



REQUEST TO ADD/REVISE A COURSE

Forest Lake Area Schools

Primary Contact: Mike Miron	Department: CTE	
Career Pathway: Transportation Careers/Heavy Equipment	Subject: Trades & Industry	
Grade Level(s)/Building(s): 11-12/FLAHS	Proposed Course Start Date: Fall 2026	
Department Members involved in the development of the course proposal: Industrial Technology, Molly Bonnett, Trade & Industry Advisory Board		
Is your department currently in Instructional Review?		Requesting FastTrack due to an urgent department need or concern? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<input type="checkbox"/> Yes <i>* For all departments in the instructional review process, new courses will be developed as part of that work.</i>	<input checked="" type="checkbox"/> No What approximate year is your department scheduled to begin?	

PART I (complete with department colleagues)

COURSE PROPOSAL NARRATIVE

A. Course Information

Proposed Course Title: Construction Explorations	Length of Course: Semester
Course Description as it will appear in the registration guide: This course provides students with an introduction to the basic equipment used in the construction industry. Students learn about basic equipment operations and job responsibilities. This course prepares students to use concepts pertaining to safety, maintenance, mathematics, and communication that operating engineers may experience.	

B. Background: Describe the process that led to this request.

Gaps/Needs State the current issues and gaps for why this course is needed. <i>Key considerations: What standards are currently not being met? What skills are not currently being taught? What data support these conclusions? What other relevant needs would this course address? Can an existing course be modified to address the same concerns? Why or why not?</i> No courses such as this are currently offered in our system. FLAS was presented with this partnership opportunity by the Local 49 because of our robust CTE programming. They believe that we have the infrastructure in place to provide
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this learning opportunity to students. Students have the opportunity to earn college credit and time toward the union apprenticeship program.

Standards | Indicate the state, national, or professional standards to which this course could be aligned.

Courses align with Local 49 Union Standards for apprenticeship.

MN CTE Frameworks:

CE.01.04 Research the scope of career opportunities available and the requirements for education, training, certification, and licensure

CE.01.05 Integrate changing employment trends, societal needs, and economic conditions into career planning

CE.01.06 Recognize the role and function of professional organizations, industry associations, and organized labor in a productive society

CE.01.09 Develop a career plan that reflects career interests, pathways, and postsecondary options

TB.01.02 Understand that regulations influence transportation design and execution

TB.01.03 Communicate ideas using appropriate industry terminology

Rationale | How does this course support the needs outlined above?

Key Considerations: Describe how this course supports the district strategic plan and/or the Middle School Course of Study redesign and learning statements. Describe the Pathways/Design opportunities this new course would create for your students & department. Include any relevant advances in your content area that support the need for this new course.

- The International Union of Operating Engineers Local 49 has partnered with Minnesota Virtual Academy and Stride Career Prep to offer the Operating Engineers Pathway.
- Students can take four, one-semester classes to explore careers in equipment operation.
- Each year there are multiple opportunities for students to participate in hands-on training opportunities, including visits to contractors.
- Students will receive credit toward Local 49's Apprenticeship Program based on the number of courses completed and events attended.
- Participants have access to career counseling and guidance into the operating engineer field for apprenticeships.
- Students may enroll in one or more courses. They don't need to commit to all courses and can be enrolled based on skill and educational level. These courses have flexible schedules to allow students to remain enrolled at their brick-and-mortar schools.
- Classes are eligible for high school credit, college credit with North Hennepin Community College and apprenticeship credit with the International Union of Operating Engineers' apprenticeship program.

ADDITIONAL FACTORS TO CONSIDER

	Consider & Describe Impact
Similar programs in other departments/grade levels	Automotive
Credit and prerequisite considerations	

Anticipated major expenditures (specialized equipment, software, textbooks)	Sponsored
Space Considerations (classroom/lab needs, storage, furniture, etc.)	Potential off-site venue
Schedule Considerations (time of year, block vs. skinny, etc.)	Potentially paired with another course to create a "block" at the end of the day.
Technology Considerations (access to current software & equipment, etc.)	TBD
Other	

PART II (Complete with T&L following building administrative approval)

