Valid Credentials: General Rules

Introduction

This document is designed to assist districts in implementing the requirements and in ensuring that PreK-12 educators are assigned to classes they are validly credentialed to teach. It identifies the credentials required for teaching specific courses. Teachers are to hold one of the credentials identified in this document for each course they teach.

Elementary Credentials

Courses in the elementary grade range, other than PE, do not appear in this document, because a general rule for elementary credentials applies to all such courses. The general rule for elementary credentials, including Kindergarten-Primary (KP), Kindergarten-Elementary (KE), Elementary (EL), Early Childhood (EC), Primary (PF), and endorsements extending the grade range of EC credentials, allows the teachers who hold these credentials to teach any course within the relevant grade range. An exception to this rule is for those initially hired on or after July 1, 2013, to teach physical education. These teachers must be licensed in PE and are included in this document.

Community School Courses

Courses that are taught at a community school, with the exception of special education courses, can be taught by an educator who holds any valid teaching credential including substitute teaching licenses.

Special Education

For courses with student populations SE or SP, any teacher holding an education of the handicapped certificate (EH) or an intervention specialist license (PI, IL or ES) can teach students—at the grade levels for which the teacher is certificated or licensed—with any disability.*

*Exceptions:

- 1. Any SE or SP course that is comprised of all deaf or hard of hearing students must be taught by someone certificated or licensed to teach deaf or hard of hearing students. This includes the following:
 - EH 196010, 196015, 196070 (grades K-12)
 - IL 196116 (grades P-12)
- 2. Any SE or SP course that is comprised of all visually impaired students must be taught by someone certificated or licensed to teach visually impaired students. This includes the following:
 - EH 196110 (grades K-12)
 - IL 196109 (grades P-12)

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
175001 - Engineering Design	AD - Adolescence to Young Adult (7-12)	132040 - Earth Sciences		7 - 12
	AD - Adolescence to Young Adult (7-12)	132035 - Life Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132034 - Life Sciences/Earth		7 - 12
	AD - Adolescence to Young Adult (7-12)	132150 - Physical Science: Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132010 - Integrated Science		7 - 12
	AD - Adolescence to Young Adult (7-12)	110094 - Integrated Mathematics		7 - 12
	AD - Adolescence to Young Adult (7-12)	101315 - Industrial Technology		7 - 12
	AD - Adolescence to Young Adult (7-12)	132045 - Earth Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132036 - Life Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132030 - Life Sciences		7 - 12
	AD - Adolescence to Young Adult (7-12)	132160 - Physical Science/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132020 - Physical Science/Physics/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132046 - Earth Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132020 - Physical Science/Physics/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132030 - Life Sciences		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	110094 - Integrated Mathematics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132036 - Life Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132010 - Integrated Science		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132034 - Life Sciences/Earth		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132150 - Physical Science: Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132035 - Life Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132045 - Earth Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	101315 - Industrial Technology		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132046 - Earth Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132040 - Earth Sciences		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132160 - Physical Science/Physics		7 - 12
	CH - Comprehensive High School (7-12)	130322 - Physics (9-12)		9 - 12
	CH - Comprehensive High School (7-12)	130300 - Physical Science		7 - 12
	CH - Comprehensive High School (7-12)	130312 - Chemistry (9-12)		7 - 12
	CH - Comprehensive High School (7-12)	130410 - Earth Science (9-12)		7 - 12
	CH - Comprehensive High School (7-12)	130205 - Biological Science (9-12)		7 - 12
	CH - Comprehensive High School (7-12)	130302 - Physics		7 - 12
	CT - Career Technical (4-12)	172303 - Manufacturing Occupations		4 - 12
	CT - Career Technical (4-12)	070203 - Medical Lab Assisting		4 - 12
	CT - Career Technical (4-12)	172307 - Tool and Die Making		4 - 12
	CT - Career Technical (4-12)	171808 - Engineering Technologies-Process		4 - 12
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	CT - Career Technical (4-12) CT - Career Technical (4-12)	171815 - Engineering Technologies-PLTW 172000 - Chemical Laboratory Assisting		4 - 12 4 - 12
	CT - Career Technical (4-12) CT - Career Technical (4-12)	172000 - Chemical Laboratory Assisting 172302 - Precision Machining		4 - 12
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	CT - Career Technical (4-12)	171650 - Energy Science		4 - 12
	CT - Career Technical (4-12)	171802 - Manufacturing Engineering Technology		
	CT - Career Technical (4-12)	171503 - Electronics		4 - 12
	CT - Career Technical (4-12)	171402 - Power Transmission		4 - 12
	CT - Career Technical (4-12)	171002 - Electrical Trades		4 - 12
	CT - Career Technical (4-12)	079950 - Practical Nurse Coordinator		4 - 12
	CT - Career Technical (4-12)	171504 - Telecommunications		4 - 12
	CT - Career Technical (4-12)	170375 - Automation and Robotics		4 - 12
	CT - Career Technical (4-12)	171809 - Engineering Technologies-Product/Service		4 - 12
	CT - Career Technical (4-12)	170100 - Air Conditioning and Heating		4 - 12
	CT - Career Technical (4-12)	171012 - Industrial Maintenance and Repair		4 - 12
	CT - Career Technical (4-12)	170380 - Manufacturing Operations		4 - 12
	CT - Career Technical (4-12)	171300 - Drafting Occupations		4 - 12
	CT - Career Technical (4-12)	160610 - Technology Education		4 - 12

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
175001 - Engineering Design	CT - Career Technical (4-12)	070912 - Pharmacy Assisting		4 - 12
	CT - Career Technical (4-12)	171801 - Engineering Technology		4 - 12
	CT - Career Technical (4-12)	172306 - Welding and Cutting		4 - 12
	CT - Career Technical (4-12)	070410 - Fitness Aide		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CT - Career Technical (4-12)	074850 - Biotechnology		4 - 12
	CT - Career Technical (4-12)	171807 - Engineering Technologies-Design		4 - 12
	CT - Career Technical (4-12)	070302 - Practical Nurse		4 - 12
	CW - Career Technical Workforce Development	070302 - Practical Nurse		4 - 12
	CW - Career Technical Workforce Development	070203 - Medical Lab Assisting		4 - 12
	CW - Career Technical Workforce Development	074850 - Biotechnology		4 - 12
	CW - Career Technical Workforce Development	172306 - Welding and Cutting		4 - 12
	CW - Career Technical Workforce Development	172303 - Manufacturing Occupations		4 - 12
	CW - Career Technical Workforce Development	172000 - Chemical Laboratory Assisting		4 - 12
	CW - Career Technical Workforce Development	172302 - Precision Machining		4 - 12
	CW - Career Technical Workforce Development	171802 - Manufacturing Engineering Technology		4 - 12
	CW - Career Technical Workforce Development	171815 - Engineering Technologies-PLTW		4 - 12
	CW - Career Technical Workforce Development	172307 - Tool and Die Making		4 - 12
	CW - Career Technical Workforce Development	170100 - Air Conditioning and Heating		4 - 12
	CW - Career Technical Workforce Development	170380 - Manufacturing Operations		4 - 12
	CW - Career Technical Workforce Development	171807 - Engineering Technologies-Design		4 - 12
	CW - Career Technical Workforce Development	170375 - Automation and Robotics		4 - 12
	CW - Career Technical Workforce Development	171650 - Energy Science		4 - 12
	CW - Career Technical Workforce Development	171402 - Power Transmission		4 - 12
	CW - Career Technical Workforce Development	171801 - Engineering Technology		4 - 12
	CW - Career Technical Workforce Development	171808 - Engineering Technologies-Process		4 - 12
	CW - Career Technical Workforce Development	171504 - Telecommunications		4 - 12
	CW - Career Technical Workforce Development	070410 - Fitness Aide		4 - 12
	CW - Career Technical Workforce Development	171809 - Engineering Technologies-Product/Service		4 - 12
	CW - Career Technical Workforce Development	171300 - Drafting Occupations		4 - 12
	CW - Career Technical Workforce Development	171012 - Industrial Maintenance and Repair		4 - 12
	CW - Career Technical Workforce Development	070912 - Pharmacy Assisting		4 - 12
	CW - Career Technical Workforce Development	171503 - Electronics		4 - 12
	CW - Career Technical Workforce Development	171002 - Electrical Trades		4 - 12
	CW - Career Technical Workforce Development	079950 - Practical Nurse Coordinator		4 - 12 KG - 12
	DS (K-12) - Designated Subject (Grades K-12) DS (K-12) - Designated Subject (Grades K-12)	132160 - Physical Science/Physics 132150 - Physical Science: Chemistry		KG - 12
	DS (K-12) - Designated Subject (Grades K-12) DS (K-12) - Designated Subject (Grades K-12)	101315 - Industrial Technology		KG - 12
	· · · · · · · · · · · · · · · · · · ·	132030 - Life Sciences		KG - 12
	DS (K-12) - Designated Subject (Grades K-12) DS (K-12) - Designated Subject (Grades K-12)	132030 - Life Sciences 132010 - Integrated Science		KG - 12 KG - 12
	DS (K-12) - Designated Subject (Grades K-12) DS (K-12) - Designated Subject (Grades K-12)	132010 - Integrated Science 132040 - Earth Sciences		KG - 12 KG - 12
	DS (K-12) - Designated Subject (Grades K-12) DS (K-12) - Designated Subject (Grades K-12)	110094 - Integrated Mathematics		KG - 12 KG - 12
	HS - High School (7-12)	130302 - Physics		7 - 12
	HS - High School (7-12)	130200 - Biological Science		7 - 12
	HS - High School (7-12)	130000 - Comprehensive Science		7 - 12
	HS - High School (7-12) HS - High School (7-12)	102000 - Comprehensive Science		7 - 12
	HS - High School (7-12)	100000 - Md.Arts 7-12 100000 - Gen Ind Techn (Gen)		7 - 12
	HS - High School (7-12)	130301 - Chemistry		7 - 12
	HS - High School (7-12)	130400 - Earth Sciences		7 - 12
	HS - High School (7-12)	110000 - Mathematics		7 - 12
	HS - High School (7-12)	101315 - Industrial Technology		7 - 12
	MA - Multi-Age PK-12	132160 - Physical Science/Physics		KG - 12
	MA - Multi-Age PK-12	132040 - Earth Sciences		KG - 12
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SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
175001 - Engineering Design	MA - Multi-Age PK-12	110094 - Integrated Mathematics		KG - 12
	MA - Multi-Age PK-12	132030 - Life Sciences		KG - 12
	MA - Multi-Age PK-12	132010 - Integrated Science		KG - 12
	MA - Multi-Age PK-12	132150 - Physical Science: Chemistry		KG - 12
	SP - Special All Grades (K-12)	110000 - Mathematics		7 - 12
	SP - Special All Grades (K-12)	101320 - Industrial Technology		KG - 12
	SP - Special All Grades (K-12)	100005 - Indust. Arts K-12		KG - 12
	SP - Special All Grades (K-12)	102000 - Ind.Arts 7-12		7 - 12
	SP - Special All Grades (K-12)	130302 - Physics		7 - 12
	SP - Special All Grades (K-12)	101315 - Industrial Technology		7 - 12
	SP - Special All Grades (K-12)	100000 - Gen Ind Techn (Gen)		KG - 12
	SP - Special All Grades (K-12)	130301 - Chemistry		7 - 12
	TM - STEM (6-12)	132010 - Integrated Science		6 - 12
	TM - STEM (6-12)	160610 - Technology Education		6 - 12
	TM - STEM (6-12)	110094 - Integrated Mathematics		6 - 12
	VO - Vocational Education	160610 - Technology Education		
	VO - Vocational Education	070912 - Pharmacy Assisting		
	VO - Vocational Education	079950 - Practical Nurse Coordinator		
	VO - Vocational Education	070302 - Practical Nurse		
	VO - Vocational Education	070410 - Fitness Aide		
	VO - Vocational Education	010100 - Agriscience		
	VO - Vocational Education	070203 - Medical Lab Assisting		
	VO - Vocational Education	171815 - Engineering Technologies-PLTW		
	VO - Vocational Education	172000 - Chemical Laboratory Assisting		
	VO - Vocational Education	172302 - Precision Machining		
	VO - Vocational Education	171802 - Manufacturing Engineering Technology		
	VO - Vocational Education	171801 - Engineering Technology		
	VO - Vocational Education	172306 - Welding and Cutting		
	VO - Vocational Education	171503 - Electronics		
	VO - Vocational Education	171504 - Telecommunications		
	VO - Vocational Education	172303 - Manufacturing Occupations		
	VO - Vocational Education	171300 - Drafting Occupations		
	VO - Vocational Education	172307 - Tool and Die Making		
	VO - Vocational Education	170375 - Automation and Robotics		
	VO - Vocational Education	170380 - Manufacturing Operations		
	VO - Vocational Education	171002 - Electrical Trades		
	VO - Vocational Education	170100 - Air Conditioning and Heating		
	VO - Vocational Education	171012 - Industrial Maintenance and Repair		
	VO - Vocational Education	171402 - Power Transmission		

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
175002 - Engineering Principles	AD - Adolescence to Young Adult (7-12)	132150 - Physical Science: Chemistry	•	7 - 12
	AD - Adolescence to Young Adult (7-12)	132036 - Life Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132035 - Life Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132045 - Earth Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132160 - Physical Science/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132046 - Earth Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132040 - Earth Sciences		7 - 12
	AD - Adolescence to Young Adult (7-12)	132034 - Life Sciences/Earth		7 - 12
	AD - Adolescence to Young Adult (7-12)	132010 - Integrated Science		7 - 12
	AD - Adolescence to Young Adult (7-12)	132020 - Physical Science/Physics/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	110094 - Integrated Mathematics		7 - 12
	AD - Adolescence to Young Adult (7-12)	101315 - Industrial Technology		7 - 12
	AD - Adolescence to Young Adult (7-12)	132030 - Life Sciences		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132150 - Physical Science: Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132045 - Earth Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132160 - Physical Science/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132034 - Life Sciences/Earth		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132036 - Life Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	101315 - Industrial Technology		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132035 - Life Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132046 - Earth Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132010 - Integrated Science		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	110094 - Integrated Mathematics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132030 - Life Sciences		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132020 - Physical Science/Physics/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132040 - Earth Sciences		7 - 12
	CH - Comprehensive High School (7-12)	130322 - Physics (9-12)		7 - 12
	CH - Comprehensive High School (7-12)	130410 - Earth Science (9-12)		7 - 12
	CH - Comprehensive High School (7-12)	130300 - Physical Science		7 - 12
	CH - Comprehensive High School (7-12)	130312 - Chemistry (9-12)		7 - 12
	CH - Comprehensive High School (7-12)	130302 - Physics		7 - 12
	CH - Comprehensive High School (7-12)	130205 - Biological Science (9-12)		7 - 12
	CH - Comprehensive High School (7-12)	130322 - Physics (9-12)		9 - 12
	CT - Career Technical (4-12)	172306 - Welding and Cutting		4 - 12
	CT - Career Technical (4-12)	160610 - Technology Education		4 - 12
	CT - Career Technical (4-12)	175002		4 - 12
	CT - Career Technical (4-12)	171504 - Telecommunications		4 - 12
	CT - Career Technical (4-12)	172307 - Tool and Die Making		4 - 12
	CT - Career Technical (4-12)	172303 - Manufacturing Occupations		4 - 12
	CT - Career Technical (4-12)	171300 - Drafting Occupations		4 - 12
	CT - Career Technical (4-12)	172000 - Chemical Laboratory Assisting		4 - 12
	CT - Career Technical (4-12)	171650 - Energy Science		4 - 12
	CT - Career Technical (4-12)	171802 - Manufacturing Engineering Technology		4 - 12
	CT - Career Technical (4-12)	171801 - Engineering Technology		4 - 12
	CT - Career Technical (4-12)	171815 - Engineering Technologies-PLTW		4 - 12
	CT - Career Technical (4-12)	171503 - Electronics		4 - 12
	CT - Career Technical (4-12)	171402 - Power Transmission		4 - 12
	CT - Career Technical (4-12)	171808 - Engineering Technologies-Process		4 - 12
	CT - Career Technical (4-12)	171012 - Industrial Maintenance and Repair		4 - 12
	CT - Career Technical (4-12)	171807 - Engineering Technologies-Design		4 - 12
	CT - Career Technical (4-12)	170375 - Automation and Robotics		4 - 12
	CT - Career Technical (4-12)	170100 - Air Conditioning and Heating		4 - 12

