



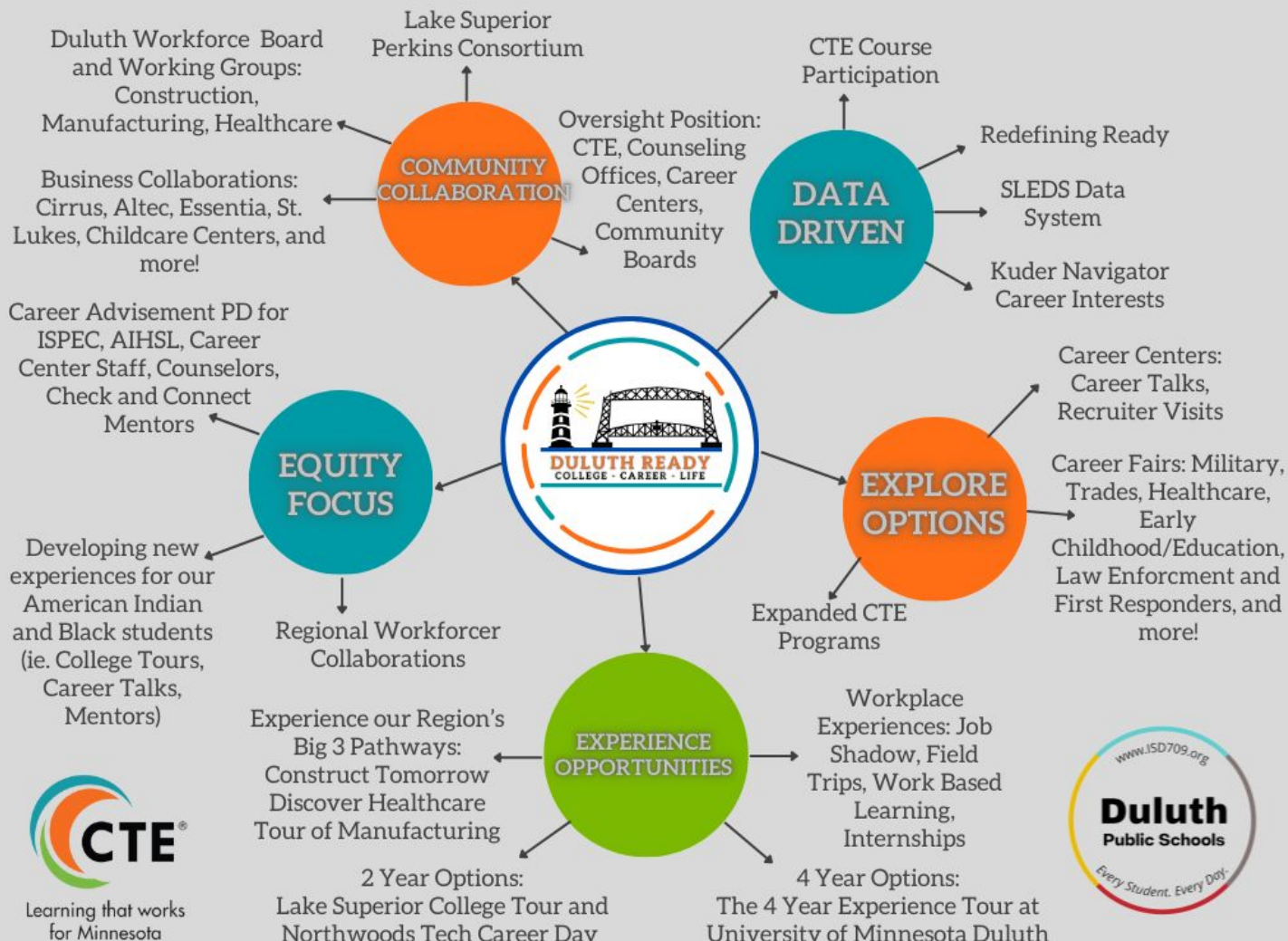
# CAREER AND TECHNICAL EDUCATION

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ISD 709 Duluth Public Schools  
Danette Seboe, CTE Coordinator  
February 2025