C. Goals and Learning Outcomes

<p>Long Term Goals for the Course Identify desired results - what will students be able to do independently?</p> <p>Students will be able to make progress toward becoming a heavy equipment operator.</p>
<p>Standards Indicate the state, national or professional standards to which this course is aligned. <small>(Copy and Paste standard and benchmarks)</small></p> <p><i>Courses align with Local 49 Union Standards for apprenticeship.</i></p> <p>MN CTE Frameworks: CE.01.04 Research the scope of career opportunities available and the requirements for education, training, certification, and licensure CE.01.05 Integrate changing employment trends, societal needs, and economic conditions into career planning CE.01.06 Recognize the role and function of professional organizations, industry associations, and organized labor in a productive society CE.01.09 Develop a career plan that reflects career interests, pathways, and postsecondary options TB.01.02 Understand that regulations influence transportation design and execution TB.01.03 Communicate ideas using appropriate industry terminology</p>
<p>Essential Learning & Skills Describe the essential learning and skills addressed in this course. Students will know and be skilled at:</p> <p>Attached.</p>

D. Course Content

<p>Course Outline Add units and any key experiences or projects that students will engage in.</p> <p>Attached.</p>

E. Budget Considerations

Materials, Equipment, Supplies | List any new resources not already available necessary for this course. This might include subscriptions, technology, or other various resources needed for the course.

<div>___ Textbooks</div> <div>Title(s):</div> <div>Approximate total cost:</div>	<div>___ Digital Curriculum Resources</div> <div>Title(s):</div> <div>Approximate total cost:</div> <div>One-time cost or annual renewal?</div>
<div>___ Other Curriculum Materials (consumables, supplies, ancillaries, etc.)</div> <div>Materials:</div> <div>Consumable/non-consumable?</div> <div>Approximate total cost:</div>	<div>___ Technology Devices/Equipment/Hardware</div> <div>Devices/equipment needed:</div> <div>Approximate cost:</div>
<div>___ Staff Development</div> <div>Staff Development description:</div> <div>Approximate cost:</div> <div>Frequency (one time? yearly?):</div>	<div>_____ Follow Up Plan</div> <div>Additional Staff Development</div> <div>Check in Meetings</div>

FINAL APPROVAL PRIOR TO SCHOOL BOARD MEETING

John-Paul Jacobson

Director of Teaching and Learning Signature

November 6, 2025

Proposed School Board Meeting Date:

CAR022E2-ALV Construction Exploration INTL

Day	Lesson Name	Assignment Given (if applicable)	Assignment Due (if applicable)
1	Unit 1: DCA Introduction 1.01 DCA Introduction	1.01 DCA Discussion: Introduction	1.01 DCA Discussion: Introduction
2	Unit 2: Exploring Heavy Equipment 2.01 Nomenclature Lesson: Crawler Mounted Equipment (Part 1) 2.02 Nomenclature Lesson: Crawler Mounted Equipment (Part 2)		
3	Unit 2: Exploring Heavy Equipment 2.03 Nomenclature Lesson: Rubber Tired Equipment (Part 1) 2.04 Nomenclature Lesson: Rubber Tired Equipment (Part 2)		
4	Unit 2: Exploring Heavy Equipment 2.05 Nomenclature Lesson: Rubber Tired Equipment (Part 3) 2.06 Nomenclature Lesson: Compaction Equipment		
5	Unit 2: Exploring Heavy Equipment 2.07 Nomenclature Lesson: Grading and Ditching Equipment (Part 1) 2.08 Nomenclature Lesson: Grading and Ditching Equipment (Part 2)		
6	Unit 2: Exploring Heavy Equipment 2.09 Nomenclature Lesson: Revolving Equipment (Part 1) 2.10 Nomenclature Lesson: Revolving Equipment (Part 2)		
7	Unit 2: Exploring Heavy Equipment 2.11 Nomenclature Lesson: Revolving Equipment (Part 3)		
8	Unit 2: Exploring Heavy Equipment 2.12 Quiz: Equipment "Families"	2.12 Quiz Equipment "Families"	2.12 Quiz: Equipment "Families"
9	Unit 3: Effective Communications in Construction 3.01 Effective Communications in Construction Presentation		
10	Unit 3: Effective Communications in Construction 3.02 Backhoe Hand Signals Video		
11	Unit 3: Effective Communications in Construction 3.03 Earth Moving Signals Video Activity		
12	Unit 3: Effective Communications in Construction 3.04 DCA Crane Signals		
13	Unit 3: Effective Communications in Construction 3.05 DCA Audible Alarms		