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
L75002 - Engineering Principles	CT - Career Technical (4-12)	172302 - Precision Machining		4 - 12
	CT - Career Technical (4-12)	171809 - Engineering Technologies-Product/Service		4 - 12
	CT - Career Technical (4-12)	170380 - Manufacturing Operations		4 - 12
	CT - Career Technical (4-12)	171002 - Electrical Trades		4 - 12
	CT - Career Technical (4-12)	070912 - Pharmacy Assisting		4 - 12
	CT - Career Technical (4-12)	070203 - Medical Lab Assisting		4 - 12
	CT - Career Technical (4-12)	070302 - Practical Nurse		4 - 12
	CT - Career Technical (4-12)	074850 - Biotechnology		4 - 12
	CT - Career Technical (4-12)	079950 - Practical Nurse Coordinator		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CT - Career Technical (4-12)	070410 - Fitness Aide		4 - 12
	CW - Career Technical Workforce Development	172303 - Manufacturing Occupations		4 - 12
	CW - Career Technical Workforce Development	171807 - Engineering Technologies-Design		4 - 12
	CW - Career Technical Workforce Development	172307 - Tool and Die Making		4 - 12
	CW - Career Technical Workforce Development	172302 - Precision Machining		4 - 12
	CW - Career Technical Workforce Development	171808 - Engineering Technologies-Process		4 - 12
	CW - Career Technical Workforce Development	171504 - Telecommunications		4 - 12
	CW - Career Technical Workforce Development	171802 - Manufacturing Engineering Technology		4 - 12
	CW - Career Technical Workforce Development	171650 - Energy Science		4 - 12
	CW - Career Technical Workforce Development	172306 - Welding and Cutting		4 - 12
	CW - Career Technical Workforce Development	172000 - Chemical Laboratory Assisting		4 - 12
	CW - Career Technical Workforce Development	171503 - Electronics		4 - 12
	CW - Career Technical Workforce Development	171402 - Power Transmission		4 - 12
	CW - Career Technical Workforce Development	171815 - Engineering Technologies-PLTW		4 - 12
	CW - Career Technical Workforce Development	171809 - Engineering Technologies-Product/Service		4 - 12
	CW - Career Technical Workforce Development	171300 - Drafting Occupations		4 - 12
	CW - Career Technical Workforce Development	079950 - Practical Nurse Coordinator		4 - 12
	CW - Career Technical Workforce Development	171002 - Electrical Trades		4 - 12
	CW - Career Technical Workforce Development	170380 - Manufacturing Operations		4 - 12
	CW - Career Technical Workforce Development	171801 - Engineering Technology		4 - 12
	CW - Career Technical Workforce Development	170100 - Air Conditioning and Heating		4 - 12
	CW - Career Technical Workforce Development	170375 - Automation and Robotics		4 - 12
	CW - Career Technical Workforce Development	074850 - Biotechnology		4 - 12
	CW - Career Technical Workforce Development	070410 - Fitness Aide		4 - 12
	CW - Career Technical Workforce Development	070203 - Medical Lab Assisting		4 - 12
	CW - Career Technical Workforce Development	171012 - Industrial Maintenance and Repair		4 - 12
	CW - Career Technical Workforce Development	070302 - Practical Nurse		4 - 12
	CW - Career Technical Workforce Development	070912 - Pharmacy Assisting		4 - 12
	DS (K-12) - Designated Subject (Grades K-12)	132030 - Life Sciences		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	132040 - Earth Sciences		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	132150 - Physical Science: Chemistry		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	132160 - Physical Science/Physics		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	132010 - Integrated Science		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	110094 - Integrated Mathematics		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	101315 - Industrial Technology		KG - 12
	HS - High School (7-12)	130400 - Earth Sciences		7 - 12
	HS - High School (7-12)	130302 - Physics		7 - 12
	HS - High School (7-12)	130000 - Comprehensive Science		7 - 12
	HS - High School (7-12)	110000 - Mathematics		7 - 12
	HS - High School (7-12)	101315 - Industrial Technology		7 - 12
	HS - High School (7-12)	102000 - Ind.Arts 7-12		7 - 12
	HS - High School (7-12)	130200 - Biological Science		7 - 12

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
175002 - Engineering Principles	HS - High School (7-12)	100000 - Gen Ind Techn (Gen)		7 - 12
	HS - High School (7-12)	130301 - Chemistry		7 - 12
	MA - Multi-Age PK-12	132010 - Integrated Science		PS - 12
	MA - Multi-Age PK-12	110094 - Integrated Mathematics		PS - 12
	MA - Multi-Age PK-12	132010 - Integrated Science		KG - 12
	MA - Multi-Age PK-12	110094 - Integrated Mathematics		KG - 12
	MA - Multi-Age PK-12	132160 - Physical Science/Physics		KG - 12
	MA - Multi-Age PK-12	132150 - Physical Science: Chemistry		PS - 12
	MA - Multi-Age PK-12	132040 - Earth Sciences		PS - 12
	MA - Multi-Age PK-12	132040 - Earth Sciences		KG - 12
	MA - Multi-Age PK-12	132160 - Physical Science/Physics		PS - 12
	MA - Multi-Age PK-12	132150 - Physical Science: Chemistry		KG - 12
	MA - Multi-Age PK-12	132030 - Life Sciences		PS - 12
	MA - Multi-Age PK-12	132030 - Life Sciences		KG - 12
	SP - Special All Grades (K-12)	130302 - Physics		7 - 12
	SP - Special All Grades (K-12)	130301 - Chemistry		KG - 12
	SP - Special All Grades (K-12)	130301 - Chemistry		7 - 12
	SP - Special All Grades (K-12)	110000 - Mathematics		7 - 12
	SP - Special All Grades (K-12)	102000 - Ind.Arts 7-12		KG - 12
	SP - Special All Grades (K-12)	102000 - Ind.Arts 7-12		7 - 12
	SP - Special All Grades (K-12)	101320 - Industrial Technology		KG - 12
	SP - Special All Grades (K-12)	101315 - Industrial Technology		7 - 12
	SP - Special All Grades (K-12)	110000 - Mathematics		KG - 12
	SP - Special All Grades (K-12)	100000 - Gen Ind Techn (Gen)		KG - 12
	SP - Special All Grades (K-12)	100005 - Indust. Arts K-12		KG - 12
	TM - STEM (6-12)	160610 - Technology Education		6 - 12
	TM - STEM (6-12)	132010 - Integrated Science		6 - 12
	TM - STEM (6-12)	110094 - Integrated Mathematics		6 - 12
	VO - Vocational Education	172307 - Tool and Die Making		
	VO - Vocational Education	172306 - Welding and Cutting		
	VO - Vocational Education	172303 - Manufacturing Occupations		
	VO - Vocational Education	172000 - Chemical Laboratory Assisting		
	VO - Vocational Education	171801 - Engineering Technology		
	VO - Vocational Education	171503 - Electronics		
	VO - Vocational Education	171402 - Power Transmission		
	VO - Vocational Education	171802 - Manufacturing Engineering Technology		
	VO - Vocational Education	171300 - Drafting Occupations		
	VO - Vocational Education	172302 - Precision Machining		
	VO - Vocational Education	171012 - Industrial Maintenance and Repair		
	VO - Vocational Education	171002 - Electrical Trades		
	VO - Vocational Education	171504 - Telecommunications		
	VO - Vocational Education	170380 - Manufacturing Operations		
	VO - Vocational Education	171815 - Engineering Technologies-PLTW		
	VO - Vocational Education	170375 - Automation and Robotics		
	VO - Vocational Education	170100 - Air Conditioning and Heating		
	VO - Vocational Education	160610 - Technology Education		
	VO - Vocational Education	070410 - Fitness Aide		
	VO - Vocational Education	010100 - Agriscience		
	VO - Vocational Education	070302 - Practical Nurse		
	VO - Vocational Education	070203 - Medical Lab Assisting		
	VO - Vocational Education	079950 - Practical Nurse Coordinator		
	VO - Vocational Education	070912 - Pharmacy Assisting		

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
175003 - Manufacturing Operations	AD - Adolescence to Young Adult (7-12)	132040 - Earth Sciences		7 - 12
	AD - Adolescence to Young Adult (7-12)	132036 - Life Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132046 - Earth Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132045 - Earth Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132035 - Life Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132034 - Life Sciences/Earth		7 - 12
	AD - Adolescence to Young Adult (7-12)	132160 - Physical Science/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132030 - Life Sciences		7 - 12
	AD - Adolescence to Young Adult (7-12)	132150 - Physical Science: Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132020 - Physical Science/Physics/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132010 - Integrated Science		7 - 12
	AD - Adolescence to Young Adult (7-12)	110094 - Integrated Mathematics		7 - 12
	AD - Adolescence to Young Adult (7-12)	101315 - Industrial Technology		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132160 - Physical Science/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132150 - Physical Science: Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132045 - Earth Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132046 - Earth Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132036 - Life Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132035 - Life Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132040 - Earth Sciences		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132034 - Life Sciences/Earth		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132030 - Life Sciences		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132020 - Physical Science/Physics/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	110094 - Integrated Mathematics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132010 - Integrated Science		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	101315 - Industrial Technology		7 - 12
	CH - Comprehensive High School (7-12)	130322 - Physics (9-12)		9 - 12
	CH - Comprehensive High School (7-12)	130302 - Physics		7 - 12
	CH - Comprehensive High School (7-12)	130205 - Biological Science (9-12)		7 - 12
	CH - Comprehensive High School (7-12)	130300 - Physical Science		7 - 12
	CH - Comprehensive High School (7-12)	130312 - Chemistry (9-12)		7 - 12
	CH - Comprehensive High School (7-12)	130410 - Earth Science (9-12)		7 - 12
	CT - Career Technical (4-12)	172302 - Precision Machining		4 - 12
	CT - Career Technical (4-12)	172303 - Manufacturing Occupations		4 - 12
	CT - Career Technical (4-12)	172307 - Tool and Die Making		4 - 12
	CT - Career Technical (4-12)	172000 - Chemical Laboratory Assisting		4 - 12
	CT - Career Technical (4-12)	172004 - Industrial Lab Assisting	<u> </u>	4 - 12
	CT - Career Technical (4-12)	171808 - Engineering Technologies-Process	<u> </u>	4 - 12
	CT - Career Technical (4-12)	171900 - Graphic Occupations	<u> </u>	4 - 12
	CT - Career Technical (4-12)	171802 - Manufacturing Engineering Technology	<u> </u>	4 - 12
	CT - Career Technical (4-12)	171801 - Engineering Technology		4 - 12
	CT - Career Technical (4-12)	171650 - Energy Science		4 - 12
	CT - Career Technical (4-12)	171503 - Electronics		4 - 12
	CT - Career Technical (4-12)	171402 - Power Transmission		4 - 12
	CT - Career Technical (4-12)	074850 - Biotechnology		4 - 12
	CT - Career Technical (4-12)	170380 - Manufacturing Operations	+	4 - 12
	CT - Career Technical (4-12)	171012 - Industrial Maintenance and Repair	+	4 - 12
	CT - Career Technical (4-12)	172304 - Heavy Metal Fabrication	+	4 - 12
	CT - Career Technical (4-12)	170600 - Business Machine Maintenance	+	4 - 12
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	CT - Career Technical (4-12)	170375 - Automation and Robotics		4 - 12
	CT - Career Technical (4-12)	172306 - Welding and Cutting		4 - 12
	CT - Career Technical (4-12)	171809 - Engineering Technologies-Product/Service		4 - 12

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
175003 - Manufacturing Operations	CT - Career Technical (4-12)	170200 - Appliance Repair		4 - 12
	CT - Career Technical (4-12)	171815 - Engineering Technologies-PLTW		4 - 12
	CT - Career Technical (4-12)	170100 - Air Conditioning and Heating		4 - 12
	CT - Career Technical (4-12)	171807 - Engineering Technologies-Design		4 - 12
	CT - Career Technical (4-12)	171002 - Electrical Trades		4 - 12
	CT - Career Technical (4-12)	160610 - Technology Education		4 - 12
	CT - Career Technical (4-12)	079950 - Practical Nurse Coordinator		4 - 12
	CT - Career Technical (4-12)	171504 - Telecommunications		4 - 12
	CT - Career Technical (4-12)	070203 - Medical Lab Assisting		4 - 12
	CT - Career Technical (4-12)	171300 - Drafting Occupations		4 - 12
	CT - Career Technical (4-12)	070410 - Fitness Aide		4 - 12
	CT - Career Technical (4-12)	070302 - Practical Nurse		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CT - Career Technical (4-12)	171403 - Motor Repair		4 - 12
	CT - Career Technical (4-12)	070912 - Pharmacy Assisting		4 - 12
	CW - Career Technical Workforce Development	171503 - Electronics		4 - 12
	CW - Career Technical Workforce Development	172305 - Sheet Metal Fabrication		4 - 12
	CW - Career Technical Workforce Development	173601 - Millwork and Cabinet Making		4 - 12
	CW - Career Technical Workforce Development	172700 - Plastics Occupations		4 - 12
	CW - Career Technical Workforce Development	171900 - Graphic Occupations		4 - 12
	CW - Career Technical Workforce Development	172304 - Heavy Metal Fabrication		4 - 12
	CW - Career Technical Workforce Development	172004 - Industrial Lab Assisting		4 - 12
	CW - Career Technical Workforce Development	172306 - Welding and Cutting		4 - 12
	CW - Career Technical Workforce Development	172307 - Tool and Die Making		4 - 12
	CW - Career Technical Workforce Development	172000 - Chemical Laboratory Assisting		4 - 12
	CW - Career Technical Workforce Development	171815 - Engineering Technologies-PLTW		4 - 12
	CW - Career Technical Workforce Development	171809 - Engineering Technologies-Product/Service		4 - 12
	CW - Career Technical Workforce Development	171808 - Engineering Technologies-Process		4 - 12
	CW - Career Technical Workforce Development	171807 - Engineering Technologies-Design		4 - 12
	CW - Career Technical Workforce Development	171802 - Manufacturing Engineering Technology		4 - 12
	CW - Career Technical Workforce Development	171801 - Engineering Technology		4 - 12
	CW - Career Technical Workforce Development	171650 - Energy Science		4 - 12
	CW - Career Technical Workforce Development	172303 - Manufacturing Occupations		4 - 12
	CW - Career Technical Workforce Development	171504 - Telecommunications		4 - 12
	CW - Career Technical Workforce Development	171300 - Drafting Occupations		4 - 12
	CW - Career Technical Workforce Development	171402 - Power Transmission		4 - 12
	CW - Career Technical Workforce Development	172302 - Precision Machining		4 - 12
	CW - Career Technical Workforce Development	171012 - Industrial Maintenance and Repair		4 - 12
	CW - Career Technical Workforce Development	079950 - Practical Nurse Coordinator		4 - 12
	CW - Career Technical Workforce Development	170380 - Manufacturing Operations		4 - 12
	CW - Career Technical Workforce Development	171002 - Electrical Trades		4 - 12
	CW - Career Technical Workforce Development	170375 - Automation and Robotics		4 - 12
	CW - Career Technical Workforce Development	170100 - Air Conditioning and Heating		4 - 12
	CW - Career Technical Workforce Development	074850 - Biotechnology		4 - 12
	CW - Career Technical Workforce Development	070912 - Pharmacy Assisting		4 - 12
	CW - Career Technical Workforce Development	070302 - Practical Nurse		4 - 12
	CW - Career Technical Workforce Development	070203 - Medical Lab Assisting		4 - 12
	CW - Career Technical Workforce Development	070410 - Fitness Aide		4 - 12
	DS (K-12) - Designated Subject (Grades K-12)	132160 - Physical Science/Physics		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	132150 - Physical Science: Chemistry		KG - 12
	DS (K-12) - Designated Subject (Grades K-12) DS (K-12) - Designated Subject (Grades K-12)	132040 - Earth Sciences		KG - 12
	DS (K-12) - Designated Subject (Grades K-12) DS (K-12) - Designated Subject (Grades K-12)	132030 - Life Sciences		KG - 12