# CONNECTING THE DOTS: STARTING TO PUT THE PIECES TOGETHER!

# CTE IN THE BIG PICTURE



# PLANNING TOOLS FOR STUDENTS



Course  
Registration  
Guide  
2025-2026


Grades  
9-12

1




New Icons  
and Colors:  
Career Fields,  
CTE, College  
Credit

Course  
Progression  
Maps

## Emergency Response, continued

<b>Course # 232300</b>	<b>Course Name: Civil and Criminal Law</b>		
		Prerequisite: None	Credits: .5
		Meets Graduation Requirement: ELECTIVE	Sem: 1 or 2
Grades: <b>11 12</b>			

**Course Description:** This course will help students gain an introductory level of understanding of the American legal system through the study of the criminal and civil justice systems. Units of study will include a historical perspective on the judicial system, case studies, mock trial simulations, and application of law to current issues.

<b>Course # 232400</b>	<b>Course Name: CITS Civil and Criminal Law</b>		
		Prerequisite: None	Credits: .5
		Meets Graduation Requirement: ELECTIVE	Sem: 1 or 2
Grades: <b>11 12</b>		<b>College Credit: FDLTCC, LAWE 1005 Seeking Careers in Criminal Justice (3 cr)</b>	

**Course Description:** This course will help students gain an introductory level of understanding of the American legal system through the study of the criminal and civil justice systems. Units of study will include a historical perspective on the judicial system, case studies, mock trial simulations, and application of law to current issues.

## Engineering, Manufacturing, & Technologies

**CAREER FIELD:**  
Engineering, Manufacturing,  
& Technology



### Department Course Progression Map

**Aviation** Intro to Aviation, Aerospace History, and Aerospace Engineering Design Aerospace Physics  
**Automotive** Auto Basics: Brakes and Engines Auto Basics: Transmissions and Suspensions ▶ Advanced Automotive  
**Construction** Intro to Construction ▶ Construction Trades I ▶ Construction Trades II Woodworking  
**Engineering** Intro to Eng Des ▶ Principles of Eng Des ▶ Adv Eng Des I ▶ Adv Eng Des II ▶ Adv Ind Eng Des  
 ▶ Simulation: Finite Element Analysis  
 ▶ Weldments  
 ▶ Sustainable Design  
Completion of Intro & Principles opens up next levels

**Fab Lab Courses:** ▶ Fab Lab 1 ▶ Fab Lab 2

### Manufacturing

Manufacturing Technologies ▶ Manuf. Tech. I ▶ Manuf. Tech. II ▶ Adv. Manuf. Tech.



### Architecture:

CAD for Architecture I ▶ CAD for Architecture II ▶ Adv. Ind. Arch. Research & Design

### Robotics Courses

Robotics 1 ▶ Robotics 2

## Aviation

<b>Course # 222931-222932</b>	<b>Course Name: Introduction to Aviation, Aerospace History, and Aerospace Engineering Design</b>		
		Prerequisite: None	Credits: 1.0
		Meets Graduation Requirement: ELECTIVE	Sem: YEAR LONG
Grades: <b>10 11 12</b>			

**Course Description:** Students gain a foundational understanding of the science of flight and typically include the history, regulations, and possible career paths within the aviation industry. Aviation courses usually cover physics, the relationships of weight and balance, principles of navigation and flight control, ground and airport operations and services, and Federal Aviation Agency regulations

# PATHWAY MAPPING IN

Duluth Public Schools College, Career, and Business

Help you through exploring all the options, help you that excite and motivate you, and get you whatever you decide your next step will be. Click below to learn more about exciting Career Pathways at Duluth Public Schools. Every student's path is unique and the options are endless!



