

# 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 (i.e., Kindergarten-Primary (KP), Kindergarten-Elementary (KE), Elementary (EL), Early Childhood (EC), 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 issued teaching credential other than a Short Term Substitute license.

## 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 (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 hearing impaired students must be taught by someone certificated or licensed to teach hearing impaired 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)

Information Technology (Career-Technical)

SUBJECT	CREDENTIAL	TEACHING FIELD/ENDORSEMENT	ADDITIONAL TEACHING FIELD/ENDORSEMENT	GRADES
145005 - Information Technology	CT - Career Technical (4-12)	140220 - Network Systems		4 - 12
	CT - Career Technical (4-12)	170600 - Business Machine Maintenance		4 - 12
	CT - Career Technical (4-12)	140210 - Information Services and Support		4 - 12
	CT - Career Technical (4-12)	171503 - Electronics		4 - 12
	CT - Career Technical (4-12)	140100 - Accounting		4 - 12
	CT - Career Technical (4-12)	140550 - Integrated Business		4 - 12
	CT - Career Technical (4-12)	171505 - Computer Network Technician		4 - 12
	CT - Career Technical (4-12)	040115 - Entertainment Marketing		4 - 12
	CT - Career Technical (4-12)	170700 - Commercial Art Occupations		4 - 12
	CT - Career Technical (4-12)	140240 - Interactive Media		4 - 12
	CT - Career Technical (4-12)	140230 - Programming/Software Development		4 - 12
	CT - Career Technical (4-12)	171900 - Graphic Occupations		4 - 12
	CT - Career Technical (4-12)	171504 - Telecommunications		4 - 12
	CT - Career Technical (4-12)	140200 - Business Information Systems		4 - 12
	CW - Career Technical Workforce Development	171505 - Computer Network Technician		4 - 12
	CW - Career Technical Workforce Development	171900 - Graphic Occupations		4 - 12
	CW - Career Technical Workforce Development	171503 - Electronics		4 - 12
	CW - Career Technical Workforce Development	140220 - Network Systems		4 - 12
	CW - Career Technical Workforce Development	140200 - Business Information Systems		4 - 12
	CW - Career Technical Workforce Development	140210 - Information Services and Support		4 - 12
	CW - Career Technical Workforce Development	140240 - Interactive Media		4 - 12
	CW - Career Technical Workforce Development	140100 - Accounting		4 - 12
	CW - Career Technical Workforce Development	170600 - Business Machine Maintenance		4 - 12
	CW - Career Technical Workforce Development	170700 - Commercial Art Occupations		4 - 12
	CW - Career Technical Workforce Development	040115 - Entertainment Marketing		4 - 12
	CW - Career Technical Workforce Development	171504 - Telecommunications		4 - 12
	HS - High School (7-12)	030398 - Cooperative Office Education		4 - 12
	HS - High School (7-12)	031399 - Intensive Office Education		4 - 12
	VO - Vocational Education	140240 - Interactive Media		4 - 12
	VO - Vocational Education	171505 - Computer Network Technician		4 - 12
	VO - Vocational Education	171504 - Telecommunications		4 - 12
	VO - Vocational Education	140150 - Data Processing/Programming		4 - 12
	VO - Vocational Education	140100 - Accounting		4 - 12
	VO - Vocational Education	040115 - Entertainment Marketing		4 - 12
	VO - Vocational Education	140901 - Secretarial Lab		4 - 12
	VO - Vocational Education	171503 - Electronics		4 - 12
	VO - Vocational Education	170600 - Business Machine Maintenance		4 - 12
	VO - Vocational Education	149003 - Vocational BOE w/o Data Processing and Shorthand		4 - 12
	VO - Vocational Education	149001 - Vocational BOE w/o Data Processing		4 - 12
	VO - Vocational Education	140220 - Network Systems		4 - 12
	VO - Vocational Education	170700 - Commercial Art Occupations		4 - 12
	VO - Vocational Education	140500 - Mat Sup/Trn/St/Rec		4 - 12
	VO - Vocational Education	140230 - Programming/Software Development		4 - 12
	VO - Vocational Education	140200 - Business Information Systems		4 - 12
	VO - Vocational Education	140900 - Typing/Related Occ		4 - 12
	VO - Vocational Education	149002 - Vocational BOE w/o Shorthand		4 - 12
	VO - Vocational Education	149000 - Vocational BOE Comprehensive		4 - 12
VO - Vocational Education	140210 - Information Services and Support		4 - 12	

Information Technology (Career-Technical)

SUBJECT	CREDENTIAL	TEACHING FIELD/ENDORSEMENT	ADDITIONAL TEACHING FIELD/ENDORSEMENT	GRADES
145010 - Web Design	CT - Career Technical (4-12)	171900 - Graphic Occupations		4 - 12
	CT - Career Technical (4-12)	171504 - Telecommunications		4 - 12
	CT - Career Technical (4-12)	040115 - Entertainment Marketing		4 - 12
	CT - Career Technical (4-12)	171505 - Computer Network Technician		4 - 12
	CT - Career Technical (4-12)	140240 - Interactive Media		4 - 12
	CT - Career Technical (4-12)	170700 - Commercial Art Occupations		4 - 12
	CT - Career Technical (4-12)	140230 - Programming/Software Development		4 - 12
	CT - Career Technical (4-12)	170600 - Business Machine Maintenance		4 - 12
	CT - Career Technical (4-12)	140210 - Information Services and Support		4 - 12
	CT - Career Technical (4-12)	171503 - Electronics		4 - 12
	CT - Career Technical (4-12)	140220 - Network Systems		4 - 12
	CT - Career Technical (4-12)	140200 - Business Information Systems		4 - 12
	CT - Career Technical (4-12)	140100 - Accounting		4 - 12
	CT - Career Technical (4-12)	140550 - Integrated Business		4 - 12
	CW - Career Technical Workforce Development	040115 - Entertainment Marketing		4 - 12
	CW - Career Technical Workforce Development	140220 - Network Systems		4 - 12
	CW - Career Technical Workforce Development	171504 - Telecommunications		4 - 12
	CW - Career Technical Workforce Development	171900 - Graphic Occupations		4 - 12
	CW - Career Technical Workforce Development	171503 - Electronics		4 - 12
	CW - Career Technical Workforce Development	170600 - Business Machine Maintenance		4 - 12
	CW - Career Technical Workforce Development	171505 - Computer Network Technician		4 - 12
	CW - Career Technical Workforce Development	140210 - Information Services and Support		4 - 12
	CW - Career Technical Workforce Development	140200 - Business Information Systems		4 - 12
	CW - Career Technical Workforce Development	140100 - Accounting		4 - 12
	CW - Career Technical Workforce Development	170700 - Commercial Art Occupations		4 - 12
	CW - Career Technical Workforce Development	140240 - Interactive Media		4 - 12
	HS - High School (7-12)	030398 - Cooperative Office Education		4 - 12
	HS - High School (7-12)	031399 - Intensive Office Education		4 - 12
	VO - Vocational Education	171505 - Computer Network Technician		4 - 12
	VO - Vocational Education	140901 - Secretarial Lab		4 - 12
	VO - Vocational Education	170700 - Commercial Art Occupations		4 - 12
	VO - Vocational Education	149000 - Vocational BOE Comprehensive		4 - 12
	VO - Vocational Education	171504 - Telecommunications		4 - 12
	VO - Vocational Education	149001 - Vocational BOE w/o Data Processing		4 - 12
	VO - Vocational Education	149003 - Vocational BOE w/o Data Processing and Shorthand		4 - 12
	VO - Vocational Education	149002 - Vocational BOE w/o Shorthand		4 - 12
	VO - Vocational Education	171503 - Electronics		4 - 12
	VO - Vocational Education	140150 - Data Processing/Programming		4 - 12
	VO - Vocational Education	170600 - Business Machine Maintenance		4 - 12
	VO - Vocational Education	140220 - Network Systems		4 - 12
	VO - Vocational Education	140240 - Interactive Media		4 - 12
	VO - Vocational Education	140230 - Programming/Software Development		4 - 12
	VO - Vocational Education	140900 - Typing/Related Occ		4 - 12
	VO - Vocational Education	140200 - Business Information Systems		4 - 12
	VO - Vocational Education	140100 - Accounting		4 - 12
	VO - Vocational Education	040115 - Entertainment Marketing		4 - 12
	VO - Vocational Education	140210 - Information Services and Support		4 - 12
VO - Vocational Education	140500 - Mat Sup/Trn/St/Rec		4 - 12	

Information Technology (Career-Technical)