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
175003 - Manufacturing Operations	DS (K-12) - Designated Subject (Grades K-12)	132010 - Integrated Science		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	101315 - Industrial Technology		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	110094 - Integrated Mathematics		KG - 12
	HS - High School (7-12)	130400 - Earth Sciences		7 - 12
	HS - High School (7-12)	130302 - Physics		7 - 12
	HS - High School (7-12)	130301 - Chemistry		7 - 12
	HS - High School (7-12)	130200 - Biological Science		7 - 12
	HS - High School (7-12)	130000 - Comprehensive Science		7 - 12
	HS - High School (7-12)	110000 - Mathematics		7 - 12
	HS - High School (7-12)	102000 - Ind.Arts 7-12		7 - 12
	HS - High School (7-12)	100000 - Gen Ind Techn (Gen)		7 - 12
	HS - High School (7-12)	101315 - Industrial Technology		7 - 12
	MA - Multi-Age PK-12	132160 - Physical Science/Physics		KG - 12
	MA - Multi-Age PK-12	132150 - Physical Science: Chemistry		KG - 12
	MA - Multi-Age PK-12	132040 - Earth Sciences		KG - 12
	MA - Multi-Age PK-12	132030 - Life Sciences		KG - 12
	MA - Multi-Age PK-12	132010 - Integrated Science		KG - 12
	MA - Multi-Age PK-12	110094 - Integrated Mathematics		KG - 12
	SP - Special All Grades (K-12)	102000 - Ind.Arts 7-12		7 - 12
	SP - Special All Grades (K-12)	130302 - Physics		7 - 12
	SP - Special All Grades (K-12)	130301 - Chemistry		7 - 12
	SP - Special All Grades (K-12)	110000 - Mathematics		7 - 12
	SP - Special All Grades (K-12)	101320 - Industrial Technology		KG - 12
	SP - Special All Grades (K-12)	101315 - Industrial Technology		7 - 12
	SP - Special All Grades (K-12)	100005 - Indust. Arts K-12		KG - 12
	SP - Special All Grades (K-12)	100000 - Gen Ind Techn (Gen)		KG - 12
	TM - STEM (6-12)	132010 - Integrated Science		6 - 12
	TM - STEM (6-12)	110094 - Integrated Mathematics		6 - 12
	TM - STEM (6-12)	160610 - Technology Education		6 - 12
	VO - Vocational Education	172700 - Plastics Occupations		
	VO - Vocational Education	172307 - Tool and Die Making		
	VO - Vocational Education	172306 - Welding and Cutting		+
	VO - Vocational Education	172304 - Heavy Metal Fabrication		+
	VO - Vocational Education	172303 - Manufacturing Occupations		+
	VO - Vocational Education	172302 - Precision Machining		+
	VO - Vocational Education	172000 - Chemical Laboratory Assisting		+
	VO - Vocational Education	171900 - Graphic Occupations		+
	VO - Vocational Education	171815 - Engineering Technologies-PLTW		+
	VO - Vocational Education	171808 - Engineering Technologies-Process		+
	VO - Vocational Education	171503 - Electronics		+
	VO - Vocational Education	171504 - Telecommunications		+
	VO - Vocational Education	171403 - Motor Repair		+
	VO - Vocational Education	171402 - Power Transmission		+
	VO - Vocational Education	171300 - Drafting Occupations		+
	VO - Vocational Education	172004 - Industrial Lab Assisting		+
	VO - Vocational Education	171012 - Industrial Maintenance and Repair		+
	VO - Vocational Education	171801 - Engineering Technology		+
	VO - Vocational Education	171002 - Electrical Trades		
	VO - Vocational Education	172305 - Sheet Metal Fabrication		
	VO - Vocational Education	170600 - Business Machine Maintenance		
	VO - Vocational Education	171802 - Manufacturing Engineering Technology		
	VO - Vocational Education	170380 - Manufacturing Operations		+

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
175003 - Manufacturing Operations	VO - Vocational Education	170375 - Automation and Robotics		
	VO - Vocational Education	170100 - Air Conditioning and Heating		
	VO - Vocational Education	160610 - Technology Education		
	VO - Vocational Education	079950 - Practical Nurse Coordinator		
	VO - Vocational Education	070203 - Medical Lab Assisting		
	VO - Vocational Education	010100 - Agriscience		
	VO - Vocational Education	070302 - Practical Nurse		
	VO - Vocational Education	070410 - Fitness Aide		
	VO - Vocational Education	070912 - Pharmacy Assisting		

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
175004 - Robotics	AD - Adolescence to Young Adult (7-12)	132150 - Physical Science: Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132046 - Earth Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132045 - Earth Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132160 - Physical Science/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132040 - Earth Sciences		7 - 12
	AD - Adolescence to Young Adult (7-12)	132036 - Life Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132035 - Life Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132034 - Life Sciences/Earth		7 - 12
	AD - Adolescence to Young Adult (7-12)	132030 - Life Sciences		7 - 12
	AD - Adolescence to Young Adult (7-12)	132020 - Physical Science/Physics/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132010 - Integrated Science		7 - 12
	AD - Adolescence to Young Adult (7-12)	110094 - Integrated Mathematics		7 - 12
	AD - Adolescence to Young Adult (7-12)	101315 - Industrial Technology		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132160 - Physical Science/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132150 - Physical Science: Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132040 - Earth Sciences		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132030 - Life Sciences		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132020 - Physical Science/Physics/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132034 - Life Sciences/Earth		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132010 - Integrated Science		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	110094 - Integrated Mathematics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	101315 - Industrial Technology		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132045 - Earth Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132046 - Earth Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132035 - Life Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132036 - Life Sci/Chemistry		7 - 12
	CH - Comprehensive High School (7-12)	130410 - Earth Science (9-12)		7 - 12
	CH - Comprehensive High School (7-12)	130322 - Physics (9-12)		9 - 12
	CH - Comprehensive High School (7-12)	130312 - Chemistry (9-12)		7 - 12
	CH - Comprehensive High School (7-12)	130302 - Physics		7 - 12
	CH - Comprehensive High School (7-12)	130300 - Physical Science		7 - 12
	CH - Comprehensive High School (7-12)	130205 - Biological Science (9-12)		7 - 12
	CT - Career Technical (4-12)	170600 - Business Machine Maintenance		4 - 12
	CT - Career Technical (4-12)	170375 - Automation and Robotics		4 - 12
	CT - Career Technical (4-12)	170200 - Appliance Repair		4 - 12
	CT - Career Technical (4-12)	171002 - Electrical Trades		4 - 12
	CT - Career Technical (4-12)	170100 - Air Conditioning and Heating		4 - 12
	CT - Career Technical (4-12)	160610 - Technology Education		4 - 12
	CT - Career Technical (4-12)	079950 - Practical Nurse Coordinator		4 - 12
	CT - Career Technical (4-12)	074850 - Biotechnology		4 - 12
	CT - Career Technical (4-12)	070912 - Pharmacy Assisting		4 - 12
	CT - Career Technical (4-12)	070410 - Fitness Aide		4 - 12
	CT - Career Technical (4-12)	070302 - Practical Nurse		4 - 12
	CT - Career Technical (4-12)	070203 - Medical Lab Assisting		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CT - Career Technical (4-12)	172307 - Tool and Die Making		4 - 12
	CT - Career Technical (4-12)	172700 - Plastics Occupations		4 - 12
	CT - Career Technical (4-12)	172304 - Heavy Metal Fabrication		4 - 12
	CT - Career Technical (4-12)	172303 - Manufacturing Occupations		4 - 12
	CT - Career Technical (4-12)	172004 - Industrial Lab Assisting		4 - 12
	CT - Career Technical (4-12)	173601 - Millwork and Cabinet Making		4 - 12
	CT - Career Technical (4-12)	172302 - Precision Machining		4 - 12

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
175004 - Robotics	CT - Career Technical (4-12)	172306 - Welding and Cutting		4 - 12
	CT - Career Technical (4-12)	172000 - Chemical Laboratory Assisting		4 - 12
	CT - Career Technical (4-12)	171900 - Graphic Occupations		4 - 12
	CT - Career Technical (4-12)	171809 - Engineering Technologies-Product/Service		4 - 12
	CT - Career Technical (4-12)	171808 - Engineering Technologies-Process		4 - 12
	CT - Career Technical (4-12)	171807 - Engineering Technologies-Design		4 - 12
	CT - Career Technical (4-12)	171802 - Manufacturing Engineering Technology		4 - 12
	CT - Career Technical (4-12)	171650 - Energy Science		4 - 12
	CT - Career Technical (4-12)	171504 - Telecommunications		4 - 12
	CT - Career Technical (4-12)	171801 - Engineering Technology		4 - 12
	CT - Career Technical (4-12)	171503 - Electronics		4 - 12
	CT - Career Technical (4-12)	171403 - Motor Repair		4 - 12
	CT - Career Technical (4-12)	171402 - Power Transmission		4 - 12
	CT - Career Technical (4-12)	172305 - Sheet Metal Fabrication		4 - 12
	CT - Career Technical (4-12)	171300 - Drafting Occupations		4 - 12
	CT - Career Technical (4-12)	171012 - Industrial Maintenance and Repair		4 - 12
	CW - Career Technical Workforce Development	173601 - Millwork and Cabinet Making		4 - 12
	CW - Career Technical Workforce Development	172307 - Tool and Die Making		4 - 12
	CW - Career Technical Workforce Development	172305 - Sheet Metal Fabrication		4 - 12
	CW - Career Technical Workforce Development	172304 - Heavy Metal Fabrication		4 - 12
	CW - Career Technical Workforce Development	172303 - Manufacturing Occupations		4 - 12
	CW - Career Technical Workforce Development	172302 - Precision Machining		4 - 12
	CW - Career Technical Workforce Development	172000 - Chemical Laboratory Assisting		4 - 12
	CW - Career Technical Workforce Development	171900 - Graphic Occupations		4 - 12
	CW - Career Technical Workforce Development	171809 - Engineering Technologies-Product/Service		4 - 12
	CW - Career Technical Workforce Development	171808 - Engineering Technologies-Process		4 - 12
	CW - Career Technical Workforce Development	171807 - Engineering Technologies-Design		4 - 12
	CW - Career Technical Workforce Development	171802 - Manufacturing Engineering Technology		4 - 12
	CW - Career Technical Workforce Development	171801 - Engineering Technology		4 - 12
	CW - Career Technical Workforce Development	171650 - Energy Science		4 - 12
	CW - Career Technical Workforce Development	171504 - Telecommunications		4 - 12
	CW - Career Technical Workforce Development	172004 - Industrial Lab Assisting		4 - 12
	CW - Career Technical Workforce Development	171815 - Engineering Technologies-PLTW		4 - 12
	CW - Career Technical Workforce Development	171503 - Electronics		4 - 12
	CW - Career Technical Workforce Development	171403 - Motor Repair		4 - 12
	CW - Career Technical Workforce Development	171402 - Power Transmission		4 - 12
	CW - Career Technical Workforce Development	171300 - Drafting Occupations		4 - 12
	CW - Career Technical Workforce Development	171012 - Industrial Maintenance and Repair		4 - 12
	CW - Career Technical Workforce Development	171002 - Electrical Trades		4 - 12
	CW - Career Technical Workforce Development	170600 - Business Machine Maintenance		4 - 12
	CW - Career Technical Workforce Development	170380 - Manufacturing Operations		4 - 12
	CW - Career Technical Workforce Development	172700 - Plastics Occupations		4 - 12
	CW - Career Technical Workforce Development	172306 - Welding and Cutting		4 - 12
	CW - Career Technical Workforce Development	170375 - Automation and Robotics		4 - 12
	CW - Career Technical Workforce Development	170200 - Appliance Repair		4 - 12
	CW - Career Technical Workforce Development	170100 - Air Conditioning and Heating		4 - 12
	CW - Career Technical Workforce Development	079950 - Practical Nurse Coordinator		4 - 12
	CW - Career Technical Workforce Development	074850 - Biotechnology		4 - 12
	CW - Career Technical Workforce Development	070912 - Pharmacy Assisting		4 - 12
	CW - Career Technical Workforce Development	070410 - Fitness Aide		4 - 12
	CW - Career Technical Workforce Development	070302 - Practical Nurse		4 - 12
	CW - Career Technical Workforce Development	070203 - Medical Lab Assisting		4 - 12

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
175004 - Robotics	DS (K-12) - Designated Subject (Grades K-12)	132160 - Physical Science/Physics		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	132150 - Physical Science: Chemistry		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	132040 - Earth Sciences		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	132030 - Life Sciences		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	132010 - Integrated Science		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	110094 - Integrated Mathematics		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	101315 - Industrial Technology		KG - 12
	HS - High School (7-12)	130400 - Earth Sciences		7 - 12
	HS - High School (7-12)	130302 - Physics		7 - 12
	HS - High School (7-12)	130301 - Chemistry		7 - 12
	HS - High School (7-12)	130200 - Biological Science		7 - 12
	HS - High School (7-12)	130000 - Comprehensive Science		7 - 12
	HS - High School (7-12)	110000 - Mathematics		7 - 12
	HS - High School (7-12)	102000 - Ind.Arts 7-12		7 - 12
	HS - High School (7-12)	101315 - Industrial Technology		7 - 12
	HS - High School (7-12)	100000 - Gen Ind Techn (Gen)		7 - 12
	MA - Multi-Age PK-12	132160 - Physical Science/Physics		KG - 12
	MA - Multi-Age PK-12	132040 - Earth Sciences		KG - 12
	MA - Multi-Age PK-12	132010 - Integrated Science		KG - 12
	MA - Multi-Age PK-12	132030 - Life Sciences		KG - 12
	MA - Multi-Age PK-12	110094 - Integrated Mathematics		KG - 12
	MA - Multi-Age PK-12	132150 - Physical Science: Chemistry		KG - 12
	SP - Special All Grades (K-12)	130301 - Chemistry		7 - 12
	SP - Special All Grades (K-12)	130302 - Physics		7 - 12
	SP - Special All Grades (K-12)	110000 - Mathematics		7 - 12
	SP - Special All Grades (K-12)	102000 - Ind.Arts 7-12		7 - 12
	SP - Special All Grades (K-12)	101320 - Industrial Technology		KG - 12
	SP - Special All Grades (K-12)	101315 - Industrial Technology		7 - 12
	SP - Special All Grades (K-12)	100005 - Indust. Arts K-12		KG - 12
	SP - Special All Grades (K-12)	100000 - Gen Ind Techn (Gen)		KG - 12
	TM - STEM (6-12)	132010 - Integrated Science		6 - 12
	TM - STEM (6-12)	160610 - Technology Education		6 - 12
	TM - STEM (6-12)	110094 - Integrated Mathematics		6 - 12
	VO - Vocational Education	172306 - Welding and Cutting		
	VO - Vocational Education	172304 - Heavy Metal Fabrication		
	VO - Vocational Education	172303 - Manufacturing Occupations		
	VO - Vocational Education	172302 - Precision Machining		
	VO - Vocational Education	172000 - Chemical Laboratory Assisting		
	VO - Vocational Education	173601 - Millwork and Cabinet Making		
	VO - Vocational Education	171900 - Graphic Occupations		
	VO - Vocational Education	171808 - Engineering Technologies-Process		
	VO - Vocational Education	171801 - Engineering Technology		
	VO - Vocational Education	171504 - Telecommunications		
	VO - Vocational Education	171503 - Electronics		
	VO - Vocational Education	171802 - Manufacturing Engineering Technology		
	VO - Vocational Education	171403 - Motor Repair		
	VO - Vocational Education	171402 - Power Transmission		
	VO - Vocational Education	171300 - Drafting Occupations		
	VO - Vocational Education	171012 - Industrial Maintenance and Repair		
	VO - Vocational Education	172004 - Industrial Lab Assisting		
	VO - Vocational Education	172700 - Plastics Occupations		
	VO - Vocational Education	172307 - Tool and Die Making		

