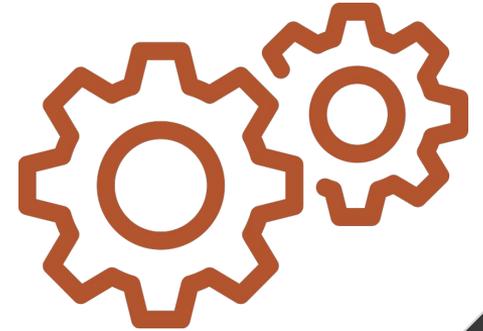
BUSINESS, MANAGEMENT, AND INFORMATION

- Intro to Marketing & Business
- Business Management, Leadership & Coaching
- Sports & Entertainment Marketing
- Starting Your Own Business – Entrepreneurship
- Business & Personal Finance
- AP Computer Science



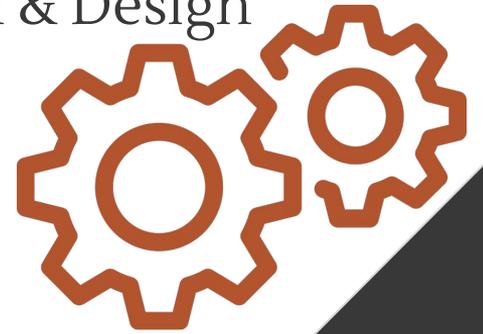
CONSTRUCTION CAREERS

- ****NEW**** Introduction to Construction (1 hr)
- ****NEW**** Woodworking
- ****NEW **** Construction Trades I
- ****NEW**** Construction Trades II



ENGINEERING AND MANUFACTURING

- Principles of Engineering
- Intro to Engineering & Design
- Advanced Independent Engineering Design
- CAD for Architecture 1 & 2
- Advanced Independent Architecture Research & Design
- FAB Lab 1 & 2
- Robotics 1 & 2
- Advanced Engineering Design 1 & 2
- Manufacturing Tech 1 & 2
- Advanced Manufacturing Tech
- Weldments
- Finite Element Analysis



HEALTHCARE CAREERS

- Emergency Medical Responder (EMR)
- (CITS) Healthcare Occupations
- (CITS) Intro to Nursing
- Anatomy and Physiology
- (CITS) Anatomy and Physiology



EMERGENCY RESPONDER CAREERS

- Emergency Medical Responder (EMR)
- ****NEW**** Fire Science
- ****NEW**** Forensic Science
- ****NEW**** Intro to Law Enforcement
- Civil and Criminal Law
- (CITS) Civil and Criminal Law



HUMAN SERVICES: LAW AND LAW ENFORCEMENT

- ****NEW**** Intro to Law Enforcement
- Civil and Criminal Law
- (CITS) Civil and Criminal Law



HOSPITALITY CAREERS: CULINARY

- Intro to Cooking
- ****NEW**** Intro to Baking (2 hr block)
- ****NEW**** Meal Prep and Packaging
- ****NEW**** Advanced Culinary



HUMAN SERVICES: CHILDCARE AND EDUCATION CAREERS

- Child Development / Child Psychology
- Early Childhood and Education Professions (2 hr block)
- Pathways 2 Teaching
- (CITS) Pathways 2 Teaching
 - *(this CITS course has no minimum requirements, EVERYONE is eligible for college credit!)*





NEW: THIS YEAR
WE WILL INDUCT
OUR FIRST
MINNESOTA
TECHNICAL
HONOR SOCIETY
GROUPS!

CTE WORKS!

Helping All Minnesotans Achieve Their Career and College Aspirations.

247,970

COMBINED NUMBER
OF SECONDARY
AND POSTSECONDARY STUDENTS
enrolled in career and technical
education (CTE) courses in 2019

SECONDARY

92%

4-year graduation
rate for all CTE
concentrators.

(Students who completed
240 CTE course hours
within one career field)

65%

CTE concentrators
who graduated
and go on to
postsecondary.

POSTSECONDARY

80%

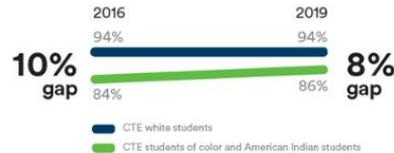
CTE concentrators
who graduated or
continued their
education.

86%

Students placed
or retained in
employment.

(By the end of the 2nd
quarter following the year
they completed a CTE
program)

4-year graduation gaps are closing
for CTE secondary students



Meeting workforce needs in 2020



Percent of jobs that will
require postsecondary
education and training
beyond high school.