West Virginia Career and Technical Education Endorsement and Testing Manual

Effective, May 8, 2024

A listing of all WVBE-required licensure exams and industry credentials required for educator certification and for completion of West Virginia Board of Education-approved Career and Technical Education (CTE) programs leading to West Virginia licensure. This Manual is maintained on the WVDE website. When tests, scores, or industry credentials listed in the manual are changed, the validity period for the previously listed test, score, and/or industry credential shall be one year from the effective date of the new test, score, or industry credential. Exception: tests, scores, or industry credentials shall remain valid for twelve months after completion of an approved program for licensure where the applicant was continuously enrolled even if the test, score, or industry credential has changed.

REQUIRED TESTS, INDUSTRY CREDENTIALS AND WORK EXPERIENCE REQUIRED FOR ISSUANCE OF THE CAREER/TECHNICAL PERMIT AND CAREER/TECHNICAL CERTIFICATE 1,2,3,4,5,6,7

ΝΟCΤΙ	
	Career Technical Certificate
1440 - Employability Skills	Achieve passing cut score at time of assessment
Sunset clause ²	
Content Specializations ³	

TABLE 1: REQUIRED WVDE pre-employment test

¹ Exemptions to the WVDE pre-employment test are identified in §126-136-10.1.b.3.F.1

² California Achievement Tests - The Career Technical Certificate passing score will be accepted for admission into teacher prep program until January 1st 2025

³ If a NOCTI test or a national or state certificate or license is not available, content specialization test may be developed or obtained from other sources.

⁴ Achieve NOCTI passing cut score (content/performance) at time of assessment.

⁵ Three years of relevant teaching experience within the last seven years in one or combination of specializations recognized on a valid Out-of-State Career and Technical Education Certificate may be accepted in place of the wage-earning experience requirements of this manual.

⁶ If continuously employed on a First-Class/Full-Time Permit for Career and Technical Education (CTE), an individual who holds an endorsement no longer included in of this manual, may use the criteria effective at the time of application for the initial First Class/Full-Time permit when applying for permit renewal or initial CTE certification.

⁷ Teaching uncertified does not count as Wage-Earning Experience.

Navigating Between Excel Tabs(different clusters):

Using the Mouse:

Clicking: Look at the bottom of the Excel window; you'll see the sheet tabs(clusters names). Click on any tab to switch to that sheet.

Scrolling: If you have numerous tabs, you can scroll left or right by clicking on the arrows beside the sheet tabs. **Using Keyboard Shortcuts:**

Ctrl + Page Up/Page Down: Press Ctrl + Page Up to move to the previous sheet or Ctrl + Page Down to move to the next sheet.

Ctrl + Tab: Similar to switching between open windows in many applications, pressing Ctrl + Tab moves to the next sheet.

Go To Specific Sheet:

Right-click Navigation Arrows: Right-click on the navigation arrows (usually found to the left of the sheet tabs) to display a list of all sheets. Click on the desired sheet name to navigate directly to it.

Go To Dialog Box: Press Ctrl + G or F5 to open the "Go To" dialog box. Enter the sheet name and press Enter to navigate directly to that sheet.

Using Excel's Ribbon:

Home > Cells > Format > Hide & Unhide > Unhide Sheet: If you've hidden any sheets, you can unhide them by going to the "Format" option in the ribbon, then "Hide & Unhide," and finally selecting "Unhide Sheet" to choose the sheet you want to unhide.

Remember, these methods work efficiently to navigate between different tabs or sheets within an Excel workbook, allowing you to access and work with various sets of data or information.

Adult (Basic) Education

WAGE-EARNING experience required for the career and technical educational alternatively certified teacher in Adult (Basic) Education		
complete two years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested. Relevant teaching experience may count as equal to work experience requirements.		
WVBE ENDORSEMENTS REQUIRED INDUSTRY CREDENTIALS INDUSTRY CREDENTIALING ORGANIZATION/S		
7900 Adult (Basic) Education	NA	Completion of a professional required training for Adult Development through WVDE and/or WVDE- Basic Education Complete a state approved CTE program OR equivalent education from Another state.

AGRICULTURE, FOOD AND NATURAL RESOURCES

WAGE-EARNING experience required for the career and technical education alternatively certified teacher in Agriculture, Food and Natural Resources

Wage-Earning Experience – Complete four years (8,000 clock hours) of satisfactory and reasonably continuous work experience in the occupation for which licensure is requested; OR

Bachelor's Degree. – Hold a bachelor's degree AND complete two years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested; OR

Associate Degree – Hold an Associate Degree in an area related to the specialization AND complete two (2) years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested.

WVBE ENDORSEMENTS	REQUIRED INDUSTRY CREDENTIALS	INDUSTRY CREDENTIALING ORGANIZATION/S
7410 Forestry	NA	NA
*7720 Agriculture Industry	#5185 Production Agriculture	NOCTI
7802 Food Products and Processing	NA	NA
7805 Power Structure and Technical Systems	NA	NA
7962 Pet Grooming	NA	NA
*1 Year to Earn Industry Credential		

ARCHITECTURE AND CONSTRUCTION CLUSTER

WAGE-EARNING experience required for the career and technical education alternatively certified teacher in Architecture and Construction Cluster

Wage-Earning Experience – Complete four years (8,000 clock hours) of satisfactory and reasonably continuous work experience in the occupation for which licensure is requested; OR

Bachelor's Degree. – Hold a bachelor's degree AND complete two years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested; OR

Associate Degree – Hold an Associate Degree in an area related to the specialization AND complete two (2) years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested.