14	Unit 3: Effective Communications in Construction 3.06 Colors and Signs		
15	Unit 3: Effective Communications in Construction 3.06 Colors and Signs		
16	Unit 3: Effective Communications in Construction 3.07 Quiz: Effective Communications	3.07 Quiz: Effective Communications	3.07 Quiz: Effective Communications
17	Unit 4: Career Pathways and Quality of Life 4.01 History of American Construction		
18	Unit 4: Career Pathways and Quality of Life 4.02 Discussion: Then & Now - Quality of Life	4.02 Discussion: Then & Now - Quality of Life	
19	Unit 4: Career Pathways and Quality of Life 4.03 DCA Quality of Life		4.02 Discussion: Then & Now - Quality of Life
20	Unit 4: Career Pathways and Quality of Life 4.04 Graded Assignment: Explore More: Wages and Employment Outlook	4.04 Graded Assignment: Explore More: Wages and Employment Outlook	
21	Unit 4: Career Pathways and Quality of Life 4.04 Graded Assignment: Explore More: Wages and Employment Outlook (cont.)		4.04 Graded Assignment: Explore More: Wages and Employment Outlook
22	Unit 4: Career Pathways and Quality of Life 4.05 DCA Industry Choices		
23	Unit 4: Career Pathways and Quality of Life 4.06 Graded Assignment: Career Pathways Pros and Cons Reflection	4.06 Graded Assignment: Career Pathways Pros and Cons Reflection	
24	Unit 4: Career Pathways and Quality of Life 4.06 Graded Assignment: Career Pathways Pros and Cons Reflection (cont.)		4.06 Graded Assignment: Career Pathways Pros and Cons Reflection
25	Unit 5: Program Requirements 5.01 DCA Program Requirements		
26	Unit 5: Program Requirements 5.02 Quiz: Requirements & Jobsite Characteristics Quiz	5.02 Quiz: Requirements & Jobsite Characteristics	5.02 Quiz: Requirements & Jobsite Characteristics
27	Unit 5: Program Requirements 5.03 DCA Federal Requirements Matching Activity		
28	Unit 5: Program Requirements 5.03 DCA Federal Requirements Matching Activity (cont.)		
29	Unit 5: Program Requirements 5.04 Graded Assignment: Program Requirements Pros and Cons Reflection	5.04 Graded Assignment: Program Requirements Pros and Cons Reflection	

30	Unit 5: Program Requirements 5.04 Graded Assignment: Program Requirements Pros and Cons Reflection (cont.)		5.04 Graded Assignment: Program Requirements Pros and Cons Reflection
31	Unit 6: Safety and Risk 6.01 DCA Safety and Risks		
32	Unit 6: Safety and Risk 6.02 Graded Assignment: Explore More: Safety and Risk Statistics	6.02 Graded Assignment: Explore More: Safety and Risk Statistics	
33	Unit 6: Safety and Risk 6.02 Graded Assignment: Explore More: Safety and Risk Statistics (cont.)		6.02 Graded Assignment: Explore More: Safety and Risk Statistics
34	Unit 6: Safety and Risk 6.03 Discussion: Then & Now – Safety	6.03 Discussion: Then & Now – Safety	
35	Unit 6: Safety and Risk 6.03 Discussion: Then & Now- Safety 6.04 Technology		6.03 Discussion: Then & Now – Safety
36	Unit 6: Safety and Risk 6.05 Grove GMK6400 Crane Operations		
37	Unit 6: Safety and Risk 6.06 Graded Assignment: Safety and Risk Pros and Cons Reflection	6.06 Graded Assignment: Safety and Risk Pros and Cons Reflection	
38	Unit 6: Safety and Risk 6.06 Graded Assignment: Safety and Risk Pros and Cons Reflection (cont.)		6.06 Graded Assignment: Safety and Risk Pros and Cons Reflection
39	Unit 7: Conclusion 7.01 Graded Assignment: Capstone	7.01 Graded Assignment: Capstone	
40	Unit 7: Conclusion 7.01 Graded Assignment: Capstone (cont.)		
41	Unit 7: Conclusion 7.01 Graded Assignment: Capstone (cont.)		
42	Unit 7: Conclusion 7.01 Graded Assignment: Capstone (cont.)		7.01 Graded Assignment: Capstone
43	Unit 8: Construction Career Exploration Project 8.01: Graded Assignment: Construction Career Exploration Project	8.01: Graded Assignment: Construction Career Exploration Project	
44	Unit 8: Construction Career Exploration Project 8.01: Graded Assignment: Construction Career Exploration Project (cont.)		
45	Unit 8: Construction Career Exploration Project 8.01: Graded Assignment: Construction Career Exploration Project (cont.)		8.01: Graded Assignment: Construction Career Exploration Project