Please note many of these documents are still in progress and in draft form.



## Career Pathway: Law, Public Safety, Corrections, and Security



DECC

From CareerOneStop:

The law, public safety, corrections, and security career cluster is all about protecting and serving the public. People working in this sector deal with protecting life and property, enforcing laws, providing legal counsel, sentencing defendants, and rehabilitating offenders.

What makes up this cluster?

- The major employers in public safety are government organizations at the city or county, state, and federal levels.
- First responders such as fire and police departments, share a mission to keep people and property safe, as do the workers who patrol city streets, coastal waters, ski slopes, and swimming beaches.
- Laws guide relationships among people, institutions, and government; workers in the law sector enforce these laws, and sometimes create them.
- Lawyers conduct research, prepare documents, gather testimony, and argue cases before judges or juries. Judges interpret laws and sentence defendants.
- The corrections sector consists of city and county jails, state and federal prisons, community correctional facilities, and juvenile detention centers.

Foundational Courses	Enhancement Courses	Recommended Supporting Courses
<ul style="list-style-type: none"> <li>● Introduction to Fire Science</li> <li>● CITS Introduction to Law Enforcement and Community Relations</li> <li>● Emergency Medical Response</li> </ul>	<ul style="list-style-type: none"> <li>● Forensic Science</li> <li>● Civil &amp; Criminal Law and CITS Civil &amp; Criminal Law</li> <li>● American Government &amp; CITS American Government</li> <li>● Emergency Medical Technician 1</li> <li>● Emergency Medical Technician 2</li> </ul>	<ul style="list-style-type: none"> <li>● Public Speaking</li> <li>● Interpersonal Communication</li> <li>● Psychology &amp; CITS Psychology</li> <li>● Sociology &amp; CITS Sociology</li> <li>● CITS Anishinaabeg of Lake Superior</li> <li>● Ethnic Studies</li> <li>● World Languages including American Sign Language</li> </ul>

Work Based Learning Opportunities	
<ul style="list-style-type: none"> <li>● Field Trips / Industry Experiences</li> <li>● Job Shadow</li> <li>● Internship/Work Experience</li> </ul>	<ul style="list-style-type: none"> <li>● Career Talks</li> <li>● Guest Speakers</li> </ul>

Credits and Credentials Available	
<ul style="list-style-type: none"> <li>● Fond Du Lac Tribal and Community College Law Enforcement Requirements                             <ul style="list-style-type: none"> <li>○ LAWE 1001 Introduction to Criminal Justice (3 cr)</li> <li>○ LAWE 1005 Seeking Careers in Criminal Justice (3 cr)</li> </ul> </li> <li>● 2 year EMR Certification</li> <li>● Emergency Medical Technician (testing cannot be completed until after student turns 18)</li> </ul>	