WVBE ENDORSEMENTS	REQUIRED INDUSTRY CREDENTIALS	INDUSTRY CREDENTIALING ORGANIZATION/S
7083 Air Conditioning and Refrigeration	HVAC Technician Certification	West Virginia Division of Labor
*7105 Civil Technology	#5178 - Technical Drafting	NOCTI
7030 Electrical Technology	Master Electrician License	WV State Fire Marshal
*7021 Carpentry	#5265 Carpentry	NOCTI
*7027 Building Maintenance & Operations	#5264 – Building Trades Maintenance	NOCTI
*7028 General Building Construction (House Construction)	NOCTI #5263 – Building Construction Occupations	NOCTI
*7022 Masonry	NOCTI #5933 Mason/Masonry	NOCTI
*7073 Operation/Maintenance-Heavy Equipment	NOCTI #5912 Heavy Equipment Maintenance and Repair	NOCTI
7023 Plumber and Pipefitting	WV Master Plumber's License	West Virginia Division of Labor

ARTS, A/V TECHNOLOGY AND COMMUNICATIONS

WAGE-EARNING experience required for the career and technical education alternatively certified teacher in Arts, A/V Technology and Communications Cluster		
Wage-Earning Experience – Complete four years (8,000 clock hours) of satisfactory and reasonably continuous work experience in the occupation for which licensure is requested; OR Bachelor's Degree – Hold a bachelor's degree AND complete two years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested; OR Associate Degree – Hold an associate degree in an area related to the specialization AND complete two (2) years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested in an area related to the specialization AND complete two (2) years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested. Completion of a full program of study from an approved education program in the specialization may count toward a half year of the work experience requirements.		
WVBE ENDORSEMENTS	REQUIRED INDUSTRY CREDENTIALS	INDUSTRY CREDENTIALING ORGANIZATION/S
*7175 Broadcasting Technology	#5186 Television Production	ΝΟΟΤΙ
*7014 Graphic Arts	#5261 – Advertising and Design	NOCTI
*1 Year to Earn Industry Credential		

BUSINESS MANAGEMENT AND ADMINISTRATION

WAGE-EARNING experience required for the career and technical education alternatively certified teacher in Business Management and Administration Cluster		
Wage-Earning Experience – Complete four years (8,000 clock hours) of satisfactory and reasonably continuous work experience in the occupation for which licensure is requested; OR Bachelor's Degree – Hold a bachelor's degree AND complete two years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested; OR Associate Degree – Hold an Associate Degree in an area related to the specialization AND complete two (2) years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested. Completion of a full program of study from an approved education program in the specialization may count toward a half year of the work experience requirements.		
WVBE ENDORSEMENTS	REQUIRED INDUSTRY CREDENTIALS	INDUSTRY CREDENTIALING ORGANIZATION/S
*7721 Business Management & Administration Industry	#5260- Administrative Assisting	NOCTI
*1 Year to Earn Industry Credential		-

EDUCATION AND TRAINING

WAGE-EARNING experience required for the career and technical education alternatively certified teacher in Education and Training Cluster

Wage-Earning Experience – Complete four years (8,000 clock hours) of satisfactory and reasonably continuous work experience in the occupation for which licensure is requested; OR

Bachelor's Degree. – Hold a bachelor's degree AND complete two years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested; OR

Associate Degree – Hold an Associate Degree in an area related to the specialization AND complete two (2) years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested.

WVBE ENDORSEMENTS	REQUIRED INDUSTRY CREDENTIALS	INDUSTRY CREDENTIALING
*7317 Early Childhood Education	NOCTI #5183 Early Childhood Education and Care -Individuals who hold a valid West Virginia Professional Teaching Certificate with an endorsement in 3600,3601,3602,3603, or 3606 are exempt from the NOCTI Exam	NOCTI
*1 Year to Earn Industry Credential		

FINANCE

WAGE-EARNING experience required for the career and technical education alternatively certified teacher in Finance Cluster

Wage-Earning Experience – Complete four years (8,000 clock hours) of satisfactory and reasonably continuous work experience in the occupation for which licensure is requested; OR

Bachelor's Degree. – Hold a bachelor's degree AND complete two years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested; OR

Associate Degree – Hold an Associate Degree in an area related to the specialization AND complete two (2) years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested.

WVBE ENDORSEMENTS	REQUIRED INDUSTRY CREDENTIALS	INDUSTRY CREDENTIALING ORGANIZATION/S
*7722 Finance Industry	#5180 - Accounting	NOCTI
*1 Year to Earn Industry Credential		

HEALTH SCIENCE EDUCATION

WAGE-EARNING experience required for the career and technical education alternatively certified teacher in Health Science Education is specified in relevant sections below

Wage-Earning Experience – bachelor's degree. – Hold a bachelor's degree in an area related to the specialization AND complete two years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested; OR

Associate degree – Hold an associate degree in an area related to the specialization AND complete two

(2) years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested.

WVBE ENDORSEMENTS	REQUIRED INDUSTRY CREDENTIALS	INDUSTRY CREDENTIALING ORGANIZATION/S
7048 Health Assistant	Valid West Virginia License as Registered Nurse (RN).	West Virginia Board of Examiners for Registered Professional Nurses
7403 Veterinary Technician	Educated from an American Veterinary Medical Association Accredited Veterinary Technology program and currently a Licensed Veterinary Technician or Registered Veterinary Technician or Certified Veterinary technician or hold credential by passing the Veterinary Technician National Exam prior to change of 1/1/2010.	West Virginia State Veterinary Board and American Association of Veterinarian State Boards.

Wage-Earning Experience – bachelor's degree. – Hold a bachelor's degree in an area related to the specialization AND complete two years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested which includes 1 year (2080 hours) in a certified nursing home, or distinct part of a hospital that meets the requirements of subacute/rehabilitation/nursing home experience; OR Associate degree – Hold an associate degree in an area related to the specialization AND complete two

(2) years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested which includes 1 year (2080 hours) in a certified nursing home, or distinct part of a hospital that meets the requirements of subacute/rehabilitation/nursing home experience.