SUBJECT	CREDENTIAL	TEACHING FIELD/ENDORSEMENT	ADDITIONAL TEACHING FIELD/ENDORSEMENT	GRADES
145015 - Information Technology Capstone	CT - Career Technical (4-12)	171504 - Telecommunications		4 - 12
	CT - Career Technical (4-12)	140230 - Programming/Software Development		4 - 12
	CT - Career Technical (4-12)	171505 - Computer Network Technician		4 - 12
	CT - Career Technical (4-12)	171503 - Electronics		4 - 12
	CT - Career Technical (4-12)	140550 - Integrated Business		4 - 12
	CT - Career Technical (4-12)	170600 - Business Machine Maintenance		4 - 12
	CT - Career Technical (4-12)	040115 - Entertainment Marketing		4 - 12
	CT - Career Technical (4-12)	140240 - Interactive Media		4 - 12
	CT - Career Technical (4-12)	140100 - Accounting		4 - 12
	CT - Career Technical (4-12)	171900 - Graphic Occupations		4 - 12
	CT - Career Technical (4-12)	140210 - Information Services and Support		4 - 12
	CT - Career Technical (4-12)	170700 - Commercial Art Occupations		4 - 12
	CT - Career Technical (4-12)	140200 - Business Information Systems		4 - 12
	CT - Career Technical (4-12)	140220 - Network Systems		4 - 12
	CW - Career Technical Workforce Development	171900 - Graphic Occupations		4 - 12
	CW - Career Technical Workforce Development	171505 - Computer Network Technician		4 - 12
	CW - Career Technical Workforce Development	171503 - Electronics		4 - 12
	CW - Career Technical Workforce Development	171504 - Telecommunications		4 - 12
	CW - Career Technical Workforce Development	140210 - Information Services and Support		4 - 12
	CW - Career Technical Workforce Development	140240 - Interactive Media		4 - 12
	CW - Career Technical Workforce Development	140220 - Network Systems		4 - 12
	CW - Career Technical Workforce Development	170600 - Business Machine Maintenance		4 - 12
	CW - Career Technical Workforce Development	140100 - Accounting		4 - 12
	CW - Career Technical Workforce Development	140200 - Business Information Systems		4 - 12
	CW - Career Technical Workforce Development	170700 - Commercial Art Occupations		4 - 12
	CW - Career Technical Workforce Development	040115 - Entertainment Marketing		4 - 12
	HS - High School (7-12)	030398 - Cooperative Office Education		4 - 12
	HS - High School (7-12)	031399 - Intensive Office Education		4 - 12
	VO - Vocational Education	040115 - Entertainment Marketing		4 - 12
	VO - Vocational Education	140150 - Data Processing/Programming		4 - 12
	VO - Vocational Education	140100 - Accounting		4 - 12
	VO - Vocational Education	140200 - Business Information Systems		4 - 12
	VO - Vocational Education	140210 - Information Services and Support		4 - 12
	VO - Vocational Education	171505 - Computer Network Technician		4 - 12
	VO - Vocational Education	171503 - Electronics		4 - 12
	VO - Vocational Education	140220 - Network Systems		4 - 12
	VO - Vocational Education	170600 - Business Machine Maintenance		4 - 12
	VO - Vocational Education	149002 - Vocational BOE w/o Shorthand		4 - 12
	VO - Vocational Education	149001 - Vocational BOE w/o Data Processing		4 - 12
	VO - Vocational Education	170700 - Commercial Art Occupations		4 - 12
	VO - Vocational Education	171504 - Telecommunications		4 - 12
	VO - Vocational Education	149000 - Vocational BOE Comprehensive		4 - 12
	VO - Vocational Education	140901 - Secretarial Lab		4 - 12
	VO - Vocational Education	140500 - Mat Sup/Trn/St/Rec		4 - 12
VO - Vocational Education	149003 - Vocational BOE w/o Data Processing and Shorthand		4 - 12	
VO - Vocational Education	140240 - Interactive Media		4 - 12	
VO - Vocational Education	140230 - Programming/Software Development		4 - 12	
VO - Vocational Education	140900 - Typing/Related Occ		4 - 12	

Information Technology (Career-Technical)

SUBJECT	CREDENTIAL	TEACHING FIELD/ENDORSEMENT	ADDITIONAL TEACHING FIELD/ENDORSEMENT	GRADES
145020 - Computer and Mobile Applications	CT - Career Technical (4-12)	170600 - Business Machine Maintenance		4 - 12
	CT - Career Technical (4-12)	171505 - Computer Network Technician		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)	140550 - Integrated Business		4 - 12
	CT - Career Technical (4-12)	140220 - Network Systems		4 - 12
	CT - Career Technical (4-12)	140210 - Information Services and Support		4 - 12
	CT - Career Technical (4-12)	140200 - Business Information Systems		4 - 12
	CW - Career Technical Workforce Development	140200 - Business Information Systems		4 - 12
	CW - Career Technical Workforce Development	171505 - Computer Network Technician		4 - 12
	CW - Career Technical Workforce Development	140210 - Information Services and Support		4 - 12
	CW - Career Technical Workforce Development	140220 - Network Systems		4 - 12
	CW - Career Technical Workforce Development	170600 - Business Machine Maintenance		4 - 12
	CW - Career Technical Workforce Development	171503 - Electronics		4 - 12
	CW - Career Technical Workforce Development	171504 - Telecommunications		4 - 12
	HS - High School (7-12)	030398 - Cooperative Office Education		4 - 12
	HS - High School (7-12)	031399 - Intensive Office Education		4 - 12
	VO - Vocational Education	171505 - Computer Network Technician		4 - 12
	VO - Vocational Education	170600 - Business Machine Maintenance		4 - 12
	VO - Vocational Education	149003 - Vocational BOE w/o Data Processing and Shorthand		4 - 12
	VO - Vocational Education	171504 - Telecommunications		4 - 12
	VO - Vocational Education	171503 - Electronics		4 - 12
	VO - Vocational Education	149002 - Vocational BOE w/o Shorthand		4 - 12
	VO - Vocational Education	149001 - Vocational BOE w/o Data Processing		4 - 12
	VO - Vocational Education	140220 - Network Systems		
	VO - Vocational Education	140500 - Mat Sup/Trn/St/Rec		4 - 12
	VO - Vocational Education	140210 - Information Services and Support		4 - 12
	VO - Vocational Education	140200 - Business Information Systems		
	VO - Vocational Education	149000 - Vocational BOE Comprehensive		4 - 12
	VO - Vocational Education	040115 - Entertainment Marketing		4 - 12

Information Technology (Career-Technical)

SUBJECT	CREDENTIAL	TEACHING FIELD/ENDORSEMENT	ADDITIONAL TEACHING FIELD/ENDORSEMENT	GRADES
145025 - Computer Hardware	AD - Adolescence to Young Adult (7-12)	132150 - Physical Science/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132040 - Earth Sciences		7 - 12
	AD - Adolescence to Young Adult (7-12)	132045 - Earth Sci/Physics		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 (7-12)	132160 - Physical Science/Physics		7 - 12
	AD - Adolescence to Young Adult (7-12)	132036 - Life Sci/Chemistry		7 - 12
	AD - Adolescence to Young Adult (7-12)	132034 - Life Sciences/Earth		7 - 12
	AD - Adolescence to Young Adult (7-12)	132035 - Life Sci/Physics		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)	130205 - Biological Science (9-12)		7 - 12
	CH - Comprehensive High School (7-12)	130300 - Physical Science		7 - 12
	CT - Career Technical (4-12)	172306 - Welding and Cutting		4 - 12
	CT - Career Technical (4-12)	172307 - Tool and Die Making		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)	171808 - Engineering Technologies-Process		4 - 12
	CT - Career Technical (4-12)	171809 - Engineering Technologies-Product/Service		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)	171505 - Computer Network Technician		4 - 12
	CT - Career Technical (4-12)	171503 - Electronics		4 - 12
	CT - Career Technical (4-12)	171504 - Telecommunications		4 - 12
	CT - Career Technical (4-12)	171300 - Drafting Occupations		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)	171012 - Industrial Maintenance and Repair		4 - 12
	CT - Career Technical (4-12)	170380 - Manufacturing Operations		4 - 12
	CT - Career Technical (4-12)	171802 - Manufacturing Engineering Technology		4 - 12
	CT - Career Technical (4-12)	170375 - Automation and Robotics		4 - 12
	CT - Career Technical (4-12)	172303 - Manufacturing Occupations		4 - 12
	CT - Career Technical (4-12)	160610 - Technology Education		4 - 12
	CT - Career Technical (4-12)	140550 - Integrated Business		4 - 12
	CT - Career Technical (4-12)	171815 - Engineering Technologies-PLTW		4 - 12
	CT - Career Technical (4-12)	140220 - Network Systems		4 - 12
	CT - Career Technical (4-12)	079950 - Practical Nurse Coordinator		4 - 12
	CT - Career Technical (4-12)	070203 - Medical Lab 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)	140200 - Business Information Systems		4 - 12
	CT - Career Technical (4-12)	070912 - Pharmacy Assisting		4 - 12
CT - Career Technical (4-12)	010100 - Agriscience		4 - 12	

Information Technology (Career-Technical)

SUBJECT	CREDENTIAL	TEACHING FIELD/ENDORSEMENT	ADDITIONAL TEACHING FIELD/ENDORSEMENT	GRADES
145025 - Computer Hardware	CT - Career Technical (4-12)	170100 - Air Conditioning and Heating		4 - 12
	CT - Career Technical (4-12)	140210 - Information Services and Support		4 - 12
	CT - Career Technical (4-12)	074850 - Biotechnology		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	171801 - Engineering Technology		4 - 12
	CW - Career Technical Workforce Development	171650 - Energy Science		4 - 12
	CW - Career Technical Workforce Development	171505 - Computer Network Technician		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	171012 - Industrial Maintenance and Repair		4 - 12
	CW - Career Technical Workforce Development	171300 - Drafting Occupations		4 - 12
	CW - Career Technical Workforce Development	171002 - Electrical Trades		4 - 12
	CW - Career Technical Workforce Development	171504 - Telecommunications		4 - 12
	CW - Career Technical Workforce Development	170375 - Automation and Robotics		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	170100 - Air Conditioning and Heating		4 - 12
	CW - Career Technical Workforce Development	171802 - Manufacturing Engineering Technology		4 - 12
	CW - Career Technical Workforce Development	140220 - Network Systems		4 - 12
	CW - Career Technical Workforce Development	140210 - Information Services and Support		4 - 12
	CW - Career Technical Workforce Development	171808 - Engineering Technologies-Process		4 - 12
	CW - Career Technical Workforce Development	171815 - Engineering Technologies-PLTW		4 - 12
	CW - Career Technical Workforce Development	140200 - Business Information Systems		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	070203 - Medical Lab Assisting		4 - 12
	CW - Career Technical Workforce Development	070302 - Practical Nurse		4 - 12
	CW - Career Technical Workforce Development	070410 - Fitness Aide		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	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
	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)	101315 - Industrial Technology		4 - 12
	DS (4-12) - Designated Subject (4-12)	110094 - Integrated Mathematics		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)	130000 - Comprehensive Science		7 - 12
	HS - High School (7-12)	110000 - Mathematics		7 - 12
HS - High School (7-12)	130200 - Biological Science		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	