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
175004 - Robotics	VO - Vocational Education	172305 - Sheet Metal Fabrication		
	VO - Vocational Education	171002 - Electrical Trades		
	VO - Vocational Education	170600 - Business Machine Maintenance		
	VO - Vocational Education	170375 - Automation and Robotics		
	VO - Vocational Education	170200 - Appliance Repair		
	VO - Vocational Education	170100 - Air Conditioning and Heating		
	VO - Vocational Education	160610 - Technology Education		
	VO - Vocational Education	079950 - Practical Nurse Coordinator		
	VO - Vocational Education	070912 - Pharmacy Assisting		
	VO - Vocational Education	010100 - Agriscience		
	VO - Vocational Education	070203 - Medical Lab Assisting		
	VO - Vocational Education	070302 - Practical Nurse		
	VO - Vocational Education	070410 - Fitness Aide		

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
175006 - Computer Integrated Manufacturing	AD - Adolescence to Young Adult (7-12)	132160 - Physical Science/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132046 - Earth Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132045 - Earth Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132040 - Earth Sciences		7 - 12
	AD - Adolescence to Young Adult (7-12)	132036 - Life Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132035 - Life Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132034 - Life Sciences/Earth		7 - 12
	AD - Adolescence to Young Adult (7-12)	132030 - Life Sciences		7 - 12
	AD - Adolescence to Young Adult (7-12)	132150 - Physical Science: Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132020 - Physical Science/Physics/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132010 - Integrated Science		7 - 12
	AD - Adolescence to Young Adult (7-12)	110094 - Integrated Mathematics		7 - 12
	AD - Adolescence to Young Adult (7-12)	101315 - Industrial Technology		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132160 - Physical Science/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132150 - Physical Science: Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132046 - Earth Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132045 - Earth Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132040 - Earth Sciences		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132036 - Life Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132035 - Life Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132034 - Life Sciences/Earth		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132030 - Life Sciences		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132020 - Physical Science/Physics/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132010 - Integrated Science		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	110094 - Integrated Mathematics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	101315 - Industrial Technology		7 - 12
	CH - Comprehensive High School (7-12)	130410 - Earth Science (9-12)		7 - 12
	CH - Comprehensive High School (7-12)	130322 - Physics (9-12)		9 - 12
	CH - Comprehensive High School (7-12)	130302 - Physics		7 - 12
	CH - Comprehensive High School (7-12)	130205 - Biological Science (9-12)		7 - 12
	CH - Comprehensive High School (7-12)	130300 - Physical Science		7 - 12
	CH - Comprehensive High School (7-12)	130312 - Chemistry (9-12)		7 - 12
	CT - Career Technical (4-12)	173601 - Millwork and Cabinet Making		4 - 12
	CT - Career Technical (4-12)	172700 - Plastics Occupations		4 - 12
	CT - Career Technical (4-12)	172306 - Welding and Cutting		4 - 12
	CT - Career Technical (4-12)	172305 - Sheet Metal Fabrication		4 - 12
	CT - Career Technical (4-12)	172304 - Heavy Metal Fabrication		4 - 12
	CT - Career Technical (4-12)	172302 - Precision Machining		4 - 12
	CT - Career Technical (4-12)	172004 - Industrial Lab Assisting		4 - 12
	CT - Career Technical (4-12)	172000 - Chemical Laboratory Assisting		4 - 12
	CT - Career Technical (4-12)	171815 - Engineering Technologies-PLTW		4 - 12
	CT - Career Technical (4-12)	171809 - Engineering Technologies-Product/Service		4 - 12
	CT - Career Technical (4-12)	171808 - Engineering Technologies-Process		4 - 12
	CT - Career Technical (4-12)	171807 - Engineering Technologies-Design		4 - 12
	CT - Career Technical (4-12)	171802 - Manufacturing Engineering Technology		4 - 12
	CT - Career Technical (4-12)	171801 - Engineering Technology		4 - 12
	CT - Career Technical (4-12)	171650 - Energy Science		4 - 12
	CT - Career Technical (4-12)	171504 - Telecommunications		4 - 12
	CT - Career Technical (4-12)	171503 - Electronics		4 - 12
	CT - Career Technical (4-12)	171403 - Motor Repair		4 - 12
	CT - Career Technical (4-12)	171402 - Power Transmission		4 - 12
	CT - Career Technical (4-12)	171900 - Graphic Occupations		4 - 12

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
175006 - Computer Integrated Manufacturing	CT - Career Technical (4-12)	171300 - Drafting Occupations		4 - 12
	CT - Career Technical (4-12)	171012 - Industrial Maintenance and Repair		4 - 12
	CT - Career Technical (4-12)	171002 - Electrical Trades		4 - 12
	CT - Career Technical (4-12)	170600 - Business Machine Maintenance		4 - 12
	CT - Career Technical (4-12)	172303 - Manufacturing Occupations		4 - 12
	CT - Career Technical (4-12)	170380 - Manufacturing Operations		4 - 12
	CT - Career Technical (4-12)	170100 - Air Conditioning and Heating		4 - 12
	CT - Career Technical (4-12)	079950 - Practical Nurse Coordinator		4 - 12
	CT - Career Technical (4-12)	074850 - Biotechnology		4 - 12
	CT - Career Technical (4-12)	070912 - Pharmacy Assisting		4 - 12
	CT - Career Technical (4-12)	172307 - Tool and Die Making		4 - 12
	CT - Career Technical (4-12)	070410 - Fitness Aide		4 - 12
	CT - Career Technical (4-12)	170375 - Automation and Robotics		4 - 12
	CT - Career Technical (4-12)	070302 - Practical Nurse		4 - 12
	CT - Career Technical (4-12)	170200 - Appliance Repair		4 - 12
	CT - Career Technical (4-12)	070203 - Medical Lab Assisting		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CT - Career Technical (4-12)	160610 - Technology Education		4 - 12
	CW - Career Technical Workforce Development	172307 - Tool and Die Making		4 - 12
	CW - Career Technical Workforce Development	172700 - Plastics Occupations		4 - 12
	CW - Career Technical Workforce Development	172305 - Sheet Metal Fabrication		4 - 12
	CW - Career Technical Workforce Development	172304 - Heavy Metal Fabrication		4 - 12
	CW - Career Technical Workforce Development	172302 - Precision Machining		4 - 12
	CW - Career Technical Workforce Development	172004 - Industrial Lab Assisting		4 - 12
	CW - Career Technical Workforce Development	172000 - Chemical Laboratory Assisting		4 - 12
	CW - Career Technical Workforce Development	171815 - Engineering Technologies-PLTW		4 - 12
	CW - Career Technical Workforce Development	171809 - Engineering Technologies-Product/Service		4 - 12
	CW - Career Technical Workforce Development	171808 - Engineering Technologies-Process		4 - 12
	CW - Career Technical Workforce Development	171802 - Manufacturing Engineering Technology		4 - 12
	CW - Career Technical Workforce Development	171801 - Engineering Technology		4 - 12
	CW - Career Technical Workforce Development	171650 - Energy Science		4 - 12
	CW - Career Technical Workforce Development	171807 - Engineering Technologies-Design		4 - 12
	CW - Career Technical Workforce Development	171504 - Telecommunications		4 - 12
	CW - Career Technical Workforce Development	171503 - Electronics		4 - 12
	CW - Career Technical Workforce Development	171403 - Motor Repair		4 - 12
	CW - Career Technical Workforce Development	171402 - Power Transmission		4 - 12
	CW - Career Technical Workforce Development	173601 - Millwork and Cabinet Making		4 - 12
	CW - Career Technical Workforce Development	171900 - Graphic Occupations		4 - 12
	CW - Career Technical Workforce Development	172306 - Welding and Cutting		4 - 12
	CW - Career Technical Workforce Development	172303 - Manufacturing Occupations		4 - 12
	CW - Career Technical Workforce Development	171300 - Drafting Occupations		4 - 12
	CW - Career Technical Workforce Development	171012 - Industrial Maintenance and Repair		4 - 12
	CW - Career Technical Workforce Development	171002 - Electrical Trades		4 - 12
	CW - Career Technical Workforce Development	170600 - Business Machine Maintenance		4 - 12
	CW - Career Technical Workforce Development	170380 - Manufacturing Operations		4 - 12
	CW - Career Technical Workforce Development	170375 - Automation and Robotics		4 - 12
	CW - Career Technical Workforce Development	170200 - Appliance Repair		4 - 12
	CW - Career Technical Workforce Development	170100 - Air Conditioning and Heating		4 - 12
Í	CW - Career Technical Workforce Development	079950 - Practical Nurse Coordinator		4 - 12
Í	CW - Career Technical Workforce Development	074850 - Biotechnology		4 - 12
Í	CW - Career Technical Workforce Development	070912 - Pharmacy Assisting		4 - 12
	CW - Career Technical Workforce Development	070410 - Fitness Aide		4 - 12

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
175006 - Computer Integrated Manufacturing	CW - Career Technical Workforce Development	070203 - Medical Lab Assisting		4 - 12
	CW - Career Technical Workforce Development	070302 - Practical Nurse		4 - 12
	DS (K-12) - Designated Subject (Grades K-12)	132160 - Physical Science/Physics		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	132150 - Physical Science: Chemistry		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	132040 - Earth Sciences		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	132030 - Life Sciences		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	132010 - Integrated Science		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	101315 - Industrial Technology		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	110094 - Integrated Mathematics		KG - 12
	HS - High School (7-12)	130302 - Physics		7 - 12
	HS - High School (7-12)	130400 - Earth Sciences		7 - 12
	HS - High School (7-12)	130000 - Comprehensive Science		7 - 12
	HS - High School (7-12)	110000 - Mathematics		7 - 12
	HS - High School (7-12)	102000 - Ind.Arts 7-12		7 - 12
	HS - High School (7-12)	101315 - Industrial Technology		7 - 12
	HS - High School (7-12)	130301 - Chemistry		7 - 12
	HS - High School (7-12)	100000 - Gen Ind Techn (Gen)		7 - 12
	HS - High School (7-12)	130200 - Biological Science		7 - 12
	MA - Multi-Age PK-12	132160 - Physical Science/Physics		KG - 12
	MA - Multi-Age PK-12	132150 - Physical Science: Chemistry		KG - 12
	MA - Multi-Age PK-12	132040 - Earth Sciences		KG - 12
	MA - Multi-Age PK-12	132030 - Life Sciences		KG - 12
	MA - Multi-Age PK-12	110094 - Integrated Mathematics		KG - 12
	MA - Multi-Age PK-12	132010 - Integrated Science		KG - 12
	SP - Special All Grades (K-12)	130302 - Physics		7 - 12
	SP - Special All Grades (K-12)	130301 - Chemistry		7 - 12
	SP - Special All Grades (K-12)	110000 - Mathematics		7 - 12
	SP - Special All Grades (K-12)	102000 - Ind.Arts 7-12		7 - 12
	SP - Special All Grades (K-12)	101320 - Industrial Technology		KG - 12
	SP - Special All Grades (K-12)	101315 - Industrial Technology		7 - 12
	SP - Special All Grades (K-12)	100005 - Indust. Arts K-12		KG - 12
	SP - Special All Grades (K-12)	100000 - Gen Ind Techn (Gen)		KG - 12
	TM - STEM (6-12)	160610 - Technology Education		6 - 12
	TM - STEM (6-12)	132010 - Integrated Science		6 - 12
	TM - STEM (6-12)	110094 - Integrated Mathematics		6 - 12
	VO - Vocational Education	173601 - Millwork and Cabinet Making		
	VO - Vocational Education	172307 - Tool and Die Making		
	VO - Vocational Education	172700 - Plastics Occupations		
	VO - Vocational Education	172305 - Sheet Metal Fabrication		
	VO - Vocational Education	172304 - Heavy Metal Fabrication		
	VO - Vocational Education	172303 - Manufacturing Occupations		
	VO - Vocational Education	172302 - Precision Machining		+
	VO - Vocational Education	172004 - Industrial Lab Assisting		
	VO - Vocational Education	171900 - Graphic Occupations		+
	VO - Vocational Education	171815 - Engineering Technologies-PLTW		1
	VO - Vocational Education	171808 - Engineering Technologies-Process		1
	VO - Vocational Education	171802 - Manufacturing Engineering Technology		1
	VO - Vocational Education	171801 - Engineering Technology		1
	VO - Vocational Education	171503 - Electronics		
	VO - Vocational Education	171012 - Industrial Maintenance and Repair		
	VO - Vocational Education	172000 - Chemical Laboratory Assisting		+
	VO - Vocational Education	171002 - Electrical Trades		1
	vo - vocational Education	171002 - Electrical Trades		

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
175006 - Computer Integrated Manufacturing	VO - Vocational Education	171402 - Power Transmission		
	VO - Vocational Education	170600 - Business Machine Maintenance		
	VO - Vocational Education	171300 - Drafting Occupations		
	VO - Vocational Education	170380 - Manufacturing Operations		
	VO - Vocational Education	170375 - Automation and Robotics		
	VO - Vocational Education	172306 - Welding and Cutting		
	VO - Vocational Education	170200 - Appliance Repair		
	VO - Vocational Education	171504 - Telecommunications		
	VO - Vocational Education	170100 - Air Conditioning and Heating		
	VO - Vocational Education	160610 - Technology Education		
	VO - Vocational Education	079950 - Practical Nurse Coordinator		
	VO - Vocational Education	070912 - Pharmacy Assisting		
	VO - Vocational Education	070410 - Fitness Aide		
	VO - Vocational Education	070302 - Practical Nurse		
	VO - Vocational Education	171403 - Motor Repair		
	VO - Vocational Education	070203 - Medical Lab Assisting		
	VO - Vocational Education	010100 - Agriscience		

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
175007 - Digital Electronics	AD - Adolescence to Young Adult (7-12)	132150 - Physical Science: Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132045 - Earth Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132040 - Earth Sciences		7 - 12
	AD - Adolescence to Young Adult (7-12)	132036 - Life Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132035 - Life Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132160 - Physical Science/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132034 - Life Sciences/Earth		7 - 12
	AD - Adolescence to Young Adult (7-12)	132030 - Life Sciences		7 - 12
	AD - Adolescence to Young Adult (7-12)	132020 - Physical Science/Physics/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132010 - Integrated Science		7 - 12
	AD - Adolescence to Young Adult (7-12)	110094 - Integrated Mathematics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132046 - Earth Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	101315 - Industrial Technology		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132160 - Physical Science/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132150 - Physical Science: Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132046 - Earth Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132040 - Earth Sciences		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132036 - Life Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132035 - Life Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132034 - Life Sciences/Earth		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132030 - Life Sciences		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132045 - Earth Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132020 - Physical Science/Physics/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132010 - Integrated Science		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	110094 - Integrated Mathematics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	101315 - Industrial Technology		7 - 12
	CH - Comprehensive High School (7-12)	130410 - Earth Science (9-12)		7 - 12
	CH - Comprehensive High School (7-12)	130322 - Physics (9-12)		9 - 12
	CH - Comprehensive High School (7-12)	130312 - Chemistry (9-12)		7 - 12
	CH - Comprehensive High School (7-12)	130302 - Physics		7 - 12
	CH - Comprehensive High School (7-12)	130300 - Physical Science		7 - 12
	CH - Comprehensive High School (7-12)	130205 - Biological Science (9-12)		7 - 12
	CT - Career Technical (4-12)	173601 - Millwork and Cabinet Making		4 - 12
	CT - Career Technical (4-12)	172700 - Plastics Occupations		4 - 12
	CT - Career Technical (4-12)	172307 - Tool and Die Making		4 - 12
	CT - Career Technical (4-12)	172305 - Sheet Metal Fabrication		4 - 12
	CT - Career Technical (4-12)	172304 - Heavy Metal Fabrication		4 - 12
	CT - Career Technical (4-12)	172303 - Manufacturing Occupations		4 - 12
	CT - Career Technical (4-12)	172004 - Industrial Lab Assisting		4 - 12
	CT - Career Technical (4-12)	172000 - Chemical Laboratory Assisting		4 - 12
	CT - Career Technical (4-12)	171900 - Graphic Occupations		4 - 12
	CT - Career Technical (4-12)	171815 - Engineering Technologies-PLTW		4 - 12
	CT - Career Technical (4-12)	171809 - Engineering Technologies-Product/Service		4 - 12
	CT - Career Technical (4-12)	171808 - Engineering Technologies-Process		4 - 12
	CT - Career Technical (4-12)	171807 - Engineering Technologies-Design		4 - 12
	CT - Career Technical (4-12)	171802 - Manufacturing Engineering Technology		4 - 12
	CT - Career Technical (4-12)	171801 - Engineering Technology		4 - 12
	CT - Career Technical (4-12)	171650 - Energy Science		4 - 12
	CT - Career Technical (4-12)	171504 - Telecommunications		4 - 12
	CT - Career Technical (4-12)	171503 - Electronics		4 - 12
	CT - Career Technical (4-12)	171403 - Motor Repair		4 - 12
	CT - Career Technical (4-12)	171300 - Drafting Occupations		4 - 12