WVBE REQUIRED INDUSTRY CREDENTIALS	INDUSTRY CREDENTIALING ORGANIZATION/S
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7042 Nursing Aide

WAGE-EARNING Experience – Complete 3 years (6000 clock hours) employment as a registered professional nurse 3 years immediately preceding employment as a faculty member; have or be enrolled in a baccalaureate degree program with completion within 5-7 years of date of hire; have at least 3 years of experience as a registered professional nurse which should include 2 years of patient side nursing care experience in an acute, intermediate or long term care clinical facility; 1 year experience in one or more of the following areas: teaching, supervision or administration; and present evidence of continuing education.

WVBE ENDORSEMENTS	REQUIRED INDUSTRY CREDENTIALS	INDUSTRY CREDENTIALING ORGANIZATION/S
7041 Practical Nursing	Valid unencumbered West Virginia License as a Registered Nurse (RN)	West Virginia Board of Examiners for Registered Professional Nurses
 WAGE-EARNING Experience – Complete four years (8,000 clock hours) of satisfactory and reasonably continuous work experience in a dental office with practice, i.e., scheduling, billing, and chair side assisting, and has completed a dental assisting program. The most recent experience must have been within the past three years and beyond the training period; OR Bachelor's Degree. – Hold a bachelor's degree AND complete two years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested; OR Associate degree – Hold an associate degree in an area related to the specialization AND complete two (2) years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested. Completion of a full program of study from an approved education program in the specialization may count toward a half year of the work experience requirements. 		
WVBE ENDORSEMENTS	REQUIRED INDUSTRY CREDENTIALS	INDUSTRY CREDENTIALING ORGANIZATION/S
7043 Dental Assistant	Certified West Virginia Dental Assistant or Licensed Dental Hygienist	Holds a valid certification from the Dental Assistant National Board, or a Registered Dental Assistant from the American Medical Technician Organization or has passed the national board dental hygiene examination and the WV Dental Board examination.

Wage-Earning Experience – Complete four years (8,000 clock hours) of wage-earning experience as a dental laboratory technician as qualified by education, training or experience who has completed a dental laboratory technology education program and who fabricates, repairs, or alters a dental prosthesis in accordance with a dentist's work authorization. The most recent experience must have been within the past three years and beyond the training period; OR

Bachelor's Degree. – Hold a bachelor's degree AND complete two years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested; OR

Associate degree – Hold an associate degree in an area related to the specialization AND complete two

(2) years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested.

Completion of a full program of study from an approved education program in the specialization may count toward a half year of the work experience requirements.

WVBE ENDORSEMENTS	REQUIRED INDUSTRY CREDENTIALS	INDUSTRY CREDENTIALING ORGANIZATION/S
7171 Dental Lab Technician	Dental Lab Technician or Dentist	Hold a valid certificate from the National Board for Certification hereinafter NCB. A Doctor of Dental Surgery (DDS) or Doctor of Dental Medicine (DMD) and licensed in the state of WV to practice in the profession.

Wage-Earning Experience – Complete four years (8,000 clock hours) of wage-earning experience in a medical office or out-patient clinic with experience in all aspects of medical office practice, i.e. insurance, medical transcription, and clinical procedures such as treatments and examinations. The most recent experience must have been within the past three years and beyond the training period.

OR

Bachelor's Degree. – Hold a bachelor's degree AND complete two years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested; OR

Associate Degree. – Hold an Associate Degree in an area related to the specialization AND complete two (2) years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested.

WVBE ENDORSEMENTS	REQUIRED INDUSTRY CREDENTIALS	INDUSTRY CREDENTIALING ORGANIZATION/S

7045 Medical Assistant	Medical Assistant or Valid West Virginia License as Registered Nurse (RN) I a	Hold a valid certificate from the American Association of Medical Assistants (AAMA), National Association for Health Professionals (NAHP), National Center for Competency Testing (NCCT), National Healthcareer Association (NHA), American Medical Technologists (AMT) or a valid license as a registered nurse in West Virginia with a minimum of a nursing diploma/associate degree and/or hold a certification by the American Health Informatics Association.	
Successful completion c completion of sixteen (2	ce-Complete four (4) years (8,000 clock hours) of EMT field experience. of a WVOEMS approved educational methodology course or an equivalent profe 16) student teaching hours under the supervision of a Master Instructor. Must r ents for Basic Life Support Lead Instructor or WVOEMS endorsed ALS Lead Instru	meet all requirements outlined in the WVOEMS	
WVBE ENDORSEMENTS	REQUIRED INDUSTRY CREDENTIALS		
7050 Medical Emergency Preparedness	Valid West Virginia EMT, or National Registry for EMT or higher Certification	West Virginia Office of Emergency Medical Services (WVOEMS) and National Registry for EMT (NREMT)	
means registered suppo must have been within	ce – Complete four years (8,000 clock hours) of wage-earning experience as a contrive personnel who works under the direct supervision of a pharmacist; or as the past three years and beyond the training period; OR	a registered nurse. The most recent experience	

in the area for which licensure is requested; OR

Associate Degree. – Hold an Associate Degree in an area related to the specialization AND complete two

(2) years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested.

Completion of a full program of study from an approved education program in the specialization may count toward a half year of the work experience requirements.

WVBE ENDORSEMENTS	REQUIRED INDUSTRY CREDENTIALS	INDUSTRY CREDENTIALING ORGANIZATION/S	
7608 Pharmacy Technician (RPT) or a Registered Nurse Valid Certified Pharmacy Technician (CPhT) or a Registered Pharmacy Technician (RPT) or a Registered Nurse Pharmacy Technician (CPhT) or a Registered Pharmacy Technician (RPT) or a Registered Nurse			
who works under the d performance of collect Bachelor's Degree. – H in the area for which lid Associate Degree. – Ho and reasonably continu Completion of a full pro	ce – Complete four years (8,000 clock hours) as a certified phlebotomy technician whi irect supervision of a medical lab assistant or director, or in a clinical laboratory in a ho on of routine laboratory samples; or as a registered nurse; OR old a bachelor's degree AND complete two years (4,000 clock hours) of satisfactory and censure is requested; OR Id an Associate Degree in an area related to the specialization AND complete two (2) y lous work experience in the area for which licensure is requested. ogram of study from an approved education program in the specialization may ar of the work experience requirements	ospital, physician's office or clinic in the dreasonably continuous work experience	
WVBE ENDORSEMENTS	REQUIRED INDUSTRY CREDENTIALS	INDUSTRY CREDENTIALING ORGANIZATION/S	