Information Technology (Career-Technical)

SUBJECT	CREDENTIAL	TEACHING FIELD/ENDORSEMENT	ADDITIONAL TEACHING FIELD/ENDORSEMENT	GRADES
145025 - Computer Hardware	HS - High School (7-12)	031399 - Intensive Office Education		4 - 12
	HS - High School (7-12)	030398 - Cooperative Office Education		4 - 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
	VO - Vocational Education	172307 - Tool and Die Making		
	VO - Vocational Education	172306 - Welding and Cutting		
	VO - Vocational Education	172302 - Precision Machining		
	VO - Vocational Education	172000 - Chemical Laboratory Assisting		
	VO - Vocational Education	171815 - Engineering Technologies-PLTW		
	VO - Vocational Education	171801 - Engineering Technology		
	VO - Vocational Education	171505 - Computer Network Technician		4 - 12
	VO - Vocational Education	171504 - Telecommunications		4 - 12
	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	171503 - Electronics		4 - 12
	VO - Vocational Education	170600 - Business Machine Maintenance		4 - 12
	VO - Vocational Education	149003 - Vocational BOE w/o Data Processing and Shorthand		4 - 12
	VO - Vocational Education	149002 - Vocational BOE w/o Shorthand		4 - 12
	VO - Vocational Education	171802 - Manufacturing Engineering Technology		
	VO - Vocational Education	149001 - Vocational BOE w/o Data Processing		4 - 12
	VO - Vocational Education	149000 - Vocational BOE Comprehensive		4 - 12
	VO - Vocational Education	140500 - Mat Sup/Trn/St/Rec		4 - 12
	VO - Vocational Education	140220 - Network Systems		4 - 12
	VO - Vocational Education	172303 - Manufacturing Occupations		
	VO - Vocational Education	140210 - Information Services and Support		4 - 12
	VO - Vocational Education	140200 - Business Information Systems		4 - 12
	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	040115 - Entertainment Marketing		4 - 12	
VO - Vocational Education	010100 - Agriscience			



Information Technology (Career-Technical)

SUBJECT	CREDENTIAL	TEACHING FIELD/ENDORSEMENT	ADDITIONAL TEACHING FIELD/ENDORSEMENT	GRADES
145030 - Computer Software	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)	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)	132040 - Earth 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)	101315 - Industrial Technology		7 - 12
	AD - Adolescence to Young Adult (7-12)	110094 - Integrated Mathematics		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)	171808 - Engineering Technologies-Process		4 - 12
	CT - Career Technical (4-12)	171802 - Manufacturing Engineering Technology		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)	171504 - Telecommunications		4 - 12
	CT - Career Technical (4-12)	171503 - Electronics		4 - 12
	CT - Career Technical (4-12)	171815 - Engineering Technologies-PLTW		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)	170600 - Business Machine Maintenance		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)	160610 - Technology Education		4 - 12
	CT - Career Technical (4-12)	171505 - Computer Network Technician		4 - 12
	CT - Career Technical (4-12)	171801 - Engineering Technology		4 - 12
	CT - Career Technical (4-12)	171809 - Engineering Technologies-Product/Service		4 - 12
	CT - Career Technical (4-12)	171807 - Engineering Technologies-Design		4 - 12
	CT - Career Technical (4-12)	140550 - Integrated Business		4 - 12
	CT - Career Technical (4-12)	140220 - Network Systems		4 - 12
	CT - Career Technical (4-12)	170375 - Automation and Robotics		4 - 12
	CT - Career Technical (4-12)	140210 - Information Services and Support		4 - 12
CT - Career Technical (4-12)	140200 - Business Information Systems		4 - 12	
CT - Career Technical (4-12)	074850 - Biotechnology		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)	070912 - Pharmacy Assisting		4 - 12	
CT - Career Technical (4-12)	070203 - Medical Lab Assisting		4 - 12	

Information Technology (Career-Technical)

SUBJECT	CREDENTIAL	TEACHING FIELD/ENDORSEMENT	ADDITIONAL TEACHING FIELD/ENDORSEMENT	GRADES
145030 - Computer Software	CT - Career Technical (4-12)	079950 - Practical Nurse Coordinator		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	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	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	171808 - Engineering Technologies-Process		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	171505 - Computer Network Technician		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	171802 - Manufacturing Engineering Technology		4 - 12
	CW - Career Technical Workforce Development	171012 - Industrial Maintenance and Repair		4 - 12
	CW - Career Technical Workforce Development	171504 - Telecommunications		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	170100 - Air Conditioning and Heating		4 - 12
	CW - Career Technical Workforce Development	140220 - Network Systems		4 - 12
	CW - Career Technical Workforce Development	140210 - Information Services and Support		4 - 12
	CW - Career Technical Workforce Development	140200 - Business Information Systems		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	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 (4-12) - Designated Subject (4-12)	132160 - Physical Science/Physics		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)	132150 - Physical Science/Chemistry		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)	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)	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)	100000 - Gen Ind Techn (Gen)		7 - 12
	HS - High School (7-12)	031399 - Intensive Office Education		4 - 12
HS - High School (7-12)	030398 - Cooperative Office Education		4 - 12	

Information Technology (Career-Technical)

SUBJECT	CREDENTIAL	TEACHING FIELD/ENDORSEMENT	ADDITIONAL TEACHING FIELD/ENDORSEMENT	GRADES
145030 - Computer Software	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
	VO - Vocational Education	172307 - Tool and Die Making		
	VO - Vocational Education	172303 - Manufacturing Occupations		
	VO - Vocational Education	172000 - Chemical Laboratory Assisting		
	VO - Vocational Education	171815 - Engineering Technologies-PLTW		
	VO - Vocational Education	171802 - Manufacturing Engineering Technology		
	VO - Vocational Education	171505 - Computer Network Technician		4 - 12
	VO - Vocational Education	171504 - Telecommunications		4 - 12
	VO - Vocational Education	171503 - Electronics		4 - 12
	VO - Vocational Education	171300 - Drafting Occupations		
	VO - Vocational Education	171012 - Industrial Maintenance and Repair		
	VO - Vocational Education	171002 - Electrical Trades		
	VO - Vocational Education	170600 - Business Machine Maintenance		4 - 12
	VO - Vocational Education	170380 - Manufacturing Operations		
	VO - Vocational Education	170375 - Automation and Robotics		
	VO - Vocational Education	170100 - Air Conditioning and Heating		
	VO - Vocational Education	171402 - Power Transmission		
	VO - Vocational Education	160610 - Technology Education		
	VO - Vocational Education	149003 - Vocational BOE w/o Data Processing and Shorthand		4 - 12
	VO - Vocational Education	149001 - Vocational BOE w/o Data Processing		4 - 12
	VO - Vocational Education	171801 - Engineering Technology		
	VO - Vocational Education	149000 - Vocational BOE Comprehensive		4 - 12
	VO - Vocational Education	149002 - Vocational BOE w/o Shorthand		4 - 12
	VO - Vocational Education	140500 - Mat Sup/Trn/St/Rec		4 - 12
	VO - Vocational Education	140220 - Network Systems		4 - 12
	VO - Vocational Education	140210 - Information Services and Support		4 - 12
	VO - Vocational Education	172302 - Precision Machining		
	VO - Vocational Education	140200 - Business Information Systems		4 - 12
	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	040115 - Entertainment Marketing		4 - 12
	VO - Vocational Education	010100 - Agriscience		

Information Technology (Career-Technical)

SUBJECT	CREDENTIAL	TEACHING FIELD/ENDORSEMENT	ADDITIONAL TEACHING FIELD/ENDORSEMENT	GRADES
145035 - Networking	CT - Career Technical (4-12)	171505 - Computer Network Technician		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)	170600 - Business Machine Maintenance		4 - 12
	CT - Career Technical (4-12)	140550 - Integrated Business		4 - 12
	CT - Career Technical (4-12)	140220 - Network Systems		4 - 12
	CT - Career Technical (4-12)	140210 - Information Services and Support		4 - 12
	CT - Career Technical (4-12)	140200 - Business Information Systems		4 - 12
	CW - Career Technical Workforce Development	171505 - Computer Network Technician		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	170600 - Business Machine Maintenance		4 - 12
	CW - Career Technical Workforce Development	140220 - Network Systems		4 - 12
	CW - Career Technical Workforce Development	140210 - Information Services and Support		4 - 12
	CW - Career Technical Workforce Development	140200 - Business Information Systems		4 - 12
	HS - High School (7-12)	031399 - Intensive Office Education		4 - 12
	HS - High School (7-12)	030398 - Cooperative Office Education		4 - 12
	VO - Vocational Education	171504 - Telecommunications		4 - 12
	VO - Vocational Education	171503 - Electronics		4 - 12
	VO - Vocational Education	170600 - Business Machine Maintenance		4 - 12
	VO - Vocational Education	171505 - Computer Network Technician		4 - 12
	VO - Vocational Education	149003 - Vocational BOE w/o Data Processing and Shorthand		4 - 12
	VO - Vocational Education	149002 - Vocational BOE w/o Shorthand		4 - 12
	VO - Vocational Education	149001 - Vocational BOE w/o Data Processing		4 - 12
	VO - Vocational Education	149000 - Vocational BOE Comprehensive		4 - 12
	VO - Vocational Education	140500 - Mat Sup/Trn/St/Rec		4 - 12
	VO - Vocational Education	140220 - Network Systems		4 - 12
	VO - Vocational Education	140210 - Information Services and Support		4 - 12
	VO - Vocational Education	140200 - Business Information Systems		4 - 12
	VO - Vocational Education	040115 - Entertainment Marketing		4 - 12