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
.75007 - Digital Electronics	CT - Career Technical (4-12)	172302 - Precision Machining	· · · · · · · · · · · · · · · · · · ·	4 - 12
	CT - Career Technical (4-12)	171012 - Industrial Maintenance and Repair		4 - 12
	CT - Career Technical (4-12)	171402 - Power Transmission		4 - 12
	CT - Career Technical (4-12)	171002 - Electrical Trades		4 - 12
	CT - Career Technical (4-12)	170600 - Business Machine Maintenance		4 - 12
	CT - Career Technical (4-12)	170380 - Manufacturing Operations		4 - 12
	CT - Career Technical (4-12)	172306 - Welding and Cutting		4 - 12
	CT - Career Technical (4-12)	170375 - Automation and Robotics		4 - 12
	CT - Career Technical (4-12)	170200 - Appliance Repair		4 - 12
	CT - Career Technical (4-12)	170100 - Air Conditioning and Heating		4 - 12
	CT - Career Technical (4-12)	160610 - Technology Education		4 - 12
	CT - Career Technical (4-12)	079950 - Practical Nurse Coordinator		4 - 12
	CT - Career Technical (4-12)	074850 - Biotechnology		4 - 12
	CT - Career Technical (4-12)	070912 - Pharmacy Assisting		4 - 12
	CT - Career Technical (4-12)	070410 - Fitness Aide		4 - 12
	CT - Career Technical (4-12)	070302 - Practical Nurse		4 - 12
	CT - Career Technical (4-12)	070203 - Medical Lab Assisting		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CW - Career Technical Workforce Development	173601 - Millwork and Cabinet Making		4 - 12
	CW - Career Technical Workforce Development	172700 - Plastics Occupations		4 - 12
	CW - Career Technical Workforce Development	172307 - Tool and Die Making		4 - 12
	CW - Career Technical Workforce Development	172305 - Sheet Metal Fabrication		4 - 12
	CW - Career Technical Workforce Development	172304 - Heavy Metal Fabrication		4 - 12
	CW - Career Technical Workforce Development	172303 - Manufacturing Occupations		4 - 12
	CW - Career Technical Workforce Development	172004 - Industrial Lab Assisting		4 - 12
	CW - Career Technical Workforce Development	172000 - Chemical Laboratory Assisting		4 - 12
	CW - Career Technical Workforce Development	171900 - Graphic Occupations		4 - 12
	CW - Career Technical Workforce Development	171809 - Engineering Technologies-Product/Service		4 - 12
	CW - Career Technical Workforce Development	171808 - Engineering Technologies-Process		4 - 12
	CW - Career Technical Workforce Development	171807 - Engineering Technologies-Design		4 - 12
	CW - Career Technical Workforce Development	171802 - Manufacturing Engineering Technology		4 - 12
	CW - Career Technical Workforce Development	171801 - Engineering Technology		4 - 12
	CW - Career Technical Workforce Development	171650 - Energy Science		4 - 12
	CW - Career Technical Workforce Development	171504 - Telecommunications		4 - 12
	CW - Career Technical Workforce Development	171815 - Engineering Technologies-PLTW		4 - 12
	CW - Career Technical Workforce Development	171503 - Electronics		4 - 12
	CW - Career Technical Workforce Development	171403 - Motor Repair		4 - 12
	CW - Career Technical Workforce Development	172302 - Precision Machining		4 - 12
	CW - Career Technical Workforce Development	171402 - Power Transmission		4 - 12
	CW - Career Technical Workforce Development	171300 - Drafting Occupations		4 - 12
	CW - Career Technical Workforce Development	172306 - Welding and Cutting		4 - 12
	CW - Career Technical Workforce Development	171012 - Industrial Maintenance and Repair		4 - 12
	CW - Career Technical Workforce Development	171002 - Electrical Trades		4 - 12
	CW - Career Technical Workforce Development	170600 - Business Machine Maintenance		4 - 12
	CW - Career Technical Workforce Development	170380 - Manufacturing Operations		4 - 12
	CW - Career Technical Workforce Development	170375 - Automation and Robotics		4 - 12
	CW - Career Technical Workforce Development	170200 - Appliance Repair		4 - 12
	CW - Career Technical Workforce Development	170100 - Air Conditioning and Heating		4 - 12
	CW - Career Technical Workforce Development	079950 - Practical Nurse Coordinator		4 - 12
	CW - Career Technical Workforce Development	074850 - Biotechnology		4 - 12
	CW - Career Technical Workforce Development	070912 - Pharmacy Assisting		4 - 12
	CW - Career Technical Workforce Development	070410 - Fitness Aide		4 - 12

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
175007 - Digital Electronics	CW - Career Technical Workforce Development	070302 - Practical Nurse		4 - 12
	CW - Career Technical Workforce Development	070203 - Medical Lab Assisting		4 - 12
	DS (K-12) - Designated Subject (Grades K-12)	132160 - Physical Science/Physics		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	132150 - Physical Science: Chemistry		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	132040 - Earth Sciences		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	132030 - Life Sciences		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	132010 - Integrated Science		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	110094 - Integrated Mathematics		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	101315 - Industrial Technology		KG - 12
	HS - High School (7-12)	130400 - Earth Sciences		7 - 12
	HS - High School (7-12)	130302 - Physics		7 - 12
	HS - High School (7-12)	130301 - Chemistry		7 - 12
	HS - High School (7-12)	130200 - Biological Science		7 - 12
	HS - High School (7-12)	130000 - Comprehensive Science		7 - 12
	HS - High School (7-12)	110000 - Mathematics		7 - 12
	HS - High School (7-12)	102000 - Ind.Arts 7-12		7 - 12
	HS - High School (7-12)	101315 - Industrial Technology		7 - 12
	HS - High School (7-12)	100000 - Gen Ind Techn (Gen)		7 - 12
	MA - Multi-Age PK-12	132160 - Physical Science/Physics		KG - 12
	MA - Multi-Age PK-12	132150 - Physical Science: Chemistry		KG - 12
	MA - Multi-Age PK-12	132040 - Earth Sciences		KG - 12
	MA - Multi-Age PK-12	132030 - Life Sciences		KG - 12
	MA - Multi-Age PK-12	132010 - Integrated Science		KG - 12
	MA - Multi-Age PK-12	110094 - Integrated Mathematics		KG - 12
	SP - Special All Grades (K-12)	130302 - Physics		7 - 12
	SP - Special All Grades (K-12)	130301 - Chemistry		7 - 12
	SP - Special All Grades (K-12)	110000 - Mathematics		7 - 12
	SP - Special All Grades (K-12)	102000 - Ind.Arts 7-12		7 - 12
	SP - Special All Grades (K-12)	101320 - Industrial Technology		KG - 12
	SP - Special All Grades (K-12)	101315 - Industrial Technology		7 - 12
	SP - Special All Grades (K-12)	100005 - Indust. Arts K-12		KG - 12
	SP - Special All Grades (K-12)	100000 - Gen Ind Techn (Gen)		KG - 12
	TM - STEM (6-12)	160610 - Technology Education		6 - 12
	TM - STEM (6-12)	132010 - Integrated Science		6 - 12
	TM - STEM (6-12)	110094 - Integrated Mathematics		6 - 12
	VO - Vocational Education	173601 - Millwork and Cabinet Making		
	VO - Vocational Education	172700 - Plastics Occupations		
	VO - Vocational Education	172307 - Tool and Die Making		
	VO - Vocational Education	172306 - Welding and Cutting		
	VO - Vocational Education	172305 - Sheet Metal Fabrication		
	VO - Vocational Education	172304 - Heavy Metal Fabrication		
	VO - Vocational Education	172302 - Precision Machining		
	VO - Vocational Education	172004 - Industrial Lab Assisting		
	VO - Vocational Education	172000 - Chemical Laboratory Assisting		
	VO - Vocational Education	171815 - Engineering Technologies-PLTW		
	VO - Vocational Education	171808 - Engineering Technologies-Process		
	VO - Vocational Education	171802 - Manufacturing Engineering Technology		
	VO - Vocational Education	171801 - Engineering Technology		
	VO - Vocational Education	171504 - Telecommunications		
	VO - Vocational Education	171900 - Graphic Occupations		
	VO - Vocational Education	171500 - Graphic Occupations 171503 - Electronics		
	VO - Vocational Education	171403 - Motor Repair		

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
175007 - Digital Electronics	VO - Vocational Education	171402 - Power Transmission		
	VO - Vocational Education	171300 - Drafting Occupations		
	VO - Vocational Education	171012 - Industrial Maintenance and Repair		
	VO - Vocational Education	171002 - Electrical Trades		
	VO - Vocational Education	172303 - Manufacturing Occupations		
	VO - Vocational Education	170600 - Business Machine Maintenance		
	VO - Vocational Education	170380 - Manufacturing Operations		
	VO - Vocational Education	170375 - Automation and Robotics		
	VO - Vocational Education	170200 - Appliance Repair		
	VO - Vocational Education	170100 - Air Conditioning and Heating		
	VO - Vocational Education	160610 - Technology Education		
	VO - Vocational Education	079950 - Practical Nurse Coordinator		
	VO - Vocational Education	070912 - Pharmacy Assisting		
	VO - Vocational Education	070410 - Fitness Aide		
	VO - Vocational Education	070302 - Practical Nurse		
	VO - Vocational Education	070203 - Medical Lab Assisting		
	VO - Vocational Education	010100 - Agriscience		

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
175008 - Mechanisms and Drives	AD - Adolescence to Young Adult (7-12)	132160 - Physical Science/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132150 - Physical Science: Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132046 - Earth Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132045 - Earth Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132040 - Earth Sciences		7 - 12
	AD - Adolescence to Young Adult (7-12)	132036 - Life Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132035 - Life Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132034 - Life Sciences/Earth		7 - 12
	AD - Adolescence to Young Adult (7-12)	132030 - Life Sciences		7 - 12
	AD - Adolescence to Young Adult (7-12)	132020 - Physical Science/Physics/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132010 - Integrated Science		7 - 12
	AD - Adolescence to Young Adult (7-12)	110094 - Integrated Mathematics		7 - 12
	AD - Adolescence to Young Adult (7-12)	101315 - Industrial Technology		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132150 - Physical Science: Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132046 - Earth Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132045 - Earth Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132160 - Physical Science/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132040 - Earth Sciences		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132036 - Life Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132035 - Life Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132034 - Life Sciences/Earth		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132030 - Life Sciences		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132020 - Physical Science/Physics/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132010 - Integrated Science		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	110094 - Integrated Mathematics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	101315 - Industrial Technology		7 - 12
	CH - Comprehensive High School (7-12)	130410 - Earth Science (9-12)		7 - 12
	CH - Comprehensive High School (7-12)	130322 - Physics (9-12)		9 - 12
	CH - Comprehensive High School (7-12)	130312 - Chemistry (9-12)		7 - 12
	CH - Comprehensive High School (7-12)	130302 - Physics		7 - 12
	CH - Comprehensive High School (7-12)	130300 - Physical Science		7 - 12
	CH - Comprehensive High School (7-12)	130205 - Biological Science (9-12)		7 - 12
	CT - Career Technical (4-12)	170375 - Automation and Robotics		4 - 12
	CT - Career Technical (4-12)	170100 - Air Conditioning and Heating		4 - 12
	CT - Career Technical (4-12)	160610 - Technology Education		4 - 12
	CT - Career Technical (4-12)	079950 - Practical Nurse Coordinator		4 - 12
	CT - Career Technical (4-12)	074850 - Biotechnology		4 - 12
	CT - Career Technical (4-12)	070912 - Pharmacy Assisting		4 - 12
	CT - Career Technical (4-12)	070410 - Fitness Aide		4 - 12
	CT - Career Technical (4-12)	070302 - Practical Nurse		4 - 12
	CT - Career Technical (4-12)	070203 - Medical Lab Assisting		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CT - Career Technical (4-12)	172307 - Tool and Die Making		4 - 12
	CT - Career Technical (4-12)	172306 - Welding and Cutting		4 - 12
	CT - Career Technical (4-12)	172303 - Weiding and catting 172303 - Manufacturing Occupations		4 - 12
	CT - Career Technical (4-12)	172000 - Chemical Laboratory Assisting		4 - 12
	CT - Career Technical (4-12)	171815 - Engineering Technologies-PLTW		4 - 12
	CT - Career Technical (4-12)	171809 - Engineering Technologies-Product/Service		4 - 12
	CT - Career Technical (4-12)	172302 - Precision Machining		4 - 12
	CT - Career Technical (4-12)	171808 - Engineering Technologies-Process		4 - 12
	CT - Career Technical (4-12)	171807 - Engineering Technologies-Design		4 - 12
	CT - Career Technical (4-12)	171802 - Manufacturing Engineering Technology		4 - 12

