

### **Technology Education**

#### **Welding Curriculum Change Proposal**

#### **Presenters**

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### **Proposal**

The purpose of this presentation is to propose a modification of the Technology Education – Welding Program to align with both State and nationally recognized programs of study.

#### Rationale

- Welding is a process of fabrication and sculpture that joins materials by causing fusion. The U.S. Bureau of Labor Statistics (BLS) places welders into a group that includes solderers, cutters and brazers. According to the BLS, jobs for these professionals are anticipated to grow by 4% from 2014 to 2024 (Bureau of Labor Statistics, 2016).
- According to a report issued by the Kane County Department of Employment and Education, manufacturing is the top industry for this area.

## Course Modification/Prerequisite and Grade Level Changes

Course:	Sections:	Replacement:	Course Code:
Fundamentals of Welding	All	None-New Course	(State Code: 13207A003)
Metals Technology I	All	Welding I	TE514GE (State Code: 13207A001)
Metals Technology II	All	Welding II	TE534GE or TE554GE (State Code: 13207A002)

# Proposed Program and Total Curriculum Integration

#### **District U-46 Welding Program Sample Student Schedule**

Period	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
1	Algebra I	Geometry	Algebra III - IV	Math Elective
2	English I	English II	English III	English IV
3	Biology	Chemistry	Physics	Advanced Placement Elective (AP) Social Studies, Civics and Econ
4		Lunch		
5	PE I	PE II/Health	PE III	PE IV
6	Study Hall	Study Hall	Advanced Placement (AP) Elective	Elective
7	Elective	Elective	Welding I	Welding II
8	Elective	Fundamentals of Welding	•	

#### Program Uniqueness

- Welding Program will be develop as a Regional Career Pathway
- Member Districts: D300, D301, D303, U-46
- Northern Kane County Regional Analysis
- Access to CTE Programming
- Shared Costs
- Savings to Member Districts

# Recommendation for Implementation

- Fall 2018 approved Program of Study available for student registration.
- Spring 2021 data regarding program outcomes available for all stakeholders.

#### Career Pathway/Program of Study Implementation Cost

▶ Elgin High School has been identified to house the District's Welding Career Pathway. Renovation of the current metals technology lab will be done with state and federal funds. The current lab has not been updated in approximately 20 years. The table on the next page indicates projected costs along with funding source to transition the metals technology lab into a state of the art welding lab.

#### Career Pathway/Program of Study Implementation Cost

Category:	Description:	Projected Costs:	Funding Source:
Equipment	Includes but not limited to installation of new welding booths, MIG welders, TIG welders, portable welding booths, plasma cutter, welding defect kit and bend tester	203,000.00	Perkins/ CTEI
Supplies	Includes but not limited to safety equipment, welding curtains, test packets, filler materials, oxygen tanks, small hand tools and torches	66,000.00	Perkins/CTEI
Construction Costs:	Includes but not limited to installing welding hoods, HVAC, electrical, paint, flooring, removal of old equipment and lighting upgrades	85,000	District CTEI/Perkins

## Textbook, Technologies and Instructional Materials

No changes needed to textbook, technologies, and instructional materials to implement this program of study.

## **Program Evaluation**

As part of the accreditation process, a program evaluation plan was drafted. The program evaluation process addresses the quality of the program, resource allocation, and post-secondary outcomes by means of surveys. Program surveys are scheduled to be conducted annually beginning May 2019.

# Additions/Deletions in Student Report Card

Course Name:	Current Credit Earned:	Proposed Credit Earned:
Fundamentals of Welding	0	2.0
Welding I	2.0	4.0
Welding II	2.0	4.0