Information Technology (Career-Technical)

SUBJECT	CREDENTIAL	TEACHING FIELD/ENDORSEMENT	ADDITIONAL TEACHING FIELD/ENDORSEMENT	GRADES
145040 - Network Operating Systems	CT - Career Technical (4-12)	171505 - Computer Network Technician		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)	170600 - Business Machine Maintenance		4 - 12
	CT - Career Technical (4-12)	140550 - Integrated Business		4 - 12
	CT - Career Technical (4-12)	140220 - Network Systems		4 - 12
	CT - Career Technical (4-12)	140210 - Information Services and Support		4 - 12
	CT - Career Technical (4-12)	140200 - Business Information Systems		4 - 12
	CW - Career Technical Workforce Development	171505 - Computer Network Technician		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	170600 - Business Machine Maintenance		4 - 12
	CW - Career Technical Workforce Development	140220 - Network Systems		4 - 12
	CW - Career Technical Workforce Development	140200 - Business Information Systems		4 - 12
	CW - Career Technical Workforce Development	140210 - Information Services and Support		4 - 12
	HS - High School (7-12)	030398 - Cooperative Office Education		4 - 12
	HS - High School (7-12)	031399 - Intensive Office Education		4 - 12
	VO - Vocational Education	171505 - Computer Network Technician		4 - 12
	VO - Vocational Education	171504 - Telecommunications		4 - 12
	VO - Vocational Education	171503 - Electronics		4 - 12
	VO - Vocational Education	170600 - Business Machine Maintenance		4 - 12
	VO - Vocational Education	149003 - Vocational BOE w/o Data Processing and Shorthand		4 - 12
	VO - Vocational Education	149002 - Vocational BOE w/o Shorthand		4 - 12
	VO - Vocational Education	149001 - Vocational BOE w/o Data Processing		4 - 12
	VO - Vocational Education	149000 - Vocational BOE Comprehensive		4 - 12
	VO - Vocational Education	140500 - Mat Sup/Trn/St/Rec		4 - 12
	VO - Vocational Education	140220 - Network Systems		4 - 12
	VO - Vocational Education	140210 - Information Services and Support		4 - 12
	VO - Vocational Education	140200 - Business Information Systems		4 - 12
	VO - Vocational Education	040115 - Entertainment Marketing		4 - 12
145045 - Network Management	CT - Career Technical (4-12)	171505 - Computer Network Technician		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)	140550 - Integrated Business		4 - 12
	CT - Career Technical (4-12)	140220 - Network Systems		4 - 12
	CT - Career Technical (4-12)	140200 - Business Information Systems		4 - 12
	CW - Career Technical Workforce Development	171505 - Computer Network Technician		4 - 12
	CW - Career Technical Workforce Development	171503 - Electronics		4 - 12
	CW - Career Technical Workforce Development	140220 - Network Systems		4 - 12
	CW - Career Technical Workforce Development	171504 - Telecommunications		4 - 12
	CW - Career Technical Workforce Development	140200 - Business Information Systems		4 - 12
	HS - High School (7-12)	031399 - Intensive Office Education		4 - 12
	HS - High School (7-12)	030398 - Cooperative Office Education		4 - 12
	VO - Vocational Education	171505 - Computer Network Technician		4 - 12
	VO - Vocational Education	171504 - Telecommunications		4 - 12
	VO - Vocational Education	171503 - Electronics		4 - 12
	VO - Vocational Education	149003 - Vocational BOE w/o Data Processing and Shorthand		4 - 12
	VO - Vocational Education	149002 - Vocational BOE w/o Shorthand		4 - 12
	VO - Vocational Education	149001 - Vocational BOE w/o Data Processing		4 - 12
	VO - Vocational Education	149000 - Vocational BOE Comprehensive		4 - 12
VO - Vocational Education	140220 - Network Systems		4 - 12	
VO - Vocational Education	140200 - Business Information Systems		4 - 12	

Information Technology (Career-Technical)

SUBJECT	CREDENTIAL	TEACHING FIELD/ENDORSEMENT	ADDITIONAL TEACHING FIELD/ENDORSEMENT	GRADES	
145050 - Network Security	CT - Career Technical (4-12)	171505 - Computer Network Technician		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)	170600 - Business Machine Maintenance		4 - 12	
	CT - Career Technical (4-12)	140550 - Integrated Business		4 - 12	
	CT - Career Technical (4-12)	140220 - Network Systems		4 - 12	
	CT - Career Technical (4-12)	140210 - Information Services and Support		4 - 12	
	CT - Career Technical (4-12)	140200 - Business Information Systems		4 - 12	
	CW - Career Technical Workforce Development	171505 - Computer Network Technician		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	170600 - Business Machine Maintenance		4 - 12	
	CW - Career Technical Workforce Development	140220 - Network Systems		4 - 12	
	CW - Career Technical Workforce Development	140210 - Information Services and Support		4 - 12	
	CW - Career Technical Workforce Development	140200 - Business Information Systems		4 - 12	
	HS - High School (7-12)	031399 - Intensive Office Education		4 - 12	
	HS - High School (7-12)	030398 - Cooperative Office Education		4 - 12	
	VO - Vocational Education	171505 - Computer Network Technician		4 - 12	
	VO - Vocational Education	171504 - Telecommunications		4 - 12	
	VO - Vocational Education	171503 - Electronics		4 - 12	
	VO - Vocational Education	170600 - Business Machine Maintenance			
	VO - Vocational Education	149003 - Vocational BOE w/o Data Processing and Shorthand		4 - 12	
	VO - Vocational Education	149002 - Vocational BOE w/o Shorthand		4 - 12	
	VO - Vocational Education	149001 - Vocational BOE w/o Data Processing		4 - 12	
	VO - Vocational Education	149000 - Vocational BOE Comprehensive		4 - 12	
	VO - Vocational Education	140500 - Mat Sup/Trn/St/Rec			
	VO - Vocational Education	140220 - Network Systems		4 - 12	
	VO - Vocational Education	140210 - Information Services and Support			
	VO - Vocational Education	140200 - Business Information Systems		4 - 12	
	VO - Vocational Education	040115 - Entertainment Marketing			
	145055 - Routing and Switching	CT - Career Technical (4-12)	171505 - Computer Network Technician		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)		140550 - Integrated Business		4 - 12	
CT - Career Technical (4-12)		140220 - Network Systems		4 - 12	
CT - Career Technical (4-12)		140200 - Business Information Systems		4 - 12	
CW - Career Technical Workforce Development		171505 - Computer Network Technician		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		140220 - Network Systems		4 - 12	
CW - Career Technical Workforce Development		140200 - Business Information Systems		4 - 12	
HS - High School (7-12)		031399 - Intensive Office Education		4 - 12	
HS - High School (7-12)		030398 - Cooperative Office Education		4 - 12	
VO - Vocational Education		171505 - Computer Network Technician		4 - 12	
VO - Vocational Education		171504 - Telecommunications		4 - 12	
VO - Vocational Education		171503 - Electronics		4 - 12	
VO - Vocational Education		149003 - Vocational BOE w/o Data Processing and Shorthand		4 - 12	
VO - Vocational Education		149002 - Vocational BOE w/o Shorthand		4 - 12	
VO - Vocational Education		149001 - Vocational BOE w/o Data Processing		4 - 12	
VO - Vocational Education		149000 - Vocational BOE Comprehensive		4 - 12	
VO - Vocational Education	140220 - Network Systems		4 - 12		
VO - Vocational Education	140200 - Business Information Systems		4 - 12		



Information Technology (Career-Technical)