American Society of Phlebotomy (ASPT) National Health Career Association or American Medical Technologist Association (AMTA) also known as

7603 Phlebotomist	Valid Certified Phlebotomy certification or a Medical Laboratory Technician or a Registered Nurse	American Medical Technologist (AMT) Or Medical Lab Assistant Certification (CMLA) or American Society of Clinical Pathology (ASCP) or International Society for Clinical Lab Technology (ISCLT) or West Virginia Board of Examiners for Registered Professional Nurses		
Wage-Earning Experience – Complete four years (8,000 clock hours) of wage-earning experience in a clinical laboratory in a hospital, physician's office, or clinic in the performance of routine laboratory procedures in bacteriology, blood-banking, hematology, urinalysis and serology. The most recent experience must have been within the past three years and beyond the training period; OR Bachelor's Degree. – Hold a bachelor's degree AND complete two years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested; OR Associate Degree. – Hold an Associate Degree in an area related to the specialization AND complete two (2) years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested. Completion of a full program of study from an approved education program in the specialization may count toward a half year of the work experience requirements.				
WVBE ENDORSEMENTS	REQUIRED INDUSTRY CREDENTIALS	INDUSTRY CREDENTIALING ORGANIZATION/S		
7172 Lab Tech-MedicalMedical Lab TechnicianCertification (CMLA) or AmeriOf Clinical Pathology (ASCP) of Clini		(AMT) or Medical Lab Assistant Certification (CMLA) or American Society of Clinical Pathology (ASCP) or International Society for Clinical Lab Technology (ISCLT)		
7614 Foundations of Health Science	Hold a Professional Teaching Certificate endorsed for biology, chemistry, general science or health	Complete WVDE sponsored professional development yearly		

Wage-Earning Experience – Complete four years (8,000 clock hours) of wage-earning experience in a hospital or out-patient clinic with experience in all aspects of respiratory therapy including clinical procedures such as treatments. examinations, and documentation. The most recent experience must

have been within the past three years and beyond the training period; OR

Bachelor's Degree. – Hold a bachelor's degree AND complete two years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested; OR

Associate Degree. – Hold an Associate Degree in an area related to the specialization AND complete two (2) years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested.

Completion of a full program of study from an approved education program in the specialization may count toward a half year of the work experience requirements.

WVBE ENDORSEMENTS	REQUIRED INDUSTRY CREDENTIALS	INDUSTRY CREDENTIALING ORGANIZATION/S		
7606 Respiratory Therapy	Certified Surgical Technologist or Certified Technologist/Surgical Assistant Licensed by the West Virginia Boo Respiratory Therapy			
Technologist/Surgical A surgical instrumentation central supply certificat period; OR Bachelor's Degree. – Ho in the area for which lic Associate Degree. – Ho and reasonably continu Completion of a full pro	ce – Complete four years (8,000 clock hours) employment as a Certified Surgical Technol ssistant in a hospital or out-patient clinic with experience in all aspects of Surgical Technol n, and operating room policy and surgical procedures preceding employment as a facult ion requirements. The most recent employment experience must have been within the old a bachelor's degree AND complete two years (4,000 clock hours) of satisfactory and ensure is requested; OR d an Associate Degree in an area related to the specialization AND complete two (2) ye ous work experience in the area for which licensure is requested. gram of study from an approved education program in the specialization may r of the work experience requirements.	nology including surgical procedures, by member. Must also be familiar with past three years and beyond the training reasonably continuous work experience		
WVBE ENDORSEMENTS	REQUIRED INDUSTRY CREDENTIALS	INDUSTRY CREDENTIALING ORGANIZATION/S		
7607 Surgical Technologist	Certified Surgical Technologist or Certified Technologist/Surgical Assistant	National Board of Surgical Technology and Surgical Assisting		

Bachelor's Degree – Hold a bachelor's degree AND complete two years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested; OR

Associate Degree – Hold an Associate Degree in an area related to the specialization AND complete two (2) years (4,000 clock hours) of satisfactory and

reasonably continuous work experience in the area for which licensure is requested. Certified by the National Certification Board for Therapeutic Massage and Bodywork. Have graduated from an approved massage education program with at least 500 hours of supervised academic instruction from an accredited school. Completion of a full program of study from an approved education program in the specialization may count toward a half year of the work experience requirements. WVBE INDUSTRY CREDENTIALING **REQUIRED INDUSTRY CREDENTIALS ENDORSEMENTS ORGANIZATION/S** Hold a valid certificate from the West National Certification of Therapeutic Massage and Body Work or Federation of State Virginia Massage Therapy Board and 7625 Massage Therapy Massage Therapy Board valid Cardiopulmonary Resuscitation (CPR) card. Wage-Earning Experience -- Hold an Associate Degree in an area related to the specialization AND complete two (2) years (4,000 clock hours) of satisfactory and reasonably continuous work experience in a medical/health care setting with experience in selected health care professions in which a valid certificate or license is held. The most recent must have been within the past 3 years and beyond the training period; OR Bachelor's Degree in Related Area – Hold a bachelor's degree in a related area. **WVBE** INDUSTRY CREDENTIALING **REQUIRED INDUSTRY CREDENTIALS ENDORSEMENTS ORGANIZATION/S** *7966 Biomedical Project Lead the Way Certificate Project Lead the Way Core Training Science Wage-Earning Experience-Bachelor's Degree or higher AND complete least two years (4,000 clock hours) of satisfactory and reasonably continuous work experience as a Licensed Athletic Trainer. Completion of a full program of study from an approved education program in the specialization may count toward a half year of the work experience requirements. INDUSTRY CREDENTIALING WVBE **REQUIRED INDUSTRY CREDENTIALS ENDORSEMENTS ORGANIZATION/S** West Virginia Board of Physical Valid West Virginia License as Certified Athletic Trainer 7620 Sports Medicine Therapy and Board of Certification *1 Year to Earn Industry Credential