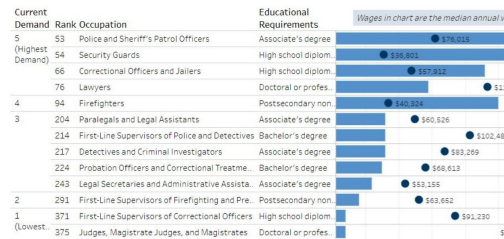
Post Secondary Opportunities in Duluth/Superior and Northeastern Minnesota	
● Community/Trades/Business Training and Certification Opportunities	
● Lake Superior College	<ul style="list-style-type: none"> <li>○ Emergency Medical Technician</li> <li>○ Fire Fighter</li> <li>○ Fire Medic</li> <li>○ Fire Science and Administration</li> <li>○ Fire Technology</li> <li>○ Wildland Firefighting</li> <li>○ Paralegal Studies</li> <li>○ Legal Secretary</li> </ul>
● Fond du Lac Tribal and Community College	<ul style="list-style-type: none"> <li>○ Criminal Justice / Peace Officer</li> </ul>
● Minnesota North	<ul style="list-style-type: none"> <li>○ Park Ranger Law Enforcement Academy</li> <li>○ Peace Officer Education</li> <li>○ Wildland /Wildlife Law Enforcement</li> <li>○ Emergency Medical Technician</li> <li>○ Paramedic</li> </ul>
● Northwood Technical College- Superior	<ul style="list-style-type: none"> <li>○ Criminal Justice Studies</li> <li>○ Emergency Medical Technician</li> <li>○ Emergency Medical Technician - Paramedic</li> <li>○ Paramedic Technician</li> </ul>
● University of Minnesota, Duluth	<ul style="list-style-type: none"> <li>○ Tribal Natural Resource Stewardship, Economics, and Law</li> <li>○ Tribal Sovereignty and Federal Indian Law</li> <li>○ Criminology</li> <li>○ Pre-Law</li> <li>○ Law School (Graduate)</li> </ul>
● College of St. Scholastica	<ul style="list-style-type: none"> <li>○ Pre-Law</li> </ul>
● University of Wisconsin, Superior	<ul style="list-style-type: none"> <li>○ Criminal Justice</li> <li>○ Legal Studies</li> </ul>

Alumni Highlights	
●	What are they up to now? Highlight 1-3 fairly recent alumni who are working in this pathway.

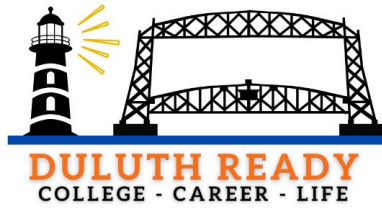
## MN DEED Career Pathways in Demand Tool



Northeast Minnesota Occupations in Demand, 2024 Reset Filters







# Redefining Ready

Our goal is to provide students with rigorous academic programs, personalized and career-specific learning experiences, along with social and emotional skills that prepare them to be global citizens in an ever-changing world.

WHAT  
DATA  
WILL WE  
USE TO  
MEASURE  
SUCCESS?  
  
SO MANY  
OPTIONS!  
  
TEAM WILL  
CHOOSE

## Career Readiness Indicators

Career Cluster identified and two or more of the following benchmarks:

- 90% Attendance
- 25 hours of Community Service
- Workplace Learning Experience
- Industry Credential
- Dual Credit CTE Course (CITS or Articulated Credit)
- Two or more organized Co-Curricular Activities

## Life Readiness Indicators

- Reality Check completed
- Service Learning Hours or Credits
- Personal Learning Plan complete
- Successful completion of Personal Finance course
- Successful completion of College, Career, & Life Readiness 11 course
- On Track for Graduation
- Successful completion of SEB curriculum
- Growth Mindset training
- Team experiences
- Identified support systems

## College Readiness Indicators

GPA of 2.8 out of 4.0 and one or more of the following indicators:

- Advanced Placement Exam (score 3+)
- Advanced Placement Course (Grade of A, B, or C)
- CITS or PSEO English or Math (Grade of A, B, or C)
- Algebra II (Grade A, B, or C)

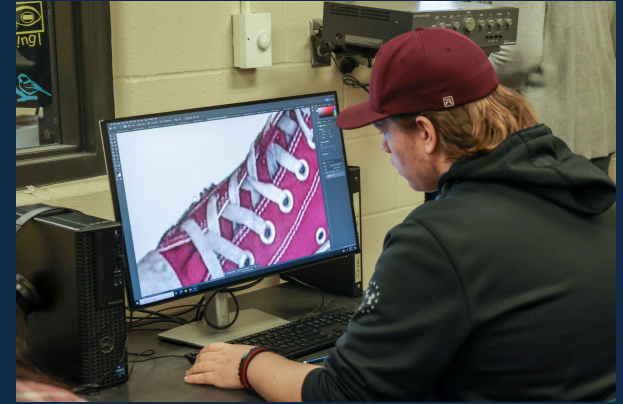
Standardized Testing Benchmarks

- ACT Exam (Reading 18+, Science 23+, Math 22+)
- College Readiness Placement Assessment

Additional Factors that Contribute to College Success

- Earning As, Bs, Cs
- FAFSA Completion
- Enrollment in CTE Sequence
- College academic advising
- Senior year math class
- Math beyond Algebra II

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 non-concentrators to be employed full time and earn 12-40% more than their peers in the first 5-8 years after graduation.