SUBJECT	CREDENTIAL	TEACHING FIELD/ENDORSEMENT	ADDITIONAL TEACHING FIELD/ENDORSEMENT	GRADES
145060 - Programming	CT - Career Technical (4-12)	171900 - Graphic Occupations		4 - 12
	CT - Career Technical (4-12)	171505 - Computer Network Technician		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)	170700 - Commercial Art Occupations		4 - 12
	CT - Career Technical (4-12)	170600 - Business Machine Maintenance		4 - 12
	CT - Career Technical (4-12)	140550 - Integrated Business		4 - 12
	CT - Career Technical (4-12)	140240 - Interactive Media		4 - 12
	CT - Career Technical (4-12)	140230 - Programming/Software Development		4 - 12
	CT - Career Technical (4-12)	140220 - Network Systems		4 - 12
	CT - Career Technical (4-12)	140210 - Information Services and Support		4 - 12
	CT - Career Technical (4-12)	140200 - Business Information Systems		4 - 12
	CT - Career Technical (4-12)	140100 - Accounting		4 - 12
	CT - Career Technical (4-12)	040115 - Entertainment Marketing		4 - 12
	CW - Career Technical Workforce Development	171900 - Graphic Occupations		4 - 12
	CW - Career Technical Workforce Development	171505 - Computer Network Technician		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	170700 - Commercial Art Occupations		4 - 12
	CW - Career Technical Workforce Development	170600 - Business Machine Maintenance		4 - 12
	CW - Career Technical Workforce Development	140240 - Interactive Media		4 - 12
	CW - Career Technical Workforce Development	140220 - Network Systems		4 - 12
	CW - Career Technical Workforce Development	140210 - Information Services and Support		4 - 12
	CW - Career Technical Workforce Development	140200 - Business Information Systems		4 - 12
	CW - Career Technical Workforce Development	140100 - Accounting		4 - 12
	CW - Career Technical Workforce Development	040115 - Entertainment Marketing		4 - 12
	HS - High School (7-12)	031399 - Intensive Office Education		4 - 12
	HS - High School (7-12)	030398 - Cooperative Office Education		4 - 12
	VO - Vocational Education	171504 - Telecommunications		4 - 12
	VO - Vocational Education	171503 - Electronics		4 - 12
	VO - Vocational Education	170700 - Commercial Art Occupations		4 - 12
	VO - Vocational Education	170600 - Business Machine Maintenance		4 - 12
	VO - Vocational Education	149003 - Vocational BOE w/o Data Processing and Shorthand		4 - 12
	VO - Vocational Education	149002 - Vocational BOE w/o Shorthand		4 - 12
	VO - Vocational Education	149001 - Vocational BOE w/o Data Processing		4 - 12
	VO - Vocational Education	149000 - Vocational BOE Comprehensive		4 - 12
	VO - Vocational Education	140901 - Secretarial Lab		4 - 12
	VO - Vocational Education	140900 - Typing/Related Occ		4 - 12
	VO - Vocational Education	140500 - Mat Sup/Trn/St/Rec		4 - 12
	VO - Vocational Education	171505 - Computer Network Technician		4 - 12
	VO - Vocational Education	140240 - Interactive Media		4 - 12
	VO - Vocational Education	140230 - Programming/Software Development		4 - 12
	VO - Vocational Education	140220 - Network Systems		4 - 12
	VO - Vocational Education	140210 - Information Services and Support		4 - 12
	VO - Vocational Education	140200 - Business Information Systems		4 - 12
	VO - Vocational Education	140150 - Data Processing/Programming		4 - 12
	VO - Vocational Education	140100 - Accounting		4 - 12
VO - Vocational Education	040115 - Entertainment Marketing		4 - 12	

Information Technology (Career-Technical)

SUBJECT	CREDENTIAL	TEACHING FIELD/ENDORSEMENT	ADDITIONAL TEACHING FIELD/ENDORSEMENT	GRADES
145065 - Object Oriented Programming	CT - Career Technical (4-12)	171900 - Graphic Occupations		4 - 12
	CT - Career Technical (4-12)	171505 - Computer Network Technician		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)	170700 - Commercial Art Occupations		4 - 12
	CT - Career Technical (4-12)	170600 - Business Machine Maintenance		4 - 12
	CT - Career Technical (4-12)	140550 - Integrated Business		4 - 12
	CT - Career Technical (4-12)	140240 - Interactive Media		4 - 12
	CT - Career Technical (4-12)	140230 - Programming/Software Development		4 - 12
	CT - Career Technical (4-12)	140220 - Network Systems		4 - 12
	CT - Career Technical (4-12)	140210 - Information Services and Support		4 - 12
	CT - Career Technical (4-12)	140200 - Business Information Systems		4 - 12
	CT - Career Technical (4-12)	140100 - Accounting		4 - 12
	CT - Career Technical (4-12)	040115 - Entertainment Marketing		4 - 12
	CW - Career Technical Workforce Development	171900 - Graphic Occupations		4 - 12
	CW - Career Technical Workforce Development	171505 - Computer Network Technician		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	170700 - Commercial Art Occupations		4 - 12
	CW - Career Technical Workforce Development	170600 - Business Machine Maintenance		4 - 12
	CW - Career Technical Workforce Development	140240 - Interactive Media		4 - 12
	CW - Career Technical Workforce Development	140220 - Network Systems		4 - 12
	CW - Career Technical Workforce Development	140210 - Information Services and Support		4 - 12
	CW - Career Technical Workforce Development	140200 - Business Information Systems		4 - 12
	CW - Career Technical Workforce Development	140100 - Accounting		4 - 12
	CW - Career Technical Workforce Development	040115 - Entertainment Marketing		4 - 12
	HS - High School (7-12)	031399 - Intensive Office Education		4 - 12
	HS - High School (7-12)	030398 - Cooperative Office Education		4 - 12
	VO - Vocational Education	171504 - Telecommunications		4 - 12
	VO - Vocational Education	171503 - Electronics		4 - 12
	VO - Vocational Education	170700 - Commercial Art Occupations		4 - 12
	VO - Vocational Education	170600 - Business Machine Maintenance		4 - 12
	VO - Vocational Education	149003 - Vocational BOE w/o Data Processing and Shorthand		4 - 12
	VO - Vocational Education	149002 - Vocational BOE w/o Shorthand		4 - 12
	VO - Vocational Education	149001 - Vocational BOE w/o Data Processing		4 - 12
	VO - Vocational Education	149000 - Vocational BOE Comprehensive		4 - 12
	VO - Vocational Education	140901 - Secretarial Lab		4 - 12
	VO - Vocational Education	140900 - Typing/Related Occ		4 - 12
	VO - Vocational Education	140500 - Mat Sup/Trn/St/Rec		4 - 12
	VO - Vocational Education	171505 - Computer Network Technician		4 - 12
	VO - Vocational Education	140240 - Interactive Media		4 - 12
	VO - Vocational Education	140230 - Programming/Software Development		4 - 12
	VO - Vocational Education	140220 - Network Systems		4 - 12
	VO - Vocational Education	140210 - Information Services and Support		4 - 12
	VO - Vocational Education	140200 - Business Information Systems		4 - 12
	VO - Vocational Education	140150 - Data Processing/Programming		4 - 12
	VO - Vocational Education	140100 - Accounting		4 - 12
VO - Vocational Education	040115 - Entertainment Marketing		4 - 12	



Information Technology (Career-Technical)

SUBJECT	CREDENTIAL	TEACHING FIELD/ENDORSEMENT	ADDITIONAL TEACHING FIELD/ENDORSEMENT	GRADES
145070 - Visual Programming	CT - Career Technical (4-12)	171900 - Graphic Occupations		4 - 12
	CT - Career Technical (4-12)	171505 - Computer Network Technician		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)	170700 - Commercial Art Occupations		4 - 12
	CT - Career Technical (4-12)	170600 - Business Machine Maintenance		4 - 12
	CT - Career Technical (4-12)	140550 - Integrated Business		4 - 12
	CT - Career Technical (4-12)	140240 - Interactive Media		4 - 12
	CT - Career Technical (4-12)	140230 - Programming/Software Development		4 - 12
	CT - Career Technical (4-12)	140220 - Network Systems		4 - 12
	CT - Career Technical (4-12)	140210 - Information Services and Support		4 - 12
	CT - Career Technical (4-12)	140200 - Business Information Systems		4 - 12
	CT - Career Technical (4-12)	140100 - Accounting		4 - 12
	CT - Career Technical (4-12)	040115 - Entertainment Marketing		4 - 12
	CW - Career Technical Workforce Development	171900 - Graphic Occupations		4 - 12
	CW - Career Technical Workforce Development	171505 - Computer Network Technician		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	170700 - Commercial Art Occupations		4 - 12
	CW - Career Technical Workforce Development	170600 - Business Machine Maintenance		4 - 12
	CW - Career Technical Workforce Development	140240 - Interactive Media		4 - 12
	CW - Career Technical Workforce Development	140220 - Network Systems		4 - 12
	CW - Career Technical Workforce Development	140210 - Information Services and Support		4 - 12
	CW - Career Technical Workforce Development	140200 - Business Information Systems		4 - 12
	CW - Career Technical Workforce Development	140100 - Accounting		4 - 12
	CW - Career Technical Workforce Development	040115 - Entertainment Marketing		4 - 12
	HS - High School (7-12)	031399 - Intensive Office Education		4 - 12
	HS - High School (7-12)	030398 - Cooperative Office Education		4 - 12
	VO - Vocational Education	171504 - Telecommunications		4 - 12
	VO - Vocational Education	171503 - Electronics		4 - 12
	VO - Vocational Education	170700 - Commercial Art Occupations		4 - 12
	VO - Vocational Education	170600 - Business Machine Maintenance		4 - 12
	VO - Vocational Education	149003 - Vocational BOE w/o Data Processing and Shorthand		4 - 12
	VO - Vocational Education	149002 - Vocational BOE w/o Shorthand		4 - 12
	VO - Vocational Education	149001 - Vocational BOE w/o Data Processing		4 - 12
	VO - Vocational Education	149000 - Vocational BOE Comprehensive		4 - 12
	VO - Vocational Education	140901 - Secretarial Lab		4 - 12
	VO - Vocational Education	140900 - Typing/Related Occ		4 - 12
	VO - Vocational Education	140500 - Mat Sup/Trn/St/Rec		4 - 12
	VO - Vocational Education	171505 - Computer Network Technician		4 - 12
	VO - Vocational Education	140240 - Interactive Media		4 - 12
	VO - Vocational Education	140230 - Programming/Software Development		4 - 12
	VO - Vocational Education	140220 - Network Systems		4 - 12
	VO - Vocational Education	140210 - Information Services and Support		4 - 12
	VO - Vocational Education	140200 - Business Information Systems		4 - 12
	VO - Vocational Education	140150 - Data Processing/Programming		4 - 12
	VO - Vocational Education	140100 - Accounting		4 - 12
VO - Vocational Education	040115 - Entertainment Marketing		4 - 12	

Information Technology (Career-Technical)