HOSPITALITY AND

nce in the area for which licensure is requeste r from an approved education program in the		
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nce in the area for which licensure is requeste		
Associate Degree. – Hold an Associate Degree in an area related to the specializati		
reasonably continuous work experience in the area for which licensure is requeste		
Bachelor's Degree. – Hold a bachelor's degree AND complete two years (4,000 clo		
e four years (8,000 clock hours) of satisfactory		

WVBE ENDORSEMENTS	REQUIRED INDUSTRY CREDENTIALS	
	ServSafe for Managers	
*7095 Culinary Arts	#5167 – Commercial Foods	
*7315 Lodging, Travel and Tourism	#5927 Hospitality Management Lodging Note: Written NOCTI Only	
0227 Parks and Recreation Management	Cardiopulmonary Resuscitation Instructor Certification, and First Aid	
*7967 Baking and Pastry	ServSafe for Managers #5918 – Retail Commercial Baking	
*1 Year to Earn Industry Credential		

TOURISM

on alternatively certified teacher in HOSPITALITY AND TOURISM

/ and reasonably continuous work experience in the occupation for

ck hours) of satisfactory and

d; OR

on AND complete two (2) years (4,000 clock hours) of satisfactory and d.

specialization may count toward a half year of the work experience

INDUSTRY CREDENTIALING ORGANIZATION/S

National Restaurant Association NOCTI

NOCTI

American Red Cross, American Heart Association, American Safety & Health Institute, Emergency Care & Safety Institute, National Safety Council

National Restaurant Association NOCTI

HUMAN SERVI

WAGE-EARNING experience required for the career and technical educ

Wage-Earning Experience – Complete four years (8,000 clock hours) of satisfactory which licensure is requested; OR

Bachelor's Degree. – Hold a bachelor's degree AND complete two years (4,000 cloc and reasonably continuous work experience in the area for which licensure is reque Associate Degree. – Hold an Associate Degree in an area related to the specializatio reasonably continuous work experience in the area for which licensure is requestec Completion of a full program of study from an approved education program in the s requirements.

WVBE ENDORSEMENTS	REQUIRED INDUSTRY CREDENTIALS	
7185 Social Services Occupation	Valid Cardiopulmonary Resuscitation (CPR) and First Aid Cards	
7065 Cosmetology	Cosmetologist & Instructor License	
7473 Barbering	Barber & Instructor License	
7714 Prevention Support Specialist	Valid Cardiopulmonary Resuscitation (CPR) and First Aid Cards	
7728 Nail Technology	Nail Technician & Instructor License	
7723 Hair Styling	Hair Stylist & Instructor License	
7932 American Sign Language Educator	Sign Language Interpreter Certification OR SLPI Advanced Plus	

cation alternatively certified teacher in HUMAN SERVICES

and reasonably continuous work experience in the occupation for

k hours) of satisfactory

ested; OR

in AND complete two (2) years (4,000 clock hours) of satisfactory and 1.

specialization may count toward a half year of the work experience

INDUSTRY CREDENTIALING ORGANIZATION/S

American Red Cross, American Heart Association, American Safety & Health Institute, Emergency Care & Safety Institute, National Safety Council WV Board of Barbers & Cosmetologists WV Board of Barbers & Cosmetologists American Red Cross, American Heart Association, American Safety & Health Institute, Emergency Care & Safety Institute, National Safety WV Board of Barbers and Cosmetologists WV Board of Barbers and Cosmetologists

WV Board of Barbers and Cosmetologists

WV Registration of Interpreters (WVRI)

OR

National institute for the Deaf

Information Technology

WAGE-EARNING experience required for the career and technical education alternatively certified teacher in Information Technology

Wage-Earning Experience – Complete four years (8,000 clock hours) of satisfactory and reasonably continuous work experience in the occupation for which licensure is requested; OR

Bachelor's Degree. – Hold a bachelor's degree AND complete two years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested; OR

Associate Degree. – Hold an Associate Degree in an area related to the specialization AND complete two (2) years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested.

WVBE ENDORSEMENTS	REQUIRED INDUSTRY CREDENTIALS	INDUSTRY CREDENTIALING ORGANIZATION/S	
*7212 Computer Technology - System	CompTIA A+ CompTIA Network+	Computing Technology Industry Association (CompTIA)	
7970 Computer Technology – Application Software	IC3 Digital Literacy Certification Level 2	Certiport	
7954 Networking	CISCO Certified Network Associate (CCNA)	CISCO	
*7968 Computer Science	Project Lead the Way Certificate	Project Lead the Way Core Training	
*1 Year to Earn Industry Credential			