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
175008 - Mechanisms and Drives	CT - Career Technical (4-12)	171801 - Engineering Technology		4 - 12
	CT - Career Technical (4-12)	171650 - Energy Science		4 - 12
	CT - Career Technical (4-12)	171504 - Telecommunications		4 - 12
	CT - Career Technical (4-12)	171503 - Electronics		4 - 12
	CT - Career Technical (4-12)	171402 - Power Transmission		4 - 12
	CT - Career Technical (4-12)	171300 - Drafting Occupations		4 - 12
	CT - Career Technical (4-12)	171012 - Industrial Maintenance and Repair		4 - 12
	CT - Career Technical (4-12)	171002 - Electrical Trades		4 - 12
	CT - Career Technical (4-12)	170380 - Manufacturing Operations		4 - 12
	CW - Career Technical Workforce Development	172307 - Tool and Die Making		4 - 12
	CW - Career Technical Workforce Development	172306 - Welding and Cutting		4 - 12
	CW - Career Technical Workforce Development	172302 - Precision Machining		4 - 12
	CW - Career Technical Workforce Development	172000 - Chemical Laboratory Assisting		4 - 12
	CW - Career Technical Workforce Development	171815 - Engineering Technologies-PLTW		4 - 12
	CW - Career Technical Workforce Development	171808 - Engineering Technologies-Process		4 - 12
	CW - Career Technical Workforce Development	171807 - Engineering Technologies-Design		4 - 12
	CW - Career Technical Workforce Development	171802 - Manufacturing Engineering Technology		4 - 12
	CW - Career Technical Workforce Development	171801 - Engineering Technology		4 - 12
	CW - Career Technical Workforce Development	171650 - Energy Science		4 - 12
	CW - Career Technical Workforce Development	171504 - Telecommunications		4 - 12
	CW - Career Technical Workforce Development	171503 - Electronics		4 - 12
	CW - Career Technical Workforce Development	171809 - Engineering Technologies-Product/Service		4 - 12
	CW - Career Technical Workforce Development	172303 - Manufacturing Occupations		4 - 12
	CW - Career Technical Workforce Development	171402 - Power Transmission		4 - 12
	CW - Career Technical Workforce Development	171300 - Drafting Occupations		4 - 12
	CW - Career Technical Workforce Development	171012 - Industrial Maintenance and Repair		4 - 12
	CW - Career Technical Workforce Development	171002 - Electrical Trades		4 - 12
	CW - Career Technical Workforce Development	170380 - Manufacturing Operations		4 - 12
	CW - Career Technical Workforce Development	170375 - Automation and Robotics		4 - 12
	CW - Career Technical Workforce Development	170100 - Air Conditioning and Heating		4 - 12
	CW - Career Technical Workforce Development	079950 - Practical Nurse Coordinator		4 - 12
	CW - Career Technical Workforce Development	074850 - Biotechnology		4 - 12
	CW - Career Technical Workforce Development	070912 - Pharmacy Assisting		4 - 12
	CW - Career Technical Workforce Development	070410 - Fitness Aide		4 - 12
	CW - Career Technical Workforce Development	070302 - Practical Nurse		4 - 12
	CW - Career Technical Workforce Development	070203 - Medical Lab Assisting		4 - 12
	DS (K-12) - Designated Subject (Grades K-12)	132160 - Physical Science/Physics		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	132150 - Physical Science: Chemistry		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	132040 - Earth Sciences		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	132030 - Life Sciences		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	132010 - Integrated Science		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	110094 - Integrated Mathematics		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	101315 - Industrial Technology		KG - 12
	HS - High School (7-12)	130400 - Earth Sciences		7 - 12
	HS - High School (7-12)	130302 - Physics		7 - 12
	HS - High School (7-12)	130301 - Chemistry		7 - 12
	HS - High School (7-12)	130200 - Biological Science		7 - 12
	HS - High School (7-12)	130000 - Comprehensive Science		7 - 12
	HS - High School (7-12)	110000 - Mathematics		7 - 12
	HS - High School (7-12)	102000 - Ind.Arts 7-12		7 - 12
	HS - High School (7-12)	101315 - Industrial Technology		7 - 12
	HS - High School (7-12)	100000 - Gen Ind Techn (Gen)		7 - 12
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SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
175008 - Mechanisms and Drives	MA - Multi-Age PK-12	132160 - Physical Science/Physics		KG - 12
	MA - Multi-Age PK-12	132150 - Physical Science: Chemistry		KG - 12
	MA - Multi-Age PK-12	132040 - Earth Sciences		KG - 12
	MA - Multi-Age PK-12	132030 - Life Sciences		KG - 12
	MA - Multi-Age PK-12	132010 - Integrated Science		KG - 12
	MA - Multi-Age PK-12	110094 - Integrated Mathematics		KG - 12
	SP - Special All Grades (K-12)	130302 - Physics		7 - 12
	SP - Special All Grades (K-12)	130301 - Chemistry		7 - 12
	SP - Special All Grades (K-12)	110000 - Mathematics		7 - 12
	SP - Special All Grades (K-12)	102000 - Ind.Arts 7-12		7 - 12
	SP - Special All Grades (K-12)	101320 - Industrial Technology		KG - 12
	SP - Special All Grades (K-12)	101315 - Industrial Technology		7 - 12
	SP - Special All Grades (K-12)	100005 - Indust. Arts K-12		KG - 12
	SP - Special All Grades (K-12)	100000 - Gen Ind Techn (Gen)		KG - 12
	TM - STEM (6-12)	160610 - Technology Education		6 - 12
	TM - STEM (6-12)	132010 - Integrated Science		6 - 12
	TM - STEM (6-12)	110094 - Integrated Mathematics		6 - 12
	VO - Vocational Education	172307 - Tool and Die Making		
	VO - Vocational Education	172306 - Welding and Cutting		
	VO - Vocational Education	172303 - Manufacturing Occupations		
	VO - Vocational Education	172302 - Precision Machining		
	VO - Vocational Education	172000 - Chemical Laboratory Assisting		
	VO - Vocational Education	171815 - Engineering Technologies-PLTW		
	VO - Vocational Education	171802 - Manufacturing Engineering Technology		
	VO - Vocational Education	171801 - Engineering Technology		
	VO - Vocational Education	171504 - Telecommunications		
	VO - Vocational Education	171503 - Electronics		
	VO - Vocational Education	171402 - Power Transmission		
	VO - Vocational Education	171300 - Drafting Occupations		
	VO - Vocational Education	171012 - Industrial Maintenance and Repair		
	VO - Vocational Education	171002 - Electrical Trades		
	VO - Vocational Education	170380 - Manufacturing Operations		
	VO - Vocational Education	170375 - Automation and Robotics		
	VO - Vocational Education	170100 - Air Conditioning and Heating		
	VO - Vocational Education	160610 - Technology Education		
	VO - Vocational Education	079950 - Practical Nurse Coordinator		
	VO - Vocational Education	070912 - Pharmacy Assisting		
	VO - Vocational Education	070410 - Fitness Aide		
	VO - Vocational Education	070302 - Practical Nurse		
	VO - Vocational Education	070203 - Medical Lab Assisting		
	VO - Vocational Education	010100 - Agriscience		

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
175009 - Engineering Capstone	AD - Adolescence to Young Adult (7-12)	132160 - Physical Science/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132150 - Physical Science: Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132046 - Earth Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132045 - Earth Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132040 - Earth Sciences		7 - 12
	AD - Adolescence to Young Adult (7-12)	132036 - Life Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132035 - Life Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132034 - Life Sciences/Earth		7 - 12
	AD - Adolescence to Young Adult (7-12)	132030 - Life Sciences		7 - 12
	AD - Adolescence to Young Adult (7-12)	132020 - Physical Science/Physics/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132010 - Integrated Science		7 - 12
	AD - Adolescence to Young Adult (7-12)	110094 - Integrated Mathematics		7 - 12
	AD - Adolescence to Young Adult (7-12)	101315 - Industrial Technology		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132160 - Physical Science/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132150 - Physical Science: Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132046 - Earth Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132045 - Earth Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132040 - Earth Sciences		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132036 - Life Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132035 - Life Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132034 - Life Sciences/Earth		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132030 - Life Sciences		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132020 - Physical Science/Physics/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132010 - Integrated Science		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	110094 - Integrated Mathematics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	101315 - Industrial Technology		7 - 12
	CH - Comprehensive High School (7-12)	130410 - Earth Science (9-12)		7 - 12
	CH - Comprehensive High School (7-12)	130322 - Physics (9-12)		9 - 12
	CH - Comprehensive High School (7-12)	130312 - Chemistry (9-12)		7 - 12
	CH - Comprehensive High School (7-12)	130302 - Physics		7 - 12
	CH - Comprehensive High School (7-12)	130300 - Physical Science		7 - 12
	CH - Comprehensive High School (7-12)	130205 - Biological Science (9-12)		7 - 12
	CT - Career Technical (4-12)	172307 - Tool and Die Making		4 - 12
	CT - Career Technical (4-12)	172306 - Welding and Cutting		4 - 12
	CT - Career Technical (4-12)	172303 - Manufacturing Occupations		4 - 12
	CT - Career Technical (4-12)	172302 - Precision Machining		4 - 12
	CT - Career Technical (4-12)	171815 - Engineering Technologies-PLTW		4 - 12
	CT - Career Technical (4-12)	171809 - Engineering Technologies-Product/Service		4 - 12
	CT - Career Technical (4-12)	171808 - Engineering Technologies-Process		4 - 12
	CT - Career Technical (4-12)	171802 - Manufacturing Engineering Technology		4 - 12
	CT - Career Technical (4-12)	171801 - Engineering Technology		4 - 12
	CT - Career Technical (4-12)	171650 - Energy Science		4 - 12
	CT - Career Technical (4-12)	171807 - Engineering Technologies-Design		4 - 12
	CT - Career Technical (4-12)	171504 - Telecommunications		4 - 12
	CT - Career Technical (4-12)	171503 - Electronics		4 - 12
	CT - Career Technical (4-12)	171402 - Power Transmission		4 - 12
	CT - Career Technical (4-12)	171300 - Drafting Occupations		4 - 12
	CT - Career Technical (4-12)	172000 - Chemical Laboratory Assisting		4 - 12
	CT - Career Technical (4-12)	171012 - Industrial Maintenance and Repair		4 - 12
	CT - Career Technical (4-12)	171002 - Electrical Trades		4 - 12
	CT - Career Technical (4-12)	170380 - Manufacturing Operations		4 - 12
	CT - Career Technical (4-12)	170375 - Automation and Robotics		4 - 12

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
175009 - Engineering Capstone	CT - Career Technical (4-12)	170100 - Air Conditioning and Heating		4 - 12
	CT - Career Technical (4-12)	160610 - Technology Education		4 - 12
	CT - Career Technical (4-12)	079950 - Practical Nurse Coordinator		4 - 12
	CT - Career Technical (4-12)	074850 - Biotechnology		4 - 12
	CT - Career Technical (4-12)	070912 - Pharmacy Assisting		4 - 12
	CT - Career Technical (4-12)	070410 - Fitness Aide		4 - 12
	CT - Career Technical (4-12)	070302 - Practical Nurse		4 - 12
	CT - Career Technical (4-12)	070203 - Medical Lab Assisting		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CW - Career Technical Workforce Development	172307 - Tool and Die Making		4 - 12
	CW - Career Technical Workforce Development	172306 - Welding and Cutting		4 - 12
	CW - Career Technical Workforce Development	172303 - Manufacturing Occupations		4 - 12
	CW - Career Technical Workforce Development	172000 - Chemical Laboratory Assisting		4 - 12
	CW - Career Technical Workforce Development	171815 - Engineering Technologies-PLTW		4 - 12
	CW - Career Technical Workforce Development	171809 - Engineering Technologies-Product/Service		4 - 12
	CW - Career Technical Workforce Development	171807 - Engineering Technologies-Design		4 - 12
	CW - Career Technical Workforce Development	171802 - Manufacturing Engineering Technology		4 - 12
	CW - Career Technical Workforce Development	171801 - Engineering Technology		4 - 12
	CW - Career Technical Workforce Development	171808 - Engineering Technologies-Process		4 - 12
	CW - Career Technical Workforce Development	171650 - Energy Science		4 - 12
	CW - Career Technical Workforce Development	171504 - Telecommunications		4 - 12
	CW - Career Technical Workforce Development	171503 - Electronics		4 - 12
	CW - Career Technical Workforce Development	171402 - Power Transmission		4 - 12
	CW - Career Technical Workforce Development	172302 - Precision Machining		4 - 12
	CW - Career Technical Workforce Development	171300 - Drafting Occupations		4 - 12
	CW - Career Technical Workforce Development	171012 - Industrial Maintenance and Repair		4 - 12
	CW - Career Technical Workforce Development	171002 - Electrical Trades		4 - 12
	CW - Career Technical Workforce Development	170380 - Manufacturing Operations		4 - 12
	CW - Career Technical Workforce Development	170375 - Automation and Robotics		4 - 12
	CW - Career Technical Workforce Development	170100 - Air Conditioning and Heating		4 - 12
	CW - Career Technical Workforce Development	079950 - Practical Nurse Coordinator		4 - 12
	CW - Career Technical Workforce Development	074850 - Biotechnology		4 - 12
	CW - Career Technical Workforce Development	070912 - Pharmacy Assisting		4 - 12
	CW - Career Technical Workforce Development	070410 - Fitness Aide		4 - 12
	CW - Career Technical Workforce Development	070302 - Practical Nurse		4 - 12
	CW - Career Technical Workforce Development	070203 - Medical Lab Assisting		4 - 12
	DS (K-12) - Designated Subject (Grades K-12)	132160 - Physical Science/Physics		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	132150 - Physical Science: Chemistry		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	132040 - Earth Sciences		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	132030 - Life Sciences		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	132010 - Integrated Science		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	110094 - Integrated Mathematics		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	101315 - Industrial Technology		KG - 12
	HS - High School (7-12)	130400 - Earth Sciences		7 - 12
	HS - High School (7-12)	130302 - Physics		7 - 12
	HS - High School (7-12)	130301 - Chemistry		7 - 12
	HS - High School (7-12)	130200 - Biological Science		7 - 12
	HS - High School (7-12)	130000 - Comprehensive Science		7 - 12
	HS - High School (7-12)	110000 - Mathematics		7 - 12
	HS - High School (7-12)	102000 - Ind.Arts 7-12		7 - 12
	HS - High School (7-12)	101315 - Industrial Technology		7 - 12
	HS - High School (7-12)	100000 - Gen Ind Technology		7 - 12

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
175009 - Engineering Capstone	MA - Multi-Age PK-12	132160 - Physical Science/Physics		KG - 12
	MA - Multi-Age PK-12	132150 - Physical Science: Chemistry		KG - 12
	MA - Multi-Age PK-12	132040 - Earth Sciences		KG - 12
	MA - Multi-Age PK-12	132030 - Life Sciences		KG - 12
	MA - Multi-Age PK-12	132010 - Integrated Science		KG - 12
	MA - Multi-Age PK-12	110094 - Integrated Mathematics		KG - 12
	SP - Special All Grades (K-12)	130302 - Physics		7 - 12
	SP - Special All Grades (K-12)	130301 - Chemistry		7 - 12
	SP - Special All Grades (K-12)	110000 - Mathematics		7 - 12
	SP - Special All Grades (K-12)	102000 - Ind.Arts 7-12		7 - 12
	SP - Special All Grades (K-12)	101320 - Industrial Technology		KG - 12
	SP - Special All Grades (K-12)	101315 - Industrial Technology		7 - 12
	SP - Special All Grades (K-12)	100005 - Indust. Arts K-12		KG - 12
	SP - Special All Grades (K-12)	100000 - Gen Ind Techn (Gen)		KG - 12
	TM - STEM (6-12)	160610 - Technology Education		6 - 12
	TM - STEM (6-12)	132010 - Integrated Science		6 - 12
	TM - STEM (6-12)	110094 - Integrated Mathematics		6 - 12
	VO - Vocational Education	172306 - Welding and Cutting		
	VO - Vocational Education	172303 - Manufacturing Occupations		
	VO - Vocational Education	172302 - Precision Machining		
	VO - Vocational Education	172000 - Chemical Laboratory Assisting		
	VO - Vocational Education	171815 - Engineering Technologies-PLTW		
	VO - Vocational Education	171802 - Manufacturing Engineering Technology		
	VO - Vocational Education	171801 - Engineering Technology		
	VO - Vocational Education	171504 - Telecommunications		
	VO - Vocational Education	171503 - Electronics		
	VO - Vocational Education	171402 - Power Transmission		
	VO - Vocational Education	171300 - Drafting Occupations		
	VO - Vocational Education	171012 - Industrial Maintenance and Repair		
	VO - Vocational Education	171002 - Electrical Trades		
	VO - Vocational Education	170380 - Manufacturing Operations		
	VO - Vocational Education	170375 - Automation and Robotics		
	VO - Vocational Education	172307 - Tool and Die Making		
	VO - Vocational Education	170100 - Air Conditioning and Heating		
	VO - Vocational Education	160610 - Technology Education		
	VO - Vocational Education	079950 - Practical Nurse Coordinator		
	VO - Vocational Education	070912 - Pharmacy Assisting		
	VO - Vocational Education	070410 - Fitness Aide		
	VO - Vocational Education	070302 - Practical Nurse		
	VO - Vocational Education	070203 - Medical Lab Assisting		
	VO - Vocational Education	010100 - Agriscience		