SUBJECT	CREDENTIAL	TEACHING FIELD/ENDORSEMENT	ADDITIONAL TEACHING FIELD/ENDORSEMENT	GRADES
145075 - Systems Analysis and Design	CT - Career Technical (4-12)	171900 - Graphic Occupations		4 - 12
	CT - Career Technical (4-12)	171505 - Computer Network Technician		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)	170700 - Commercial Art Occupations		4 - 12
	CT - Career Technical (4-12)	170600 - Business Machine Maintenance		4 - 12
	CT - Career Technical (4-12)	140550 - Integrated Business		4 - 12
	CT - Career Technical (4-12)	140240 - Interactive Media		4 - 12
	CT - Career Technical (4-12)	140230 - Programming/Software Development		4 - 12
	CT - Career Technical (4-12)	140210 - Information Services and Support		4 - 12
	CT - Career Technical (4-12)	140200 - Business Information Systems		4 - 12
	CT - Career Technical (4-12)	140100 - Accounting		4 - 12
	CT - Career Technical (4-12)	040115 - Entertainment Marketing		4 - 12
	CW - Career Technical Workforce Development	171505 - Computer Network Technician		4 - 12
	CW - Career Technical Workforce Development	171900 - Graphic Occupations		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	170700 - Commercial Art Occupations		4 - 12
	CW - Career Technical Workforce Development	170600 - Business Machine Maintenance		4 - 12
	CW - Career Technical Workforce Development	140240 - Interactive Media		4 - 12
	CW - Career Technical Workforce Development	140210 - Information Services and Support		4 - 12
	CW - Career Technical Workforce Development	140200 - Business Information Systems		4 - 12
	CW - Career Technical Workforce Development	140100 - Accounting		4 - 12
	CW - Career Technical Workforce Development	040115 - Entertainment Marketing		4 - 12
	HS - High School (7-12)	031399 - Intensive Office Education		4 - 12
	HS - High School (7-12)	030398 - Cooperative Office Education		4 - 12
	VO - Vocational Education	171505 - Computer Network Technician		4 - 12
	VO - Vocational Education	171504 - Telecommunications		4 - 12
	VO - Vocational Education	171503 - Electronics		4 - 12
	VO - Vocational Education	170700 - Commercial Art Occupations		4 - 12
	VO - Vocational Education	170600 - Business Machine Maintenance		4 - 12
	VO - Vocational Education	149003 - Vocational BOE w/o Data Processing and Shorthand		4 - 12
	VO - Vocational Education	149002 - Vocational BOE w/o Shorthand		4 - 12
	VO - Vocational Education	149001 - Vocational BOE w/o Data Processing		4 - 12
	VO - Vocational Education	149000 - Vocational BOE Comprehensive		4 - 12
	VO - Vocational Education	140901 - Secretarial Lab		4 - 12
	VO - Vocational Education	140900 - Typing/Related Occ		4 - 12
	VO - Vocational Education	140500 - Mat Sup/Trn/St/Rec		4 - 12
	VO - Vocational Education	140240 - Interactive Media		4 - 12
	VO - Vocational Education	140230 - Programming/Software Development		4 - 12
	VO - Vocational Education	140210 - Information Services and Support		4 - 12
	VO - Vocational Education	140200 - Business Information Systems		4 - 12
	VO - Vocational Education	140150 - Data Processing/Programming		4 - 12
VO - Vocational Education	140100 - Accounting		4 - 12	
VO - Vocational Education	040115 - Entertainment Marketing		4 - 12	

Information Technology (Career-Technical)

SUBJECT	CREDENTIAL	TEACHING FIELD/ENDORSEMENT	ADDITIONAL TEACHING FIELD/ENDORSEMENT	GRADES
145080 - Database Administration	CT - Career Technical (4-12)	171505 - Computer Network Technician		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)	170600 - Business Machine Maintenance		4 - 12
	CT - Career Technical (4-12)	140550 - Integrated Business		4 - 12
	CT - Career Technical (4-12)	140230 - Programming/Software Development		4 - 12
	CT - Career Technical (4-12)	140220 - Network Systems		4 - 12
	CT - Career Technical (4-12)	140210 - Information Services and Support		4 - 12
	CT - Career Technical (4-12)	140200 - Business Information Systems		4 - 12
	CT - Career Technical (4-12)	140100 - Accounting		4 - 12
	CW - Career Technical Workforce Development	171505 - Computer Network Technician		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	170600 - Business Machine Maintenance		4 - 12
	CW - Career Technical Workforce Development	140220 - Network Systems		4 - 12
	CW - Career Technical Workforce Development	140210 - Information Services and Support		4 - 12
	CW - Career Technical Workforce Development	140200 - Business Information Systems		4 - 12
	CW - Career Technical Workforce Development	140100 - Accounting		4 - 12
	HS - High School (7-12)	031399 - Intensive Office Education		4 - 12
	HS - High School (7-12)	030398 - Cooperative Office Education		4 - 12
	VO - Vocational Education	171505 - Computer Network Technician		4 - 12
	VO - Vocational Education	171504 - Telecommunications		4 - 12
	VO - Vocational Education	171503 - Electronics		4 - 12
	VO - Vocational Education	149003 - Vocational BOE w/o Data Processing and Shorthand		4 - 12
	VO - Vocational Education	149002 - Vocational BOE w/o Shorthand		4 - 12
	VO - Vocational Education	149001 - Vocational BOE w/o Data Processing		4 - 12
	VO - Vocational Education	170600 - Business Machine Maintenance		4 - 12
	VO - Vocational Education	149000 - Vocational BOE Comprehensive		4 - 12
	VO - Vocational Education	140901 - Secretarial Lab		4 - 12
	VO - Vocational Education	140900 - Typing/Related Occ		4 - 12
	VO - Vocational Education	140500 - Mat Sup/Trn/St/Rec		4 - 12
	VO - Vocational Education	140230 - Programming/Software Development		4 - 12
	VO - Vocational Education	140220 - Network Systems		4 - 12
	VO - Vocational Education	140210 - Information Services and Support		4 - 12
	VO - Vocational Education	140200 - Business Information Systems		4 - 12
	VO - Vocational Education	140150 - Data Processing/Programming		4 - 12
	VO - Vocational Education	140100 - Accounting		4 - 12
	VO - Vocational Education	040115 - Entertainment Marketing		4 - 12

Information Technology (Career-Technical)

SUBJECT	CREDENTIAL	TEACHING FIELD/ENDORSEMENT	ADDITIONAL TEACHING FIELD/ENDORSEMENT	GRADES
145085 - Database Applications Development	CT - Career Technical (4-12)	171505 - Computer Network Technician		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)	170600 - Business Machine Maintenance		4 - 12
	CT - Career Technical (4-12)	140550 - Integrated Business		4 - 12
	CT - Career Technical (4-12)	140230 - Programming/Software Development		4 - 12
	CT - Career Technical (4-12)	140210 - Information Services and Support		4 - 12
	CT - Career Technical (4-12)	140200 - Business Information Systems		4 - 12
	CT - Career Technical (4-12)	140100 - Accounting		4 - 12
	CW - Career Technical Workforce Development	171505 - Computer Network Technician		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	170600 - Business Machine Maintenance		4 - 12
	CW - Career Technical Workforce Development	140210 - Information Services and Support		4 - 12
	CW - Career Technical Workforce Development	140200 - Business Information Systems		4 - 12
	CW - Career Technical Workforce Development	140100 - Accounting		4 - 12
	HS - High School (7-12)	031399 - Intensive Office Education		4 - 12
	HS - High School (7-12)	030398 - Cooperative Office Education		4 - 12
	VO - Vocational Education	171505 - Computer Network Technician		4 - 12
	VO - Vocational Education	171504 - Telecommunications		4 - 12
	VO - Vocational Education	170600 - Business Machine Maintenance		4 - 12
	VO - Vocational Education	149003 - Vocational BOE w/o Data Processing and Shorthand		4 - 12
	VO - Vocational Education	149002 - Vocational BOE w/o Shorthand		4 - 12
	VO - Vocational Education	171503 - Electronics		4 - 12
	VO - Vocational Education	149001 - Vocational BOE w/o Data Processing		4 - 12
	VO - Vocational Education	149000 - Vocational BOE Comprehensive		4 - 12
	VO - Vocational Education	140901 - Secretarial Lab		4 - 12
	VO - Vocational Education	140900 - Typing/Related Occ		4 - 12
	VO - Vocational Education	140500 - Mat Sup/Trn/St/Rec		4 - 12
	VO - Vocational Education	140230 - Programming/Software Development		4 - 12
	VO - Vocational Education	140210 - Information Services and Support		4 - 12
	VO - Vocational Education	140200 - Business Information Systems		4 - 12
VO - Vocational Education	140150 - Data Processing/Programming		4 - 12	
VO - Vocational Education	140100 - Accounting		4 - 12	
VO - Vocational Education	040115 - Entertainment Marketing		4 - 12	

Information Technology (Career-Technical)