The high school graduation rate for Minnesota students who are CTE concentrators (enrolled in two or more CTE courses) is 92%.

Nearly two-thirds (65%) of Minnesota high school CTE concentrators enroll in postsecondary for further education and career development.

In Minnesota, 86% of postsecondary students completing a CTE program were placed in employment by the end of the second quarter following program completion.

Nearly two-thirds (65%) of jobs will require some postsecondary training and/or education beyond high school.

# 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!**





# HIGH QUALITY CTE PROGRAMS

## THE ELEMENTS OF HIGH QUALITY CTE:

- STANDARDS-ALIGNED AND INTEGRATED CURRICULUM: DEVELOPMENT OF CTE PROGRAM CURRICULUM AND STANDARDS.
- INTEGRATED NETWORK OF PARTNERSHIPS: BUSINESS AND COMMUNITY PARTNERSHIPS TO SUPPORT CTE PROGRAM ALIGNMENT AND SUCCESS.
- COURSE SEQUENCING AND CREDENTIALS: COORDINATION OF COURSEWORK PROGRESSION IN CTE PROGRAMS AND CAREER PATHWAYS THAT LEAD TO RECOGNIZED POSTSECONDARY CREDENTIALS.
- CAREER-CONNECTED LEARNING AND EXPERIENTIAL LEARNING: CAREER PLANNING AND CAREER-BASED EXPERIENTIAL LEARNING OPPORTUNITIES.
- INDUSTRY-SPECIFIC FACILITIES, EQUIPMENT, TECHNOLOGY AND MATERIALS: FACILITIES AND EQUIPMENT SPECIFIC TO WORK IN GIVEN CAREER FIELDS.
- WORK-BASED LEARNING (WBL): FIRSTHAND, ONSITE STUDENT ENGAGEMENT OPPORTUNITIES IN A GIVEN CAREER FIELD.
- DATA FOR PROGRAM IMPROVEMENT AND ADVOCACY: USE OF DATA FOR CONTINUOUS PROGRAM IMPROVEMENT AND ADVOCACY.
- STUDENT LEADERSHIP DEVELOPMENT: LEADERSHIP DEVELOPMENT THROUGH EMBEDDED CLASSROOM ACTIVITIES AND CAREER AND TECHNICAL STUDENT ORGANIZATION (CTSO) OPPORTUNITIES.
- ACCESS, EQUITY AND INCLUSION: CTE PROGRAM PROMOTION AND SUPPORT FOR ALL STUDENT POPULATIONS.
- STUDENT-CENTERED INSTRUCTION: INSTRUCTIONAL STRATEGIES THAT SUPPORT ATTAINMENT OF CAREER-RELEVANT KNOWLEDGE AND SKILLS.
- PROFESSIONAL DEVELOPMENT FOR KNOWLEDGEABLE EXPERTS: QUALIFICATIONS AND PROFESSIONAL DEVELOPMENT OF SECONDARY CTE TEACHERS.

# ISD 709 PROGRAMS OF STUDY

Duluth Public Schools

2025-2026 School Year



# ISD 709 CTE BY THE NUMBERS

4393

Semester Course  
Enrollments in  
24-25

59

Sections of CTE  
Courses at  
Denfeld 24-25

96

Sections of CTE  
Courses at East  
24-25

2079

Semester Course  
Enrollments in 23-24

49

Sections of CTE Courses  
at Denfeld 23-24

57

Sections of CTE Courses  
at Denfeld 23-24