LAW AND PUBLIC SAFETY, CORRECTIONS AND SECURITY

WAGE-EARNING experience required for the career and technical education alternatively certified teacher in Law and Public Safety, Corrections and		
Security		
Wage-Earning Experience –	Complete four years (8,000 clock hours) of satisfactory and	reasonably continuous work experience in the occupation for
which licensure is requeste	d; OR	
Bachelor's Degree. – Hold a bachelor's degree AND complete two years (4,000 clock hours) of satisfactory and		
reasonably continuous wor	k experience in the area for which licensure is requested; O	R
Associate Degree. – Hold ar	n Associate Degree in an area related to the specialization A	ND complete two (2) years (4,000 clock hours) of satisfactory and
reasonably continuous wor	k experience in the area for which licensure is requested.	
Completion of a full program	m of study from an approved education program in the spe	cialization may count toward a half year of the work experience
requirements.		
WVBE ENDORSEMENTS	REQUIRED INDUSTRY CREDENTIALS	INDUSTRY CREDENTIALING ORGANIZATION/S
#5269 - Criminal Justice Note Must submit the following to the WVDE Program Area Coordinator to become exempt from the required NOCTI- WV State Police Academy Training Certificate of completion AND a notarized V10 indicating 5 or more years of Law Enforcement experienceNOCTILicense - Hold a current West Virginia EMT or Paramedic License and a current Cardiopulmonary Resuscitation, hereinafter CPR, Instructor Certification, and documentation of completion of the field-based experience in fire instruction and EMT instructor training; AND Experience - Complete four years (8,000 clock hours) of satisfactory recent work experience with a combination of in fire service and EMT field experience EMS instructors must be affiliated with WVOEMS-endorsed educational institute; AND		
Test – Test scores reflecting a minimum of 85% on the National Registry EMT certification or re-certification examination and on the West Virginia State Fire Commission approved exam for the Fire Fighter 1 and Fire Fighter 2 or the National Fire Protection Association, hereinafter NFPA 1001 National Certification Exam.		
7040 Emergency Services	WVOEMS endorsed BLS Lead or WVOEMS ALS Lead instructor or Paramedic Certification Instructor Certification; First Aid Certification; Field Based	WV State Fire Commission WV Department of Health & Human Services, Bureau of Public Health, Office of Emergency Medical Services
, o to Emergency Services	Experience in EMT Training; Field Based Experience in fire	American Red Cross, American Heart Association, American

	service training; Firefighter 1 and Firefighter 2; Hazardous Materials Operations Level Certification	Safety & Health Institute, Emergency Care & Safety Institute, and National Safety Council
7060 Industrial Fire Management	Certified in First Aid; CPR-Instructor Certification; Field Based Experience in fire service training; Fire Fighter 1 and Firefighter 2; and Hazardous Materials Operations Level Certifications.	WV State Fire Commission American Red Cross, American Heart Association, American Safety & Health Institute, Emergency Care & Safety Institute, National Safety Council
*1 Year to Earn Industry C	redential	

MANUFACTURING

WAGE-EARNING experience required for the career and technical education alternatively certified teacher in Manufacturing

Wage-Earning Experience – Complete four years (8,000 clock hours) of satisfactory and reasonably continuous work experience in the occupation for which licensure is requested; OR

Bachelor's Degree. – Hold a bachelor's degree AND complete two years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested; OR

Associate Degree. – Hold an Associate Degree in an area related to the specialization AND complete two (2) years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested.

WVBE ENDORSEMENTS	REQUIRED INDUSTRY CREDENTIALS	INDUSTRY CREDENTIALING ORGANIZATION/S
*7070 Industrial Equipment Maintenance	#5174 – Industrial Maintenance Mechanics	NOCTI
7051 Machine Tool Technology	Machining Level 1	National Institute for Metal Working Skills
*7092 Millwork and Cabinet	#5905 Cabinetmaking	ΝΟΟΤΙ
7052 Welding	SMAW Plate and GMAW Plate in the 2G, 3G and 4G positions (SMAW and GMAW Pipe in the 6G position exceeds the minimum plate requirements)	American Welding Society (AWS) accredited testing facility or WVDE approved welding certification test site
7221 Robotics	NA	NA
*7223 FANUC Operator	FCR-01 FANUC Certified Robot - Operator 1	NOCTI
7725 Manufacturing Industry	Hold a Career and Technical Education Certificate or a Professional Teaching Certificate	Successful completion of professional development approved by the WVDE
7951 Aviation Maintenance	Airframe and Power Plant	FAA
*1 Year to Earn Industry Credential		

MARKETING

WAGE-EARNING experience required for the career and technical education alternatively certified teacher in Marketing					
Wage-Earning Experience – Complete four years (8,000 clock hours) of satisfactory and reasonably continuous work experience in the occupation for which licensure is requested; OR					
Bachelor's Degree. – Hold	Bachelor's Degree. – Hold a bachelor's degree AND complete two years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested; OR				
Associate Degree. – Hold an Associate Degree in an area related to the specialization AND complete two (2) years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested.					
Completion of a full program of study from an approved education program in the specialization may count toward a half year of the work experience requirements.					
WVBE ENDORSEMENTS REQUIRED INDUSTRY CREDENTIALS INDUSTRY CREDENTIALING ORGANIZATION/S					
*7727 Marketing Industry	*7727 Marketing Industry # 5921- Retail Merchandising NOCTI				
*1 Year to Earn Industry Creder	ntial				

SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS

WAGE-EARNING experience r	equired for the career and technical education and Mathe	on alternatively certified teacher in Science, Technology, Engineering matics			
Wage-Earning Experience – Complete four years (8,000 clock hours) of satisfactory and reasonably continuous work experience in the occupation for which licensure is requested; OR Bachelor's Degree. – Hold a bachelor's degree AND complete two years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested; OR Associate Degree. – Hold an Associate Degree in an area related to the specialization AND complete two (2) years (4,000 clock hours) of satisfactory and reasonably continuous work experience in the area for which licensure is requested. Completion of a full program of study from an approved education program in the specialization may count toward a half year of the work experience requirements. Relevant teaching experience may count as equal to work experience requirements.					
WVBE ENDORSEMENTS	WVBE ENDORSEMENTS REQUIRED INDUSTRY CREDENTIALS INDUSTRY CREDENTIALING ORGANIZATION/S				
*7441 AC Aerospace Engineering I	Southern Regional Education Board Certificate	Complete professional development and/or WVDE-approved coursework related to Career and Technical Education.			
*7465 AC Energy, Power, and Southern Regional Education Board Complete professional development and/or WVDE-approved coursework related to Career and Technical Education.					
*7550 Pre-Engineering	Project Lead the Way Certificate	Project Lead the Way Core Training: IED & POE required			
*1 Year to Earn Industry Credential					