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
175012 - Analog Based Electronic Devices	AD - Adolescence to Young Adult (7-12)	132160 - Physical Science/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132150 - Physical Science: Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132046 - Earth Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132045 - Earth Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132040 - Earth Sciences		7 - 12
	AD - Adolescence to Young Adult (7-12)	132036 - Life Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132035 - Life Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132034 - Life Sciences/Earth		7 - 12
	AD - Adolescence to Young Adult (7-12)	132030 - Life Sciences		7 - 12
	AD - Adolescence to Young Adult (7-12)	132020 - Physical Science/Physics/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132010 - Integrated Science		7 - 12
	AD - Adolescence to Young Adult (7-12)	110094 - Integrated Mathematics		7 - 12
	AD - Adolescence to Young Adult (7-12)	101315 - Industrial Technology		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132160 - Physical Science/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132150 - Physical Science: Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132046 - Earth Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132045 - Earth Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132040 - Earth Sciences		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132036 - Life Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132035 - Life Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132034 - Life Sciences/Earth		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132030 - Life Sciences		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132020 - Physical Science/Physics/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132010 - Integrated Science		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	110094 - Integrated Mathematics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	101315 - Industrial Technology		7 - 12
	CH - Comprehensive High School (7-12)	130410 - Earth Science (9-12)		7 - 12
	CH - Comprehensive High School (7-12)	130322 - Physics (9-12)		9 - 12
	CH - Comprehensive High School (7-12)	130312 - Chemistry (9-12)		7 - 12
	CH - Comprehensive High School (7-12)	130302 - Physics		7 - 12
	CH - Comprehensive High School (7-12)	130300 - Physical Science		7 - 12
	CH - Comprehensive High School (7-12)	130205 - Biological Science (9-12)		7 - 12
	CT - Career Technical (4-12)	172307 - Tool and Die Making		4 - 12
	CT - Career Technical (4-12)	172306 - Welding and Cutting		4 - 12
	CT - Career Technical (4-12)	172303 - Manufacturing Occupations		4 - 12
	CT - Career Technical (4-12)	172302 - Precision Machining		4 - 12
	CT - Career Technical (4-12)	172000 - Chemical Laboratory Assisting		4 - 12
	CT - Career Technical (4-12)	171809 - Engineering Technologies-Product/Service		4 - 12
	CT - Career Technical (4-12)	171808 - Engineering Technologies-Process		4 - 12
	CT - Career Technical (4-12)	171807 - Engineering Technologies-Design		4 - 12
	CT - Career Technical (4-12)	171801 - Engineering Technology		4 - 12
	CT - Career Technical (4-12)	171650 - Energy Science		4 - 12
	CT - Career Technical (4-12)	171504 - Telecommunications		4 - 12
	CT - Career Technical (4-12)	171802 - Manufacturing Engineering Technology		4 - 12
	CT - Career Technical (4-12)	171815 - Engineering Technologies-PLTW		4 - 12
	CT - Career Technical (4-12)	171503 - Electronics		4 - 12
	CT - Career Technical (4-12)	171402 - Power Transmission		4 - 12
	CT - Career Technical (4-12)	171300 - Drafting Occupations		4 - 12
	CT - Career Technical (4-12)	171012 - Industrial Maintenance and Repair		4 - 12
	CT - Career Technical (4-12)	171002 - Electrical Trades		4 - 12
	CT - Career Technical (4-12)	170380 - Manufacturing Operations		4 - 12
	CT - Career Technical (4-12)	170375 - Automation and Robotics		4 - 12

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
175012 - Analog Based Electronic Devices	CT - Career Technical (4-12)	170100 - Air Conditioning and Heating		4 - 12
	CT - Career Technical (4-12)	160610 - Technology Education		4 - 12
	CT - Career Technical (4-12)	079950 - Practical Nurse Coordinator		4 - 12
	CT - Career Technical (4-12)	074850 - Biotechnology		4 - 12
	CT - Career Technical (4-12)	070912 - Pharmacy Assisting		4 - 12
	CT - Career Technical (4-12)	070410 - Fitness Aide		4 - 12
	CT - Career Technical (4-12)	070302 - Practical Nurse		4 - 12
	CT - Career Technical (4-12)	070203 - Medical Lab Assisting		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CW - Career Technical Workforce Development	172306 - Welding and Cutting		4 - 12
	CW - Career Technical Workforce Development	172303 - Manufacturing Occupations		4 - 12
	CW - Career Technical Workforce Development	172302 - Precision Machining		4 - 12
	CW - Career Technical Workforce Development	171815 - Engineering Technologies-PLTW		4 - 12
	CW - Career Technical Workforce Development	171809 - Engineering Technologies-Product/Service		4 - 12
	CW - Career Technical Workforce Development	171808 - Engineering Technologies-Process		4 - 12
	CW - Career Technical Workforce Development	171802 - Manufacturing Engineering Technology		4 - 12
	CW - Career Technical Workforce Development	171801 - Engineering Technology		4 - 12
	CW - Career Technical Workforce Development	171650 - Energy Science		4 - 12
	CW - Career Technical Workforce Development	171504 - Telecommunications		4 - 12
	CW - Career Technical Workforce Development	171503 - Electronics		4 - 12
	CW - Career Technical Workforce Development	171402 - Power Transmission		4 - 12
	CW - Career Technical Workforce Development	171300 - Drafting Occupations		4 - 12
	CW - Career Technical Workforce Development	171807 - Engineering Technologies-Design		4 - 12
	CW - Career Technical Workforce Development	172000 - Chemical Laboratory Assisting		4 - 12
	CW - Career Technical Workforce Development	172307 - Tool and Die Making		4 - 12
	CW - Career Technical Workforce Development	171012 - Industrial Maintenance and Repair		4 - 12
	CW - Career Technical Workforce Development	171002 - Electrical Trades		4 - 12
	CW - Career Technical Workforce Development	170380 - Manufacturing Operations		4 - 12
	CW - Career Technical Workforce Development	170375 - Automation and Robotics		4 - 12
	CW - Career Technical Workforce Development	170100 - Air Conditioning and Heating		4 - 12
	CW - Career Technical Workforce Development	079950 - Practical Nurse Coordinator		4 - 12
	CW - Career Technical Workforce Development	074850 - Biotechnology		4 - 12
	CW - Career Technical Workforce Development	070912 - Pharmacy Assisting		4 - 12
	CW - Career Technical Workforce Development	070410 - Fitness Aide		4 - 12
	CW - Career Technical Workforce Development	070302 - Practical Nurse		4 - 12
	CW - Career Technical Workforce Development	070203 - Medical Lab Assisting		4 - 12
	DS (4-12) - Designated Subject (4-12)	132160 - Physical Science/Physics		4 - 12
	DS (4-12) - Designated Subject (4-12)	132150 - Physical Science: Chemistry		4 - 12
	DS (4-12) - Designated Subject (4-12)	132040 - Earth Sciences		4 - 12
	DS (4-12) - Designated Subject (4-12)	132030 - Life Sciences		4 - 12
	DS (4-12) - Designated Subject (4-12)	132010 - Integrated Science		4 - 12
	DS (4-12) - Designated Subject (4-12)	110094 - Integrated Mathematics		4 - 12
	DS (4-12) - Designated Subject (4-12)	101315 - Industrial Technology		4 - 12
	HS - High School (7-12)	130400 - Earth Sciences		7 - 12
	HS - High School (7-12)	130302 - Physics		7 - 12
	HS - High School (7-12)	130301 - Chemistry		7 - 12
	HS - High School (7-12)	130200 - Biological Science		7 - 12
	HS - High School (7-12)	130000 - Comprehensive Science		7 - 12
	HS - High School (7-12)	110000 - Mathematics		7 - 12
	HS - High School (7-12)	102000 - Ind.Arts 7-12		7 - 12
	HS - High School (7-12)	101315 - Industrial Technology		7 - 12
1	HS - High School (7-12)	100000 - Gen Ind Techn (Gen)		7 - 12

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
175012 - Analog Based Electronic Devices	MA - Multi-Age PK-12	132160 - Physical Science/Physics		KG - 12
	MA - Multi-Age PK-12	132150 - Physical Science: Chemistry		KG - 12
	MA - Multi-Age PK-12	132040 - Earth Sciences		KG - 12
	MA - Multi-Age PK-12	132030 - Life Sciences		KG - 12
	MA - Multi-Age PK-12	132010 - Integrated Science		KG - 12
	MA - Multi-Age PK-12	110094 - Integrated Mathematics		KG - 12
	SP - Special All Grades (K-12)	130302 - Physics		KG - 12
	SP - Special All Grades (K-12)	130301 - Chemistry		KG - 12
	SP - Special All Grades (K-12)	110000 - Mathematics		KG - 12
	SP - Special All Grades (K-12)	102000 - Ind.Arts 7-12		KG - 12
	SP - Special All Grades (K-12)	101320 - Industrial Technology		KG - 12
	SP - Special All Grades (K-12)	101315 - Industrial Technology		KG - 12
	SP - Special All Grades (K-12)	100005 - Indust. Arts K-12		KG - 12
	SP - Special All Grades (K-12)	100000 - Gen Ind Techn (Gen)		KG - 12
	TM - STEM (6-12)	160610 - Technology Education		6 - 12
	TM - STEM (6-12)	132010 - Integrated Science		6 - 12
	TM - STEM (6-12)	110094 - Integrated Mathematics		6 - 12
	VO - Vocational Education	172307 - Tool and Die Making		
	VO - Vocational Education	172303 - Manufacturing Occupations		
	VO - Vocational Education	172302 - Precision Machining		
	VO - Vocational Education	172000 - Chemical Laboratory Assisting		
	VO - Vocational Education	171815 - Engineering Technologies-PLTW		1
	VO - Vocational Education	171802 - Manufacturing Engineering Technology		
	VO - Vocational Education	171801 - Engineering Technology		
	VO - Vocational Education	171504 - Telecommunications		
	VO - Vocational Education	171503 - Electronics		
	VO - Vocational Education	171402 - Power Transmission		
	VO - Vocational Education	171300 - Drafting Occupations		
	VO - Vocational Education	171012 - Industrial Maintenance and Repair		
	VO - Vocational Education	172306 - Welding and Cutting		
	VO - Vocational Education	171002 - Electrical Trades		
	VO - Vocational Education	170380 - Manufacturing Operations		
	VO - Vocational Education	170375 - Automation and Robotics		
	VO - Vocational Education	170100 - Air Conditioning and Heating		
	VO - Vocational Education	160610 - Technology Education		
	VO - Vocational Education	079950 - Practical Nurse Coordinator		
	VO - Vocational Education	070912 - Pharmacy Assisting		
	VO - Vocational Education	070410 - Fitness Aide		
	VO - Vocational Education	070302 - Practical Nurse		
	VO - Vocational Education	070203 - Medical Lab Assisting		
	VO - Vocational Education	010100 - Agriscience		

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
175015 - Pre-Engineering Technologies (Middle Level)	AD - Adolescence to Young Adult (7-12)	132160 - Physical Science/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132150 - Physical Science: Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132046 - Earth Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132045 - Earth Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132040 - Earth Sciences		7 - 12
	AD - Adolescence to Young Adult (7-12)	132036 - Life Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132035 - Life Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132034 - Life Sciences/Earth		7 - 12
	AD - Adolescence to Young Adult (7-12)	132030 - Life Sciences		7 - 12
	AD - Adolescence to Young Adult (7-12)	132020 - Physical Science/Physics/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132010 - Integrated Science		7 - 12
	AD - Adolescence to Young Adult (7-12)	110094 - Integrated Mathematics		7 - 12
	AD - Adolescence to Young Adult (7-12)	101315 - Industrial Technology		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132160 - Physical Science/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132150 - Physical Science: Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132046 - Earth Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132045 - Earth Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132040 - Earth Sciences		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132036 - Life Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132035 - Life Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132034 - Life Sciences/Earth		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132030 - Life Sciences		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132020 - Physical Science/Physics/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132010 - Integrated Science		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	110094 - Integrated Mathematics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	101315 - Industrial Technology		7 - 12
	CH - Comprehensive High School (7-12)	130410 - Earth Science (9-12)		7 - 12
	CH - Comprehensive High School (7-12)	130322 - Physics (9-12)		9 - 12
	CH - Comprehensive High School (7-12)	130312 - Chemistry (9-12)		7 - 12
	CH - Comprehensive High School (7-12)	130302 - Physics		7 - 12
	CH - Comprehensive High School (7-12)	130300 - Physical Science		7 - 12
	CH - Comprehensive High School (7-12)	130205 - Biological Science (9-12)		7 - 12
	CT - Career Technical (4-12)	173601 - Millwork and Cabinet Making		4 - 12
	CT - Career Technical (4-12)	172700 - Plastics Occupations		4 - 12
	CT - Career Technical (4-12)	172307 - Tool and Die Making		4 - 12
	CT - Career Technical (4-12)	172305 - Sheet Metal Fabrication		4 - 12
	CT - Career Technical (4-12)	172304 - Heavy Metal Fabrication		4 - 12
	CT - Career Technical (4-12)	172303 - Manufacturing Occupations		4 - 12
	CT - Career Technical (4-12)	172004 - Industrial Lab Assisting		4 - 12
	CT - Career Technical (4-12)	172000 - Chemical Laboratory Assisting		4 - 12
	CT - Career Technical (4-12)	171900 - Graphic Occupations		4 - 12
	CT - Career Technical (4-12)	171815 - Engineering Technologies-PLTW		4 - 12
	CT - Career Technical (4-12)	171809 - Engineering Technologies-Product/Service		4 - 12
	CT - Career Technical (4-12)	171808 - Engineering Technologies-Process		4 - 12
	CT - Career Technical (4-12)	171807 - Engineering Technologies-Design		4 - 12
	CT - Career Technical (4-12)	171802 - Manufacturing Engineering Technology		4 - 12
	CT - Career Technical (4-12)	171801 - Engineering Technology		4 - 12
	CT - Career Technical (4-12)	171650 - Energy Science		4 - 12
	CT - Career Technical (4-12)	171504 - Telecommunications		4 - 12
	CT - Career Technical (4-12)	171503 - Electronics		4 - 12
	CT - Career Technical (4-12)	171403 - Motor Repair		4 - 12
	CT - Career Technical (4-12)	171402 - Power Transmission		4 - 12

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
175015 - Pre-Engineering Technologies (Middle Level)	CT - Career Technical (4-12)	171300 - Drafting Occupations		4 - 12
	CT - Career Technical (4-12)	172302 - Precision Machining		4 - 12
	CT - Career Technical (4-12)	171012 - Industrial Maintenance and Repair		4 - 12
	CT - Career Technical (4-12)	171002 - Electrical Trades		4 - 12
	CT - Career Technical (4-12)	172306 - Welding and Cutting		4 - 12
	CT - Career Technical (4-12)	170600 - Business Machine Maintenance		4 - 12
	CT - Career Technical (4-12)	170380 - Manufacturing Operations		4 - 12
	CT - Career Technical (4-12)	170375 - Automation and Robotics		4 - 12
	CT - Career Technical (4-12)	170200 - Appliance Repair		4 - 12
	CT - Career Technical (4-12)	170100 - Air Conditioning and Heating		4 - 12
	CT - Career Technical (4-12)	160610 - Technology Education		4 - 12
	CT - Career Technical (4-12)	079950 - Practical Nurse Coordinator		4 - 12
	CT - Career Technical (4-12)	074850 - Biotechnology		4 - 12
	CT - Career Technical (4-12)	070912 - Pharmacy Assisting		4 - 12
	CT - Career Technical (4-12)	070410 - Fitness Aide		4 - 12
	CT - Career Technical (4-12)	070302 - Practical Nurse		4 - 12
	CT - Career Technical (4-12)	070203 - Medical Lab Assisting		4 - 12
	CT - Career Technical (4-12)	010100 - Agriscience		4 - 12
	CW - Career Technical Workforce Development	173601 - Millwork and Cabinet Making		4 - 12
	CW - Career Technical Workforce Development	172700 - Plastics Occupations		4 - 12
	CW - Career Technical Workforce Development	172307 - Tool and Die Making		4 - 12
	CW - Career Technical Workforce Development	172305 - Sheet Metal Fabrication		4 - 12
	CW - Career Technical Workforce Development	172304 - Heavy Metal Fabrication		4 - 12
	CW - Career Technical Workforce Development	172303 - Manufacturing Occupations		4 - 12
	CW - Career Technical Workforce Development	172004 - Industrial Lab Assisting		4 - 12
	CW - Career Technical Workforce Development	172000 - Chemical Laboratory Assisting		4 - 12
	CW - Career Technical Workforce Development	171900 - Graphic Occupations		4 - 12
	CW - Career Technical Workforce Development	171809 - Engineering Technologies-Product/Service		4 - 12
	CW - Career Technical Workforce Development	171808 - Engineering Technologies-Process		4 - 12
	CW - Career Technical Workforce Development	171807 - Engineering Technologies-Design		4 - 12
	CW - Career Technical Workforce Development	171802 - Manufacturing Engineering Technology		4 - 12
	CW - Career Technical Workforce Development	171801 - Engineering Technology		4 - 12
	CW - Career Technical Workforce Development	171650 - Energy Science		4 - 12
	CW - Career Technical Workforce Development	171504 - Telecommunications		4 - 12
	CW - Career Technical Workforce Development	171815 - Engineering Technologies-PLTW		4 - 12
	CW - Career Technical Workforce Development	172302 - Precision Machining		4 - 12
	CW - Career Technical Workforce Development	171503 - Electronics		4 - 12
	CW - Career Technical Workforce Development	171403 - Motor Repair		4 - 12
	CW - Career Technical Workforce Development	171402 - Power Transmission		4 - 12
	CW - Career Technical Workforce Development	171300 - Drafting Occupations		4 - 12
	CW - Career Technical Workforce Development	172306 - Welding and Cutting		4 - 12
	CW - Career Technical Workforce Development	171012 - Industrial Maintenance and Repair		4 - 12
	CW - Career Technical Workforce Development	171002 - Electrical Trades		4 - 12
	CW - Career Technical Workforce Development	170600 - Business Machine Maintenance		4 - 12
	CW - Career Technical Workforce Development	170380 - Manufacturing Operations		4 - 12
	CW - Career Technical Workforce Development	170375 - Automation and Robotics		4 - 12
	CW - Career Technical Workforce Development	170200 - Appliance Repair		4 - 12
	CW - Career Technical Workforce Development	170100 - Air Conditioning and Heating		4 - 12
	·	· · ·		4 - 12
	· ·			4 - 12
	· ·			4 - 12
	· ·	·		4 - 12
	CW - Career Technical Workforce Development	079950 - Practical Nurse Coordinator 074850 - Biotechnology 070912 - Pharmacy Assisting 070410 - Fitness Aide		