SUBJECT	CREDENTIAL	TEACHING FIELD/ENDORSEMENT	ADDITIONAL TEACHING FIELD/ENDORSEMENT	GRADES	
145090 - Game Design	CT - Career Technical (4-12)	171900 - Graphic Occupations		4 - 12	
	CT - Career Technical (4-12)	170700 - Commercial Art Occupations		4 - 12	
	CT - Career Technical (4-12)	140550 - Integrated Business		4 - 12	
	CT - Career Technical (4-12)	140240 - Interactive Media		4 - 12	
	CT - Career Technical (4-12)	140230 - Programming/Software Development		4 - 12	
	CT - Career Technical (4-12)	140200 - Business Information Systems		4 - 12	
	CT - Career Technical (4-12)	140100 - Accounting		4 - 12	
	CT - Career Technical (4-12)	040115 - Entertainment Marketing		4 - 12	
	CW - Career Technical Workforce Development	171900 - Graphic Occupations		4 - 12	
	CW - Career Technical Workforce Development	170700 - Commercial Art Occupations		4 - 12	
	CW - Career Technical Workforce Development	140240 - Interactive Media		4 - 12	
	CW - Career Technical Workforce Development	140200 - Business Information Systems		4 - 12	
	CW - Career Technical Workforce Development	140100 - Accounting		4 - 12	
	CW - Career Technical Workforce Development	040115 - Entertainment Marketing		4 - 12	
	HS - High School (7-12)	031399 - Intensive Office Education		4 - 12	
	HS - High School (7-12)	030398 - Cooperative Office Education		4 - 12	
	VO - Vocational Education	170700 - Commercial Art Occupations		4 - 12	
	VO - Vocational Education	149003 - Vocational BOE w/o Data Processing and Shorthand		4 - 12	
	VO - Vocational Education	149002 - Vocational BOE w/o Shorthand		4 - 12	
	VO - Vocational Education	149001 - Vocational BOE w/o Data Processing		4 - 12	
	VO - Vocational Education	149000 - Vocational BOE Comprehensive		4 - 12	
	VO - Vocational Education	140901 - Secretarial Lab		4 - 12	
	VO - Vocational Education	140900 - Typing/Related Occ		4 - 12	
	VO - Vocational Education	140240 - Interactive Media		4 - 12	
	VO - Vocational Education	140230 - Programming/Software Development		4 - 12	
	VO - Vocational Education	140200 - Business Information Systems		4 - 12	
	VO - Vocational Education	140150 - Data Processing/Programming		4 - 12	
	VO - Vocational Education	140100 - Accounting		4 - 12	
	VO - Vocational Education	040115 - Entertainment Marketing		4 - 12	
	145095 - Design Techniques	CT - Career Technical (4-12)	171900 - Graphic Occupations		4 - 12
		CT - Career Technical (4-12)	170700 - Commercial Art Occupations		4 - 12
		CT - Career Technical (4-12)	140550 - Integrated Business		4 - 12
CT - Career Technical (4-12)		140240 - Interactive Media		4 - 12	
CT - Career Technical (4-12)		140200 - Business Information Systems		4 - 12	
CT - Career Technical (4-12)		040115 - Entertainment Marketing		4 - 12	
CW - Career Technical Workforce Development		171900 - Graphic Occupations		4 - 12	
CW - Career Technical Workforce Development		170700 - Commercial Art Occupations		4 - 12	
CW - Career Technical Workforce Development		140240 - Interactive Media		4 - 12	
CW - Career Technical Workforce Development		140200 - Business Information Systems		4 - 12	
CW - Career Technical Workforce Development		040115 - Entertainment Marketing		4 - 12	
HS - High School (7-12)		031399 - Intensive Office Education		4 - 12	
HS - High School (7-12)		030398 - Cooperative Office Education		4 - 12	
VO - Vocational Education		171900 - Graphic Occupations		4 - 12	
VO - Vocational Education		170700 - Commercial Art Occupations		4 - 12	
VO - Vocational Education		149003 - Vocational BOE w/o Data Processing and Shorthand		4 - 12	
VO - Vocational Education		149002 - Vocational BOE w/o Shorthand		4 - 12	
VO - Vocational Education		149001 - Vocational BOE w/o Data Processing		4 - 12	
VO - Vocational Education		149000 - Vocational BOE Comprehensive		4 - 12	
VO - Vocational Education		140240 - Interactive Media		4 - 12	
VO - Vocational Education		140200 - Business Information Systems		4 - 12	
VO - Vocational Education		040115 - Entertainment Marketing		4 - 12	

Information Technology (Career-Technical)

SUBJECT	CREDENTIAL	TEACHING FIELD/ENDORSEMENT	ADDITIONAL TEACHING FIELD/ENDORSEMENT	GRADES
145100 - Creating and Editing Digital Graphics	CT - Career Technical (4-12)	171900 - Graphic Occupations		4 - 12
	CT - Career Technical (4-12)	170700 - Commercial Art Occupations		4 - 12
	CT - Career Technical (4-12)	140550 - Integrated Business		4 - 12
	CT - Career Technical (4-12)	140240 - Interactive Media		4 - 12
	CT - Career Technical (4-12)	140200 - Business Information Systems		4 - 12
	CT - Career Technical (4-12)	040115 - Entertainment Marketing		4 - 12
	CW - Career Technical Workforce Development	171900 - Graphic Occupations		4 - 12
	CW - Career Technical Workforce Development	170700 - Commercial Art Occupations		4 - 12
	CW - Career Technical Workforce Development	140240 - Interactive Media		4 - 12
	CW - Career Technical Workforce Development	140200 - Business Information Systems		4 - 12
	CW - Career Technical Workforce Development	040115 - Entertainment Marketing		4 - 12
	HS - High School (7-12)	031399 - Intensive Office Education		4 - 12
	HS - High School (7-12)	030398 - Cooperative Office Education		4 - 12
	VO - Vocational Education	171900 - Graphic Occupations		4 - 12
	VO - Vocational Education	170700 - Commercial Art Occupations		4 - 12
	VO - Vocational Education	149003 - Vocational BOE w/o Data Processing and Shorthand		4 - 12
	VO - Vocational Education	149002 - Vocational BOE w/o Shorthand		4 - 12
	VO - Vocational Education	149001 - Vocational BOE w/o Data Processing		4 - 12
	VO - Vocational Education	149000 - Vocational BOE Comprehensive		4 - 12
	VO - Vocational Education	140240 - Interactive Media		4 - 12
VO - Vocational Education	140200 - Business Information Systems		4 - 12	
VO - Vocational Education	040115 - Entertainment Marketing		4 - 12	
145105 - Multimedia and Image Management Techniques	CT - Career Technical (4-12)	171900 - Graphic Occupations		4 - 12
	CT - Career Technical (4-12)	170700 - Commercial Art Occupations		4 - 12
	CT - Career Technical (4-12)	140550 - Integrated Business		4 - 12
	CT - Career Technical (4-12)	140240 - Interactive Media		4 - 12
	CT - Career Technical (4-12)	140230 - Programming/Software Development		4 - 12
	CT - Career Technical (4-12)	140200 - Business Information Systems		4 - 12
	CT - Career Technical (4-12)	140100 - Accounting		4 - 12
	CT - Career Technical (4-12)	040115 - Entertainment Marketing		4 - 12
	CW - Career Technical Workforce Development	171900 - Graphic Occupations		4 - 12
	CW - Career Technical Workforce Development	170700 - Commercial Art Occupations		4 - 12
	CW - Career Technical Workforce Development	140240 - Interactive Media		4 - 12
	CW - Career Technical Workforce Development	140200 - Business Information Systems		4 - 12
	CW - Career Technical Workforce Development	140100 - Accounting		4 - 12
	CW - Career Technical Workforce Development	040115 - Entertainment Marketing		4 - 12
	HS - High School (7-12)	031399 - Intensive Office Education		4 - 12
	HS - High School (7-12)	030398 - Cooperative Office Education		4 - 12
	VO - Vocational Education	170700 - Commercial Art Occupations		4 - 12
	VO - Vocational Education	149003 - Vocational BOE w/o Data Processing and Shorthand		4 - 12
	VO - Vocational Education	149002 - Vocational BOE w/o Shorthand		4 - 12
	VO - Vocational Education	149001 - Vocational BOE w/o Data Processing		4 - 12
	VO - Vocational Education	149000 - Vocational BOE Comprehensive		4 - 12
	VO - Vocational Education	140901 - Secretarial Lab		4 - 12
	VO - Vocational Education	140900 - Typing/Related Occ		4 - 12
	VO - Vocational Education	140240 - Interactive Media		4 - 12
	VO - Vocational Education	140230 - Programming/Software Development		4 - 12
	VO - Vocational Education	140200 - Business Information Systems		4 - 12
	VO - Vocational Education	140150 - Data Processing/Programming		4 - 12
	VO - Vocational Education	140100 - Accounting		4 - 12
VO - Vocational Education	040115 - Entertainment Marketing		4 - 12	

Information Technology (Career-Technical)

SUBJECT	CREDENTIAL	TEACHING FIELD/ENDORSEMENT	ADDITIONAL TEACHING FIELD/ENDORSEMENT	GRADES
145110 - Video and Sound	CT - Career Technical (4-12)	171900 - Graphic Occupations		4 - 12
	CT - Career Technical (4-12)	171505 - Computer Network Technician		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)	170700 - Commercial Art Occupations		4 - 12
	CT - Career Technical (4-12)	170600 - Business Machine Maintenance		4 - 12
	CT - Career Technical (4-12)	140550 - Integrated Business		4 - 12
	CT - Career Technical (4-12)	140240 - Interactive Media		4 - 12
	CT - Career Technical (4-12)	140230 - Programming/Software Development		4 - 12
	CT - Career Technical (4-12)	140220 - Network Systems		4 - 12
	CT - Career Technical (4-12)	140210 - Information Services and Support		4 - 12
	CT - Career Technical (4-12)	140200 - Business Information Systems		4 - 12
	CT - Career Technical (4-12)	140100 - Accounting		4 - 12
	CT - Career Technical (4-12)	040115 - Entertainment Marketing		4 - 12
	CW - Career Technical Workforce Development	171900 - Graphic Occupations		4 - 12
	CW - Career Technical Workforce Development	171505 - Computer Network Technician		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	170700 - Commercial Art Occupations		4 - 12
	CW - Career Technical Workforce Development	170600 - Business Machine Maintenance		4 - 12
	CW - Career Technical Workforce Development	140240 - Interactive Media		4 - 12
	CW - Career Technical Workforce Development	140220 - Network Systems		4 - 12
	CW - Career Technical Workforce Development	140210 - Information Services and Support		4 - 12
	CW - Career Technical Workforce Development	140200 - Business Information Systems		4 - 12
	CW - Career Technical Workforce Development	140100 - Accounting		4 - 12
	CW - Career Technical Workforce Development	040115 - Entertainment Marketing		4 - 12
	HS - High School (7-12)	031399 - Intensive Office Education		4 - 12
	HS - High School (7-12)	030398 - Cooperative Office Education		4 - 12
	VO - Vocational Education	171900 - Graphic Occupations		4 - 12
	VO - Vocational Education	171505 - Computer Network Technician		4 - 12
	VO - Vocational Education	171504 - Telecommunications		4 - 12
	VO - Vocational Education	171503 - Electronics		4 - 12
	VO - Vocational Education	170700 - Commercial Art Occupations		4 - 12
	VO - Vocational Education	149003 - Vocational BOE w/o Data Processing and Shorthand		4 - 12
	VO - Vocational Education	170600 - Business Machine Maintenance		4 - 12
	VO - Vocational Education	149002 - Vocational BOE w/o Shorthand		4 - 12
	VO - Vocational Education	149001 - Vocational BOE w/o Data Processing		4 - 12
	VO - Vocational Education	149000 - Vocational BOE Comprehensive		4 - 12
	VO - Vocational Education	140901 - Secretarial Lab		4 - 12
	VO - Vocational Education	140900 - Typing/Related Occ		4 - 12
	VO - Vocational Education	140500 - Mat Sup/Trn/St/Rec		4 - 12
	VO - Vocational Education	140240 - Interactive Media		4 - 12
	VO - Vocational Education	140230 - Programming/Software Development		4 - 12
	VO - Vocational Education	140220 - Network Systems		4 - 12
	VO - Vocational Education	140210 - Information Services and Support		4 - 12
	VO - Vocational Education	140200 - Business Information Systems		4 - 12
VO - Vocational Education	140150 - Data Processing/Programming		4 - 12	
VO - Vocational Education	140100 - Accounting		4 - 12	
VO - Vocational Education	040115 - Entertainment Marketing		4 - 12	