TRANSPORTATION, DISTRIBUTION AND LOGISTICS

WAGE-EARNING experience r		natively certified teacher in Transportation, Distribution and		
Logistics				
Wage-Earning Experience – Con for which licensure is requested		and reasonably continuous work experience in the occupation		
•				
_		k hours) of satisfactory and reasonably continuous work		
experience in the area for which	•			
-		n AND complete two (2) years (4,000 clock hours) of		
	tinuous work experience in the area for which licens			
Completion of a full program of experience requirements.	study from an approved education program in the s	specialization may count toward a half year of the work		
WVBE ENDORSEMENTS	REQUIRED INDUSTRY CREDENTIALS	INDUSTRY CREDENTIALING ORGANIZATION/S		
	A4 – Suspension & Steering			
7001 Automotive Technology	A5 – Brakes			
7001 Automotive Technology	A6 -Electrical/Electronic Systems	National Institute for Automotive Service Excellence (ASE)		
	A8 – Engine Performance			
	T2 – Diesel Engines			
	T4 – Brakes			
7007 Diesel Equipment	T5 –Suspension/Steering	National Institute for Automotive Service Excellence (ASE		
Technology	T6 –Electrical/Electronic Systems			
	T8 – Preventative Maintenance Inspection			
	B2 – Painting & Refinishing			
	B3 – Non-Structural Analysis & Damage Repair	National Institute for Automotive Service Excellence (ASE)		
7010 Collision Repair	B4 – Structural Analysis & Damage Repair	or I-Car Equivalent		
	B5 – Mechanical & Electrical Components			
*74E2 AC Clobal Logistics and		Complete professional development and/or WVDE-		
*7453 AC Global Logistics and	Southern Regional Education Board Certificate	approved coursework related to Career and Technical		
Supply Chain Management I		Education		
7006 Power Equipment	#5277 Small Engine Technology	ΝΟCΤΙ		
Technology	#5277 – Small Engine Technology			
*1 Year to Earn Industry Creden	tial			

	A B		С	
1 2	TABLE 4: CTE Permanent Advanced Credentials			
3	WVBE ADVANCED CREDENTIAL AND CODE AWARDED FOR CTE Programs of Study	CERTIFICATE REQUIREMENTS	PROFESSIONAL DEVELOPMENT/ COURSE WORK	
4	7225 Drone Ground and Flight Training	Hold a Career and Technical Education Certificate or a Professional Teaching Certificate.	Successful passage of the FAA Part 107 exam from the Federal Aviation Administration	
5	7969 Coding, App, and Game Design	Hold a Career and Technical Education Certificate or a Professional Teaching Certificate	Successful completion of professional development approved by the WVDE	
6 7	0560 Business Education	Hold a Career and Technical Education Certificate or a Professional Teaching Certificate	Successful completion of professional development approved by the WVDE	
	0561 Marketing Education	Hold a Career and Technical Education Certificate or a Professional Teaching Certificate in the following: 7230 Entrepreneurship 7721 Business Management & Administration Industry 7722 Finance Industry 0400 Business Principles 0419 Business Principles including Business Mathematics 0500 Secretarial Studies or Occupation Commerce 0519 Secretarial Studies including Business Mathematics 0600 Business Education 0605 Business Education including Business Math	Successful completion of professional development approved by the WVDE	
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	A	В	C
9 10 11 12 13 14 15 16 17 18	0064 Personal Finance Education Specialist	Hold a Career and Technical Education Certificate in the following: 7721 Business Management & Administration Industry 7722 Finance Industry 7315 Lodging, Travel and Tourism 0227 Parks and Recreation Management 7970 Computer Technology – Application Software 7727 Marketing Industry or Professional Teaching Certificate	Successful completion of professional development approved by the WVDE
19	7187 Career in Social Services	Hold a Career and Technical Education Certificate or a Professional Teaching Certificate in the following: 1600 General Home Economics 1601 Occupational Home Economics 1700 Vocational Home Economics 1705 Consumer/Homemaking 1706 Family and Consumer Science 7041 Practical Nursing 7042 Nursing Aide 7048 Health Assistant 7317 Early Childhood Education	Successful completion of professional development approved by the WVDE
20	7230 Entrepreneurship	Hold a Career and Technical Education Certificate or a Professional Teaching Certificate	Successful completion of professional development approved by the WVDE

	А	В	С
21	7310 Personal Services	Hold a Career and Technical Education Certificate or a Professional Teaching Certificate	Successful completion of professional development approved by the WVDE
22	7320 Event Planning and Design Production	Hold a Career and Technical Education Certificate or a Professional Teaching Certificate	Successful completion of professional development approved by the WVDE
23	7629 Career and Technical Education for Middle School	Hold a Career and Technical Education Certificate or a Professional Teaching Certificate	Successful completion of professional development approved by the WVDE
24	7635 Home Economics (Middle School)	Hold a Career and Technical Education Certificate or a Professional Teaching Certificate	Successful completion of professional development approved by the WVDE
25	7640 Wood Shop (Middle School)	Hold a Career and Technical Education Certificate or a Professional Teaching Certificate	Successful completion of professional development approved by the WVDE
26 27	7702 Coordinator of Career and Work Skills Training	Hold a Career and Technical Education Certificate or a Professional Teaching	Complete a minimum of Two years (4000 clock hours) of related wage- earning experience.
28 29 30	7707 Careers in Education	Hold a Career and Technical Education Certificate or a Professional Teaching Certificate.	Complete professional development and/or coursework related to Careers in Education training programs in CTE as specified by the WVDE.
31	7705 Gateway	Hold a Career and Technical Education Certificate or a Professional Teaching Certificate.	Project Lead the Way Core Training
32	7442 AC Aerospace Engineering II	Hold a Career and Technical Education Certificate or a Professional Teaching Certificate.	Southern Regional Education Board Summer Training Institute
33 34	7443 AC Aerospace Engineering III	Hold a Career and Technical Education Certificate or a Professional Teaching Certificate.	Southern Regional Education Board Summer Training Institute
35	7444 AC Aerospace Engineering IV	Hold a Career and Technical Education Certificate or a Professional Teaching Certificate.	Southern Regional Education Board Summer Training Institute
36	7466 AC Energy Dower and Engineered Systems II	Hold a Career and Technical Education	Southern Regional Education Board Summer Training