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
175015 - Pre-Engineering Technologies (Middle Level)	CW - Career Technical Workforce Development	070302 - Practical Nurse		4 - 12
	CW - Career Technical Workforce Development	070203 - Medical Lab Assisting		4 - 12
	DS (K-12) - Designated Subject (Grades K-12)	132160 - Physical Science/Physics		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	132150 - Physical Science: Chemistry		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	132040 - Earth Sciences		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	132030 - Life Sciences		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	132010 - Integrated Science		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	110094 - Integrated Mathematics		KG - 12
	DS (K-12) - Designated Subject (Grades K-12)	101315 - Industrial Technology		KG - 12
	HS - High School (7-12)	130400 - Earth Sciences		7 - 12
	HS - High School (7-12)	130302 - Physics		7 - 12
	HS - High School (7-12)	130301 - Chemistry		7 - 12
	HS - High School (7-12)	130200 - Biological Science		7 - 12
	HS - High School (7-12)	130000 - Comprehensive Science		7 - 12
	HS - High School (7-12)	110000 - Mathematics		7 - 12
	HS - High School (7-12)	102000 - Ind.Arts 7-12		7 - 12
	HS - High School (7-12)	101315 - Industrial Technology		7 - 12
	HS - High School (7-12)	100000 - Gen Ind Techn (Gen)		7 - 12
	MA - Multi-Age PK-12	132160 - Physical Science/Physics		KG - 12
	MA - Multi-Age PK-12	132150 - Physical Science: Chemistry		KG - 12
	MA - Multi-Age PK-12	132040 - Earth Sciences		KG - 12
	MA - Multi-Age PK-12	132030 - Life Sciences		KG - 12
	MA - Multi-Age PK-12	132010 - Integrated Science		KG - 12
	MA - Multi-Age PK-12	110094 - Integrated Mathematics		KG - 12
	SP - Special All Grades (K-12)	130302 - Physics		7 - 12
	SP - Special All Grades (K-12)	130301 - Chemistry		7 - 12
	SP - Special All Grades (K-12)	110000 - Mathematics		7 - 12
	SP - Special All Grades (K-12)	102000 - Ind.Arts 7-12		7 - 12
	SP - Special All Grades (K-12)	101320 - Industrial Technology		KG - 12
	SP - Special All Grades (K-12)	101315 - Industrial Technology		7 - 12
	SP - Special All Grades (K-12)	100005 - Indust. Arts K-12		KG - 12
	SP - Special All Grades (K-12)	100000 - Gen Ind Techn (Gen)		KG - 12
	TM - STEM (6-12)	160610 - Technology Education		6 - 12
	TM - STEM (6-12)	132010 - Integrated Science		6 - 12
	TM - STEM (6-12)	110094 - Integrated Mathematics		6 - 12
	VO - Vocational Education	173601 - Millwork and Cabinet Making		
	VO - Vocational Education	172700 - Plastics Occupations		
	VO - Vocational Education	172307 - Tool and Die Making		
	VO - Vocational Education	172306 - Welding and Cutting		
	VO - Vocational Education	172305 - Sheet Metal Fabrication		
	VO - Vocational Education	172304 - Heavy Metal Fabrication		
	VO - Vocational Education	172302 - Precision Machining		
	VO - Vocational Education	172004 - Industrial Lab Assisting		
	VO - Vocational Education	172000 - Chemical Laboratory Assisting		
	VO - Vocational Education	171815 - Engineering Technologies-PLTW		
	VO - Vocational Education	171808 - Engineering Technologies-Process		
	VO - Vocational Education	171802 - Manufacturing Engineering Technology		
	VO - Vocational Education	171900 - Graphic Occupations		
	VO - Vocational Education	171801 - Engineering Technology		
	VO - Vocational Education	171504 - Telecommunications		
	VO - Vocational Education	171503 - Electronics		
	VO - Vocational Education	171403 - Motor Repair		

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
175015 - Pre-Engineering Technologies (Middle Level)	VO - Vocational Education	171402 - Power Transmission		
	VO - Vocational Education	171300 - Drafting Occupations		
	VO - Vocational Education	171012 - Industrial Maintenance and Repair		
	VO - Vocational Education	171002 - Electrical Trades		
	VO - Vocational Education	172303 - Manufacturing Occupations		
	VO - Vocational Education	170600 - Business Machine Maintenance		
	VO - Vocational Education	170380 - Manufacturing Operations		
	VO - Vocational Education	170375 - Automation and Robotics		
	VO - Vocational Education	170200 - Appliance Repair		
	VO - Vocational Education	170100 - Air Conditioning and Heating		
	VO - Vocational Education	160610 - Technology Education		
	VO - Vocational Education	079950 - Practical Nurse Coordinator		
	VO - Vocational Education	070912 - Pharmacy Assisting		
	VO - Vocational Education	070410 - Fitness Aide		
	VO - Vocational Education	070302 - Practical Nurse		
	VO - Vocational Education	070203 - Medical Lab Assisting		
	VO - Vocational Education	010100 - Agriscience		

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
175017 - Engineering Logic	AD - Adolescence to Young Adult (7-12)	132160 - Physical Science/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132150 - Physical Science: Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132046 - Earth Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132045 - Earth Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132040 - Earth Sciences		7 - 12
	AD - Adolescence to Young Adult (7-12)	132036 - Life Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132035 - Life Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132034 - Life Sciences/Earth		7 - 12
	AD - Adolescence to Young Adult (7-12)	132030 - Life Sciences		7 - 12
	AD - Adolescence to Young Adult (7-12)	132020 - Physical Science/Physics/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132010 - Integrated Science		7 - 12
	AD - Adolescence to Young Adult (7-12)	110094 - Integrated Mathematics		7 - 12
	AD - Adolescence to Young Adult (7-12)	101315 - Industrial Technology		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132150 - Physical Science: Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132046 - Earth Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132045 - Earth Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132160 - Physical Science/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132040 - Earth Sciences		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132036 - Life Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132035 - Life Sci/Physics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132034 - Life Sciences/Earth		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132030 - Life Sciences		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132020 - Physical Science/Physics/Chemistry		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	132010 - Integrated Science		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	110094 - Integrated Mathematics		7 - 12
	AD - Adolescence to Young Adult (Grades 7-12)	101315 - Industrial Technology		7 - 12
	CH - Comprehensive High School (7-12)	130410 - Earth Science (9-12)		7 - 12
	CH - Comprehensive High School (7-12)	130322 - Physics (9-12)		9 - 12
	CH - Comprehensive High School (7-12)	130312 - Chemistry (9-12)		7 - 12
	CH - Comprehensive High School (7-12)	130302 - Physics		7 - 12
	CH - Comprehensive High School (7-12)	130300 - Physical Science		7 - 12
	CH - Comprehensive High School (7-12)	130205 - Biological Science (9-12)		7 - 12
	CT - Career Technical (4-12)	172307 - Tool and Die Making		4 - 12
	CT - Career Technical (4-12)	172303 - Manufacturing Occupations		4 - 12
	CT - Career Technical (4-12)	172302 - Precision Machining		4 - 12
	CT - Career Technical (4-12)	172000 - Chemical Laboratory Assisting		4 - 12
	CT - Career Technical (4-12)	171809 - Engineering Technologies-Product/Service		4 - 12
	CT - Career Technical (4-12)	171808 - Engineering Technologies-Process		4 - 12
	CT - Career Technical (4-12)	171807 - Engineering Technologies-Design		4 - 12
	CT - Career Technical (4-12)	171802 - Manufacturing Engineering Technology		4 - 12
	CT - Career Technical (4-12)	171801 - Engineering Technology		4 - 12
	CT - Career Technical (4-12)	171650 - Energy Science		4 - 12
	CT - Career Technical (4-12)	171504 - Telecommunications		4 - 12
	CT - Career Technical (4-12)	171815 - Engineering Technologies-PLTW		4 - 12
	CT - Career Technical (4-12)	172306 - Welding and Cutting		4 - 12
	CT - Career Technical (4-12)	171503 - Electronics		4 - 12
	CT - Career Technical (4-12)	171402 - Power Transmission		4 - 12
	CT - Career Technical (4-12)	171300 - Drafting Occupations		4 - 12
	CT - Career Technical (4-12)	171012 - Industrial Maintenance and Repair		4 - 12
	CT - Career Technical (4-12)	171002 - Electrical Trades		4 - 12
	CT - Career Technical (4-12)	170380 - Manufacturing Operations		4 - 12
	CT - Career Technical (4-12)	170375 - Automation and Robotics		4 - 12

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
175017 - Engineering Logic	CT - Career Technical (4-12)	170100 - Air Conditioning and Heating		4 - 12
	CT - Career Technical (4-12)	160610 - Technology Education		4 - 12
	CT - Career Technical (4-12)	074850 - Biotechnology		4 - 12
	CW - Career Technical Workforce Development	172307 - Tool and Die Making		4 - 12
	CW - Career Technical Workforce Development	172306 - Welding and Cutting		4 - 12
	CW - Career Technical Workforce Development	172303 - Manufacturing Occupations		4 - 12
	CW - Career Technical Workforce Development	172000 - Chemical Laboratory Assisting		4 - 12
	CW - Career Technical Workforce Development	171815 - Engineering Technologies-PLTW		4 - 12
	CW - Career Technical Workforce Development	171809 - Engineering Technologies-Product/Service		4 - 12
	CW - Career Technical Workforce Development	171808 - Engineering Technologies-Process		4 - 12
	CW - Career Technical Workforce Development	171807 - Engineering Technologies-Design		4 - 12
	CW - Career Technical Workforce Development	171802 - Manufacturing Engineering Technology		4 - 12
	CW - Career Technical Workforce Development	171801 - Engineering Technology		4 - 12
	CW - Career Technical Workforce Development	172302 - Precision Machining		4 - 12
	CW - Career Technical Workforce Development	171650 - Energy Science		4 - 12
	CW - Career Technical Workforce Development	171504 - Telecommunications		4 - 12
	CW - Career Technical Workforce Development	171503 - Electronics		4 - 12
	CW - Career Technical Workforce Development	171402 - Power Transmission		4 - 12
	CW - Career Technical Workforce Development	171300 - Drafting Occupations		4 - 12
	CW - Career Technical Workforce Development	171012 - Industrial Maintenance and Repair		4 - 12
	CW - Career Technical Workforce Development	171002 - Electrical Trades		4 - 12
	CW - Career Technical Workforce Development	170380 - Manufacturing Operations		4 - 12
	CW - Career Technical Workforce Development	170375 - Automation and Robotics		4 - 12
	CW - Career Technical Workforce Development	170100 - Air Conditioning and Heating		4 - 12
	CW - Career Technical Workforce Development	074850 - Biotechnology		4 - 12
	DS (4-12) - Designated Subject (4-12)	132160 - Physical Science/Physics		4 - 12
	DS (4-12) - Designated Subject (4-12)	132150 - Physical Science: Chemistry		4 - 12
	DS (4-12) - Designated Subject (4-12)	132040 - Earth Sciences		4 - 12
	DS (4-12) - Designated Subject (4-12)	132030 - Life Sciences		4 - 12
	DS (4-12) - Designated Subject (4-12)	132010 - Integrated Science		4 - 12
	DS (4-12) - Designated Subject (4-12)	110094 - Integrated Mathematics		4 - 12
	DS (4-12) - Designated Subject (4-12)	101315 - Industrial Technology		4 - 12
	HS - High School (7-12)	130400 - Earth Sciences		7 - 12
	HS - High School (7-12)	130302 - Physics		7 - 12
	HS - High School (7-12)	130301 - Chemistry		7 - 12
	HS - High School (7-12)	130200 - Biological Science		7 - 12
	HS - High School (7-12)	130000 - Comprehensive Science		7 - 12
	HS - High School (7-12)	110000 - Mathematics		7 - 12
	HS - High School (7-12)	102000 - Ind.Arts 7-12		7 - 12
	HS - High School (7-12)	101315 - Industrial Technology		7 - 12
	HS - High School (7-12)	100000 - Gen Ind Techn (Gen)		7 - 12
	MA - Multi-Age PK-12	132160 - Physical Science/Physics		KG - 12
	MA - Multi-Age PK-12	132150 - Physical Science: Chemistry		KG - 12
	MA - Multi-Age PK-12	132040 - Earth Sciences		KG - 12
	MA - Multi-Age PK-12	132030 - Life Sciences		KG - 12
	MA - Multi-Age PK-12	132010 - Integrated Science		KG - 12
	MA - Multi-Age PK-12	110094 - Integrated Mathematics		KG - 12
	SP - Special All Grades (K-12)	130302 - Physics		7 - 12
	SP - Special All Grades (K-12)	130301 - Chemistry		7 - 12
Í	SP - Special All Grades (K-12)	110000 - Mathematics		7 - 12
Í	SP - Special All Grades (K-12)	102000 - Ind.Arts 7-12		7 - 12
Í	SP - Special All Grades (K-12)	101320 - Industrial Technology		KG - 12

SUBJECT	CREDENTIAL	TEACHING FIELD / ENDORSEMENT	ADDITIONAL TEACHING FIELD / ENDORSEMENT	GRADES
175017 - Engineering Logic	SP - Special All Grades (K-12)	101315 - Industrial Technology		7 - 12
	SP - Special All Grades (K-12)	100005 - Indust. Arts K-12		KG - 12
	SP - Special All Grades (K-12)	100000 - Gen Ind Techn (Gen)		KG - 12
	TM - STEM (6-12)	160610 - Technology Education		6 - 12
	TM - STEM (6-12)	132010 - Integrated Science		6 - 12
	TM - STEM (6-12)	110094 - Integrated Mathematics		6 - 12
	VO - Vocational Education	172307 - Tool and Die Making		
	VO - Vocational Education	172306 - Welding and Cutting		4 - 12
	VO - Vocational Education	172303 - Manufacturing Occupations		
	VO - Vocational Education	172302 - Precision Machining		
	VO - Vocational Education	172000 - Chemical Laboratory Assisting		
	VO - Vocational Education	171815 - Engineering Technologies-PLTW		
	VO - Vocational Education	171802 - Manufacturing Engineering Technology		
	VO - Vocational Education	171801 - Engineering Technology		
	VO - Vocational Education	171504 - Telecommunications		
	VO - Vocational Education	171503 - Electronics		
	VO - Vocational Education	171402 - Power Transmission		
	VO - Vocational Education	171300 - Drafting Occupations		
	VO - Vocational Education	171012 - Industrial Maintenance and Repair		
	VO - Vocational Education	171002 - Electrical Trades		
	VO - Vocational Education	170380 - Manufacturing Operations		1
	VO - Vocational Education	170375 - Automation and Robotics		
	VO - Vocational Education	170100 - Air Conditioning and Heating		1
	VO - Vocational Education	160610 - Technology Education		4 - 12