Information Technology (Career-Technical)

SUBJECT	CREDENTIAL	TEACHING FIELD/ENDORSEMENT	ADDITIONAL TEACHING FIELD/ENDORSEMENT	GRADES
145115 - Animation	CT - Career Technical (4-12)	171900 - Graphic Occupations		4 - 12
	CT - Career Technical (4-12)	170700 - Commercial Art Occupations		4 - 12
	CT - Career Technical (4-12)	140550 - Integrated Business		4 - 12
	CT - Career Technical (4-12)	140240 - Interactive Media		4 - 12
	CT - Career Technical (4-12)	140230 - Programming/Software Development		4 - 12
	CT - Career Technical (4-12)	140200 - Business Information Systems		4 - 12
	CT - Career Technical (4-12)	140100 - Accounting		4 - 12
	CT - Career Technical (4-12)	040115 - Entertainment Marketing		4 - 12
	CW - Career Technical Workforce Development	140200 - Business Information Systems		4 - 12
	CW - Career Technical Workforce Development	140100 - Accounting		4 - 12
	CW - Career Technical Workforce Development	040115 - Entertainment Marketing		4 - 12
	CW - Career Technical Workforce Development	171900 - Graphic Occupations		4 - 12
	CW - Career Technical Workforce Development	170700 - Commercial Art Occupations		4 - 12
	CW - Career Technical Workforce Development	140240 - Interactive Media		4 - 12
	HS - High School (7-12)	031399 - Intensive Office Education		4 - 12
	HS - High School (7-12)	030398 - Cooperative Office Education		4 - 12
	VO - Vocational Education	171900 - Graphic Occupations		4 - 12
	VO - Vocational Education	170700 - Commercial Art Occupations		4 - 12
	VO - Vocational Education	149003 - Vocational BOE w/o Data Processing and Shorthand		4 - 12
	VO - Vocational Education	149002 - Vocational BOE w/o Shorthand		4 - 12
	VO - Vocational Education	149001 - Vocational BOE w/o Data Processing		4 - 12
	VO - Vocational Education	149000 - Vocational BOE Comprehensive		4 - 12
	VO - Vocational Education	140901 - Secretarial Lab		4 - 12
	VO - Vocational Education	140900 - Typing/Related Occ		4 - 12
	VO - Vocational Education	140240 - Interactive Media		4 - 12
	VO - Vocational Education	140230 - Programming/Software Development		4 - 12
	VO - Vocational Education	140200 - Business Information Systems		4 - 12
	VO - Vocational Education	140150 - Data Processing/Programming		4 - 12
	VO - Vocational Education	140100 - Accounting		4 - 12
	VO - Vocational Education	040115 - Entertainment Marketing		4 - 12



Information Technology (Career-Technical)

SUBJECT	CREDENTIAL	TEACHING FIELD/ENDORSEMENT	ADDITIONAL TEACHING FIELD/ENDORSEMENT	GRADES
145120 - 3-D Techniques	CT - Career Technical (4-12)	171900 - Graphic Occupations		4 - 12
	CT - Career Technical (4-12)	170700 - Commercial Art Occupations		4 - 12
	CT - Career Technical (4-12)	140550 - Integrated Business		4 - 12
	CT - Career Technical (4-12)	140240 - Interactive Media		4 - 12
	CT - Career Technical (4-12)	140230 - Programming/Software Development		4 - 12
	CT - Career Technical (4-12)	140200 - Business Information Systems		4 - 12
	CT - Career Technical (4-12)	140100 - Accounting		4 - 12
	CT - Career Technical (4-12)	040115 - Entertainment Marketing		4 - 12
	CW - Career Technical Workforce Development	171900 - Graphic Occupations		4 - 12
	CW - Career Technical Workforce Development	170700 - Commercial Art Occupations		4 - 12
	CW - Career Technical Workforce Development	140240 - Interactive Media		4 - 12
	CW - Career Technical Workforce Development	140200 - Business Information Systems		4 - 12
	CW - Career Technical Workforce Development	140100 - Accounting		4 - 12
	CW - Career Technical Workforce Development	040115 - Entertainment Marketing		4 - 12
	HS - High School (7-12)	031399 - Intensive Office Education		4 - 12
	HS - High School (7-12)	030398 - Cooperative Office Education		4 - 12
	VO - Vocational Education	149003 - Vocational BOE w/o Data Processing and Shorthand		4 - 12
	VO - Vocational Education	149002 - Vocational BOE w/o Shorthand		4 - 12
	VO - Vocational Education	149001 - Vocational BOE w/o Data Processing		4 - 12
	VO - Vocational Education	170700 - Commercial Art Occupations		4 - 12
	VO - Vocational Education	149000 - Vocational BOE Comprehensive		4 - 12
	VO - Vocational Education	140901 - Secretarial Lab		4 - 12
	VO - Vocational Education	140900 - Typing/Related Occ		4 - 12
	VO - Vocational Education	140240 - Interactive Media		4 - 12
	VO - Vocational Education	140230 - Programming/Software Development		4 - 12
	VO - Vocational Education	140200 - Business Information Systems		4 - 12
VO - Vocational Education	140150 - Data Processing/Programming		4 - 12	
VO - Vocational Education	140100 - Accounting		4 - 12	
VO - Vocational Education	040115 - Entertainment Marketing		4 - 12	

Information Technology (Career-Technical)

SUBJECT	CREDENTIAL	TEACHING FIELD/ENDORSEMENT	ADDITIONAL TEACHING FIELD/ENDORSEMENT	GRADES
145125 - Interactive Application Development	CT - Career Technical (4-12)	171900 - Graphic Occupations		4 - 12
	CT - Career Technical (4-12)	170700 - Commercial Art Occupations		4 - 12
	CT - Career Technical (4-12)	140550 - Integrated Business		4 - 12
	CT - Career Technical (4-12)	140240 - Interactive Media		4 - 12
	CT - Career Technical (4-12)	140230 - Programming/Software Development		4 - 12
	CT - Career Technical (4-12)	140200 - Business Information Systems		4 - 12
	CT - Career Technical (4-12)	140100 - Accounting		4 - 12
	CT - Career Technical (4-12)	040115 - Entertainment Marketing		4 - 12
	CW - Career Technical Workforce Development	171900 - Graphic Occupations		4 - 12
	CW - Career Technical Workforce Development	170700 - Commercial Art Occupations		4 - 12
	CW - Career Technical Workforce Development	140240 - Interactive Media		4 - 12
	CW - Career Technical Workforce Development	140200 - Business Information Systems		4 - 12
	CW - Career Technical Workforce Development	140100 - Accounting		4 - 12
	CW - Career Technical Workforce Development	040115 - Entertainment Marketing		4 - 12
	HS - High School (7-12)	031399 - Intensive Office Education		4 - 12
	HS - High School (7-12)	030398 - Cooperative Office Education		4 - 12
	VO - Vocational Education	170700 - Commercial Art Occupations		4 - 12
	VO - Vocational Education	149003 - Vocational BOE w/o Data Processing and Shorthand		4 - 12
	VO - Vocational Education	149002 - Vocational BOE w/o Shorthand		4 - 12
	VO - Vocational Education	149001 - Vocational BOE w/o Data Processing		4 - 12
	VO - Vocational Education	149000 - Vocational BOE Comprehensive		4 - 12
	VO - Vocational Education	140901 - Secretarial Lab		4 - 12
	VO - Vocational Education	140900 - Typing/Related Occ		4 - 12
	VO - Vocational Education	140240 - Interactive Media		4 - 12
	VO - Vocational Education	140230 - Programming/Software Development		4 - 12
	VO - Vocational Education	140200 - Business Information Systems		4 - 12
	VO - Vocational Education	140150 - Data Processing/Programming		4 - 12
VO - Vocational Education	140100 - Accounting		4 - 12	
VO - Vocational Education	040115 - Entertainment Marketing		4 - 12	