	А	В	С
37	7400 AC LITERBY FOWER and Lingineered Systems in	Certificate or a Professional Teaching	Institute
38	7467 AC Energy Power and Engineered Systems III	Hold a Career and Technical Education Certificate or a Professional Teaching Certificate.	Southern Regional Education Board Summer Training Institute
39	7468 AC Energy Power and Engineered Systems IV	Hold a Career and Technical Education Certificate or a Professional Teaching Certificate.	Southern Regional Education Board Summer Training Institute
40	7563 Digital Electronics (PLTW)	Hold a Career and Technical Education Certificate or a Professional Teaching Certificate.	Project Lead the Way Core Training
41	7564 Engineering Design and Development (PLTW)	Hold a Career and Technical Education Certificate or a Professional Teaching Certificate.	Project Lead the Way Core Training
42	7562 Computer Integrated Manufacturing (PLTW)	Hold a Career and Technical Education Certificate or a Professional Teaching Certificate.	Project Lead the Way Core Training
43	7561 Civil Engineering and Architecture (PLTW)	Hold a Career and Technical Education Certificate or a Professional Teaching Certificate.	
44	7560 Aerospace Engineering (PLTW)	Hold a Career and Technical Education Certificate or a Professional Teaching Certificate.	Project Lead the Way Core Training
45	7565 Environmental Sustainability (PLTW)	Hold a Career and Technical Education Certificate or a Professional Teaching Certificate.	Project Lead the Way Core Training
46 47 48	7590 STEAM	Hold a Career and Technical Education Certificate or a Professional Teaching Certificate.	Complete professional development and/or coursework related to Careers in Education training programs in CTE as specified by the WVDE.

WVBE ADULT PART TIME PERMIT	PART TIME ADULT PROGRAM	CERTIFICATE REQUIREMENTS	INDUSTRY CREDENTIALING ORGANIZATION/S
7041 Practical Nursing	Practical Nursing Part-Time Instructor	WAGE-EARNING Experience – Complete 3 years (6000 clock hours) employment as a registered professional nurse 3 years immediately preceding employment as a faculty member; have or be enrolled in a baccalaureatedegree program; have at least 3 years of experience as a registered professional nurse which should include 2 years of patient side nursing care experience in an acute, intermediate care clinical facility; 1 year experience in one or more of the following areas: teaching, supervision or administration; and present evidence of continuing education. or long term	West Virginia Board of Examiners for Registered Nurses
7056 Sterile Processing	HE9315 Sterile Processing Technician	Complete two years (4,000 clock hours) of wage-earning experience in an inpatient or outpatient surgery setting with experience in all aspects of sterile processing.	Sterile processing certification Certified Registered Central Service Technician (CRCST)

TABLE 5: Adult Permit (Part Time) Endorsed for Areas of Career and Technical Education:

7042 Nursing Aide		WAGE-EARNING experience two years with a related bachelor's degree or two years with a related associate degree. The identified wage- earning experience must include 1 year, (2,000 clock hours) of long-term care experience within the identified wage-earning experience. AND Valid West Virginia License as Registered Nurse (RN)	West Virginia Board of Examiners for Registered Professional Nurses
7603 Phlebotomist	HE 0773 Phlebotomy Technician	Complete two years (4,000 clock hours) of wage- earning experience as a certified phlebotomy technician, as registered supportive personnel who works under the direct supervision of a medical lab assistant or director. AND Valid Certified Phlebotomy certification	American Society of Phlebotomy (ASPT) National Health Career Association or American Medical Technologist Association (AMTA)
7611 EKG Technician	HE 0810 Electrocardiograph Technician	Complete two years (4,000 clock hours) of wage- earning experience as a certified as a Electrocardiograph Technician, as registered supportive personnel who works who work in a clinic, hospital, emergency services or other health care facility.	Hold a valid certificate or license from the appropriate state and/or national organization or agency, when applicable
7960 Commercial Driver's License	TR 2170 Truck Driver Training	WAGE-EARNING experience four years with a high school diploma or equivalent, two years with a bachelor's or two years with an associate degree AND Commercial Driver's	West Virginia Department of Transportation, Division of Motor

7108 Heavy Equipment Operator	AR9107 Heavy Equipment Operator	WAGE-EARNING experience four years with a high school diploma or equivalent, two years with a bachelor's or an associate degree AND hold the OSHA 500 Authorization	WVU Extensior Service
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WVBE ADULT PART TIME PERMIT	PART TIME ADULT PROGRAM	CERTIFICATE REQUIREMENTS	INDUSTRY CREDENTIALING ORGANIZATION/S
7047 Emergency Medical Services	EMS (Public Service Training)	License. – Hold a current WV EMT, WV Paramedic Certification, or National Registry EMT or Paramedic license; AND Complete four years of recent volunteer or paid work experience, which may include emergency room or emergency medical care, beyond the training period in the occupation to be taught; AND score a minimum of 85% on WVDE approved examination; AND Hold current CPR instructor certification; And Complete an approved instructor course; AND Successfully complete the EMT field- based experience.	WV Department of Health and Human Resources, Bureau of Public Health, Office of Emergency Medical Services or American Red Cross or American Heart Association or American Safety & Health Institute or Emergency Care & Safety Institute or National Safety Council
7087 Fire Service Training	Fire Service Training (Public Service Training)	Complete four years of volunteer or paid work experience in the field of fire service; AND Complete an approved instructor training program and successfully complete the field-based experience in fire instructor training and provide verification from the RESA Public Service Coordinator of completion of required training in firefighting, hazardous materials, CPR and First Aid; AND Score a minimum of 85% on a WVDE approved examination.	merican Red Cross or American Heart Association or American Safety & Health Institute or Emergency Care & Safety Institute or National Safety Council WV Fire Commission

EMS and Fire Service Endorsements: