

CENTRAL OKLAHOMA WORKFORCE INNOVATION BOARD

A proud partner of the americanjobcenter network

"STEM Occupations" in Central Oklahoma

Approved and Published: February 2019

IMPORTANT! This document contains important information about your rights, responsibilities and/or benefits. It is critical that you understand the information in this document, and we will provide the information in your preferred language at no cost to you. Call Kim Chapman (405) 275-7800 for assistance in the translation and understanding of the information in this document.

jIMPORTANTE! Este document contiene información sobre sus derechos, responsabilidades y/o beneficios. Es importante que usted entienda la información en este documento. Nosotros le podemos ofrecer la información en el idioma de su preferencia sin costo para usted. Llame al Trini Rodriguez (405) 275-7800 para pedir asistencia en traducir y entender la información en este documento.

Telephone Relay Service is available by dialing 711 or (800) 722-0353

PURPOSE: To provide a list of STEM occupations in the region.

The Central Oklahoma Workforce Innovation Board (COWIB) is the policy and guidance board for the Workforce Oklahoma system in Central Oklahoma. We are business leaders with a goal to establish a highly skilled, productive workforce in our 9-county area.

The Central Oklahoma Workforce Innovation Board (COWIB) complies with WIOA's Equal Opportunity and Nondiscrimination provisions which prohibit discrimination on the basis of race, color, religion, sex (including pregnancy, childbirth, and related medical conditions, transgender status, and gender identity), national origin (including limited English proficiency), age, disability, political affiliation or belief, or, the basis of citizenship status or participation in a WIOA Title-1 financially assisted program or activity.



"STEM Occupations" in Central Oklahoma

Approved and Published: February 2019

Table of Contents

Purpose	3
Browse STEM Occupations	3
Equal Opportunity and Nondiscrimination Statement	11
Addenda / Revisions	11

Purpose

One of the measures of contract performance for the COWIB's WIOA Service Provider is:

"Clients Enrolled in STEM Related Training"

This measure is defined as the number of WIOA Title I participants who enter training that is designed to support entry into a STEM Occupation, where "STEM" refers to Science, Technology, Engineering, or Mathematics.

COWIB has developed our own definition of a STEM Occupation. There are two parts:

- 1. An occupation that is classified as "STEM" in the O*Net Online database: https://www.onetonline.org/find/stem
- 2. An occupation that is otherwise recognized by COWIB as a "STEM" occupation.

A complete list of STEM Occupations appear on the following pages.

Browse STEM Occupations

CODE	OCCUPATION	Identified as STEM
11-3021.00	Computer and Information Systems Managers	O*NET Online
11-9041.00	Architectural and Engineering Managers	O*NET Online
11-9041.01	Biofuels/Biodiesel Technology and Product Development Man	O*NET Online
11-9111.00	Medical and Health Services Managers	O*NET Online
11-9121.00	Natural Sciences Managers	O*NET Online
11-9121.01	Clinical Research Coordinators	O*NET Online
11-9121.02	Water Resource Specialists	O*NET Online
15-1111.00	Computer and Information Research Scientists	O*NET Online
15-1121.00	Computer Systems Analysts	O*NET Online
15-1121.01	Informatics Nurse Specialists	O*NET Online
15-1122.00	Information Security Analysts	O*NET Online
15-1131.00	Computer Programmers	O*NET Online
15-1132.00	Software Developers, Applications	O*NET Online
15-1133.00	Software Developers, Systems Software	O*NET Online
15-1134.00	Web Developers	O*NET Online
15-1141.00	Database Administrators	O*NET Online
15-1142.00	Network and Computer Systems Administrators	O*NET Online
15-1143.00	Computer Network Architects	O*NET Online
15-1143.01	Telecommunications Engineering Specialists	O*NET Online
15-1151.00	Computer User Support Specialists	O*NET Online
15-1152.00	Computer Network Support Specialists	O*NET Online
15-1199.00	Computer Occupations, All Other	O*NET Online
15-1199.01	Software Quality Assurance Engineers and Testers	O*NET Online
15-1199.02	Computer Systems Engineers/Architects	O*NET Online

45 4400 00		
15-1199.03	Web Administrators	O*NET Online
15-1199.04	Geospatial Information Scientists and Technologists	O*NET Online
15-1199.05	Geographic Information Systems Technicians	O*NET Online
15-1199.06	Database Architects	O*NET Online
15-1199.07	Data Warehousing Specialists	O*NET Online
15-1199.08	Business Intelligence Analysts	O*NET Online
15-1199.09	Information Technology Project Managers	O*NET Online
15-1199.10	Search Marketing Strategists	O*NET Online
15-1199.11	Video Game Designers	O*NET Online
15-1199.12	Document Management Specialists	O*NET Online
15-2011.00	Actuaries	O*NET Online
15-2021.00	Mathematicians	O*NET Online
15-2031.00	Operations Research Analysts	O*NET Online
15-2041.00	Statisticians	O*NET Online
15-2041.01	Biostatisticians	O*NET Online
15-2041.02	Clinical Data Managers	O*NET Online
15-2091.00	Mathematical Technicians	O*NET Online
15-2099.00	Mathematical Science Occupations, All Other	O*NET Online
17-1011.00	Architects, Except Landscape and Naval	O*NET Online
17-1012.00	Landscape Architects	O*NET Online
17-1021.00	Cartographers and Photogrammetrists	O*NET Online
17-1022.00	Surveyors	O*NET Online
17-1022.01	Geodetic Surveyors	O*NET Online
17-2011.00	Aerospace Engineers	O*NET Online
17-2021.00	Agricultural Engineers	O*NET Online
17-2031.00	Biomedical Engineers	O*NET Online
17-2041.00	Chemical Engineers	O*NET Online
17-2051.00	Civil Engineers	O*NET Online
17-2051.01	Transportation Engineers	O*NET Online
17-2061.00	Computer Hardware Engineers	O*NET Online
17-2071.00	Electrical Engineers	O*NET Online
17-2072.00	Electronics Engineers, Except Computer	O*NET Online
17-2072.01	Radio Frequency Identification Device Specialists	O*NET Online
17-2081.00	Environmental Engineers	O*NET Online
17-2081.01	Water/Wastewater Engineers	O*NET Online
17-2111.00	Health and Safety Engineers, Except Mining Safety Engineers and	O*NET Online
	Inspectors	
17-2111.01	Industrial Safety and Health Engineers	O*NET Online
17-2111.02	Fire-Prevention and Protection Engineers	O*NET Online
17-2111.03	Product Safety Engineers	O*NET Online
17-2112.00	Industrial Engineers	O*NET Online
17-2112.01	Human Factors Engineers and Ergonomists	O*NET Online
17-2121.00	Marine Engineers and Naval Architects	O*NET Online
17-2121.01	Marine Engineers	O*NET Online
17-2121.02	Marine Architects	O*NET Online

17-2131.00	Materials Engineers	O*NET Online
17-2131.00	Mechanical Engineers	O*NET Online
17-2141.00	Fuel Cell Engineers	O*NET Online
17-2141.01	Automotive Engineers	O*NET Online
17-2141.02	Mining and Geological Engineers, Including Mining Safety	O*NET Online
17-2151.00	Engineers	O NET ONIT
17-2161.00		O*NET Online
17-2101.00	Nuclear Engineers Petroleum Engineers	O*NET Online
17-2199.00	Engineers, All Other	O*NET Online
17-2199.01	Biochemical Engineers	O*NET Online
17-2199.02	Validation Engineers	O*NET Online
17-2199.03	Energy Engineers	O*NET Online
17-2199.04	Manufacturing Engineers	O*NET Online
17-2199.05	Mechatronics Engineers	O*NET Online
17-2199.06	Microsystems Engineers	O*NET Online
17-2199.07	Photonics Engineers	O*NET Online
17-2199.08	Robotics Engineers	O*NET Online
17-2199.09	Nanosystems Engineers	O*NET Online
17-2199.10	Wind Energy Engineers	O*NET Online
17-2199.11	Solar Energy Systems Engineers	O*NET Online
17-3011.00	Architectural and Civil Drafters	O*NET Online
17-3011.01	Architectural Drafters	O*NET Online
17-3011.02	Civil Drafters	O*NET Online
17-3012.00	Electrical and Electronics Drafters	O*NET Online
17-3012.01	Electronic Drafters	O*NET Online
17-3012.02	Electrical Drafters	O*NET Online
17-3013.00	Mechanical Drafters	O*NET Online
17-3019.00	Drafters, All Other	O*NET Online
17-3021.00	Aerospace Engineering and Operations Technicians	O*NET Online
17-3022.00	Civil Engineering Technicians	O*NET Online
17-3023.00	Electrical and Electronic Engineering Technicians	O*NET Online
17-3023.01	Electronics Engineering Technicians	O*NET Online
17-3023.03	Electrical Engineering Technicians	O*NET Online
17-3024.00	Electro-Mechanical Technicians	O*NET Online
17-3024.01	Robotics Technicians	O*NET Online
17-3025.00	Environmental Engineering Technicians	O*NET Online
17-3026.00	Industrial Engineering Technicians	O*NET Online
17-3027.00	Mechanical Engineering Technicians	O*NET Online
17-3027.01	Automotive Engineering Technicians	O*NET Online
17-3029.00	Engineering Technicians, Except Drafters, All Other	O*NET Online
17-3029.01	Non-Destructive Testing Specialists	O*NET Online
17-3029.02	Electrical Engineering Technologists	O*NET Online
17-3029.03	Electromechanical Engineering Technologists	O*NET Online
17-3029.04	Electronics Engineering Technologists	O*NET Online
17-3029.05	Industrial Engineering Technologists	O*NET Online
11 3023.03		O NET ONIME

17 2020 00	Manufacturing Fusing anima Taskas la siste	
17-3029.06	Manufacturing Engineering Technologists	O*NET Online
17-3029.07	Mechanical Engineering Technologists	O*NET Online
17-3029.08	Photonics Technicians	O*NET Online
17-3029.09	Manufacturing Production Technicians	O*NET Online
17-3029.10	Fuel Cell Technicians	O*NET Online
17-3029.11	Nanotechnology Engineering Technologists	O*NET Online
17-3029.12	Nanotechnology Engineering Technicians	O*NET Online
17-3031.00	Surveying and Mapping Technicians	O*NET Online
17-3031.01	Surveying Technicians	O*NET Online
17-3031.02	Mapping Technicians	O*NET Online
19-1011.00	Animal Scientists	O*NET Online
19-1012.00	Food Scientists and Technologists	O*NET Online
19-1013.00	Soil and Plant Scientists	O*NET Online
19-1021.00	Biochemists and Biophysicists	O*NET Online
19-1022.00	Microbiologists	O*NET Online
19-1023.00	Zoologists and Wildlife Biologists	O*NET Online
19-1029.00	Biological Scientists, All Other	O*NET Online
19-1029.01	Bioinformatics Scientists	O*NET Online
19-1029.02	Molecular and Cellular Biologists	O*NET Online
19-1029.03	Geneticists	O*NET Online
19-1031.00	Conservation Scientists	O*NET Online
19-1031.01	Soil and Water Conservationists	O*NET Online
19-1031.02	Range Managers	O*NET Online
19-1031.03	Park Naturalists	O*NET Online
19-1032.00	Foresters	O*NET Online
19-1041.00	Epidemiologists	O*NET Online
19-1042.00	Medical Scientists, Except Epidemiologists	O*NET Online
19-1099.00	Life Scientists, All Other	O*NET Online
19-2011.00	Astronomers	O*NET Online
19-2012.00	Physicists	O*NET Online
19-2021.00	Atmospheric and Space Scientists	O*NET Online
19-2031.00	Chemists	O*NET Online
19-2032.00	Materials Scientists	O*NET Online
19-2041.00	Environmental Scientists and Specialists, Including Health	O*NET Online
19-2041.01	Climate Change Analysts	O*NET Online
19-2041.02	Environmental Restoration Planners	O*NET Online
19-2041.03	Industrial Ecologists	O*NET Online
19-2042.00	Geoscientists, Except Hydrologists and Geographers	O*NET Online
19-2043.00	Hydrologists	O*NET Online
19-2099.00	Physical Scientists, All Other	O*NET Online
19-2099.01	Remote Sensing Scientists and Technologists	O*NET Online
19-3011.00	Economists	O*NET Online
19-3011.00	Environmental Economists	O*NET Online
19-3011.01	Survey Researchers	O*NET Online
19-3022.00	Clinical, Counseling, and School Psychologists	O*NET Online
19-2021.00	Chinical, Counseling, and School Psychologists	U NET UNIME

40.2024.04		
19-3031.01	School Psychologists	O*NET Online
19-3031.02	Clinical Psychologists	O*NET Online
19-3031.03	Counseling Psychologists	O*NET Online
19-3032.00	Industrial-Organizational Psychologists	O*NET Online
19-3039.00	Psychologists, All Other	O*NET Online
19-3039.01	Neuropsychologists and Clinical Neuropsychologists	O*NET Online
19-3041.00	Sociologists	O*NET Online
19-3051.00	Urban and Regional Planners	O*NET Online
19-3091.00	Anthropologists and Archeologists	O*NET Online
19-3091.01	Anthropologists	O*NET Online
19-3091.02	Archeologists	O*NET Online
19-3092.00	Geographers	O*NET Online
19-3094.00	Political Scientists	O*NET Online
19-3099.00	Social Scientists and Related Workers, All Other	O*NET Online
19-3099.01	Transportation Planners	O*NET Online
19-4011.00	Agricultural and Food Science Technicians	O*NET Online
19-4011.01	Agricultural Technicians	O*NET Online
19-4011.02	Food Science Technicians	O*NET Online
19-4021.00	Biological Technicians	O*NET Online
19-4031.00	Chemical Technicians	O*NET Online
19-4041.00	Geological and Petroleum Technicians	O*NET Online
19-4041.01	Geophysical Data Technicians	O*NET Online
19-4041.02	Geological Sample Test Technicians	O*NET Online
19-4051.00	Nuclear Technicians	O*NET Online
19-4051.01	Nuclear Equipment Operation Technicians	O*NET Online
19-4051.02	Nuclear Monitoring Technicians	O*NET Online
19-4061.00	Social Science Research Assistants	O*NET Online
19-4061.01	City and Regional Planning Aides	O*NET Online
19-4091.00	Environmental Science and Protection Technicians, Including Health	O*NET Online
19-4092.00	Forensic Science Technicians	O*NET Online
19-4093.00	Forest and Conservation Technicians	O*NET Online
19-4099.00	Life, Physical, and Social Science Technicians, All Other	O*NET Online
19-4099.01	Quality Control Analysts	O*NET Online
19-4099.02	Precision Agriculture Technicians	O*NET Online
19-4099.03	Remote Sensing Technicians	O*NET Online
25-1021.00	Computer Science Teachers, Postsecondary	O*NET Online
25-1022.00	Mathematical Science Teachers, Postsecondary	O*NET Online
25-1031.00	Architecture Teachers, Postsecondary	O*NET Online
25-1032.00	Engineering Teachers, Postsecondary	O*NET Online
25-1032.00	Agricultural Sciences Teachers, Postsecondary	O*NET Online
25-1041.00	Biological Science Teachers, Postsecondary	O*NET Online
25-1042.00	Forestry and Conservation Science Teachers, Postsecondary	O*NET Online
25-1043.00	Atmospheric, Earth, Marine, and Space Sciences Teachers,	O*NET Online
23-1031.00	Postsecondary	
	r ostsecondary	

25-1052.00	Chemistry Teachers, Postsecondary	O*NET Online
25-1053.00	Environmental Science Teachers, Postsecondary	O*NET Online
25-1054.00	Physics Teachers, Postsecondary	O*NET Online
25-1061.00	Anthropology and Archeology Teachers, Postsecondary	O*NET Online
25-1062.00	Area, Ethnic, and Cultural Studies Teachers, Postsecondary	O*NET Online
25-1063.00	Economics Teachers, Postsecondary	O*NET Online
25-1064.00	Geography Teachers, Postsecondary	O*NET Online
25-1065.00	Political Science Teachers, Postsecondary	O*NET Online
25-1066.00	Psychology Teachers, Postsecondary	O*NET Online
25-1067.00	Sociology Teachers, Postsecondary	O*NET Online
25-1069.00	Social Sciences Teachers, Postsecondary, All Other	O*NET Online
25-1071.00	Health Specialties Teachers, Postsecondary	O*NET Online
25-1072.00	Nursing Instructors and Teachers, Postsecondary	O*NET Online
29-1011.00	Chiropractors	O*NET Online
29-1021.00	Dentists, General	O*NET Online
29-1022.00	Oral and Maxillofacial Surgeons	O*NET Online
29-1023.00	Orthodontists	O*NET Online
29-1024.00	Prosthodontists	O*NET Online
29-1029.00	Dentists, All Other Specialists	O*NET Online
29-1031.00	Dietitians and Nutritionists	O*NET Online
29-1041.00	Optometrists	O*NET Online
29-1051.00	Pharmacists	O*NET Online
29-1061.00	Anesthesiologists	O*NET Online
29-1062.00	Family and General Practitioners	O*NET Online
29-1063.00	Internists, General	O*NET Online
29-1064.00	Obstetricians and Gynecologists	O*NET Online
29-1065.00	Pediatricians, General	O*NET Online
29-1066.00	Psychiatrists	O*NET Online
29-1067.00	Surgeons	O*NET Online
29-1069.00	Physicians and Surgeons, All Other	O*NET Online
29-1069.01	Allergists and Immunologists	O*NET Online
29-1069.02	Dermatologists	O*NET Online
29-1069.03	Hospitalists	O*NET Online
29-1069.04	Neurologists	O*NET Online
29-1069.05	Nuclear Medicine Physicians	O*NET Online
29-1069.06	Ophthalmologists	O*NET Online
29-1069.07	Pathologists	O*NET Online
29-1069.08	Physical Medicine and Rehabilitation Physicians	O*NET Online
29-1069.09	Preventive Medicine Physicians	O*NET Online
29-1069.10	Radiologists	O*NET Online
29-1069.11	Sports Medicine Physicians	O*NET Online
29-1069.12	Urologists	O*NET Online
29-1071.00	Physician Assistants	O*NET Online
29-1071.01	Anesthesiologist Assistants	O*NET Online
29-1081.00	Podiatrists	O*NET Online

bational Therapists Vision Therapists, Orientation and Mobility Specialists, and a Rehabilitation Therapists cal Therapists tion Therapists ational Therapists ational Therapists therapists c Therapists c	O*NET Online
a Rehabilitation Therapists cal Therapists tion Therapists ational Therapists ational Therapists therapists c Therapists c Therapists c Therapists ch-Language Pathologists ise Physiologists pists, All Other inarians tered Nurses Care Nurses c Care Nurses at Care Nurses al Care Nurses al Care Nurses c Anesthetists	O*NET OnlineO*NET Online
cal Therapists tion Therapists ational Therapists nerapists Therapists Therapists ch-Language Pathologists ise Physiologists pists, All Other inarians tered Nurses Care Nurses Care Nurses al Care Nurses al Care Nurses al Nurse Specialists c Anesthetists	O*NET OnlineO*NET Online
tion Therapists ational Therapists herapists Therapists ratory Therapists th-Language Pathologists th-Language Pathologists ise Physiologists pists, All Other inarians tered Nurses Care Nurses heed Practice Psychiatric Nurses al Care Nurses al Care Nurses al Nurse Specialists Anesthetists	O*NET OnlineO*NET Online
ational Therapists herapists Therapists ratory Therapists ch-Language Pathologists ise Physiologists pists, All Other inarians tered Nurses Care Nurses heed Practice Psychiatric Nurses al Care Nurses al Care Nurses al Nurse Specialists Anesthetists	O*NET OnlineO*NET Online
herapists Therapists ratory Therapists ratory Therapists ratory Therapists ratory Therapists ratory Therapists rese Physiologists pists, All Other inarians tered Nurses Care Nurses reced Practice Psychiatric Nurses al Care Nurses al Nurse Specialists Anesthetists	O*NET OnlineO*NET Online
E Therapists ratory Therapists ch-Language Pathologists ise Physiologists pists, All Other inarians tered Nurses Care Nurses need Practice Psychiatric Nurses al Care Nurses al Care Nurses al Nurse Specialists e Anesthetists	O*NET OnlineO*NET Online
ratory Therapists ch-Language Pathologists ise Physiologists pists, All Other inarians tered Nurses Care Nurses care Nurses need Practice Psychiatric Nurses al Care Nurses al Care Nurses al Nurse Specialists c Anesthetists	O*NET OnlineO*NET Online
ch-Language Pathologists ise Physiologists pists, All Other inarians tered Nurses Care Nurses need Practice Psychiatric Nurses al Care Nurses al Care Nurses al Nurse Specialists e Anesthetists	O*NET OnlineO*NET Online
ise Physiologists pists, All Other inarians tered Nurses Care Nurses need Practice Psychiatric Nurses al Care Nurses al Care Nurses al Nurse Specialists e Anesthetists	O*NET OnlineO*NET Online
pists, All Other inarians tered Nurses Care Nurses need Practice Psychiatric Nurses al Care Nurses al Nurse Specialists e Anesthetists	O*NET OnlineO*NET OnlineO*NET OnlineO*NET OnlineO*NET OnlineO*NET OnlineO*NET OnlineO*NET OnlineO*NET OnlineO*NET Online
inarians tered Nurses Care Nurses need Practice Psychiatric Nurses al Care Nurses al Nurse Specialists e Anesthetists	O*NET OnlineO*NET OnlineO*NET OnlineO*NET OnlineO*NET OnlineO*NET OnlineO*NET OnlineO*NET Online
tered Nurses Care Nurses Inced Practice Psychiatric Nurses al Care Nurses al Nurse Specialists e Anesthetists	O*NET OnlineO*NET OnlineO*NET OnlineO*NET OnlineO*NET OnlineO*NET Online
Care Nurses need Practice Psychiatric Nurses al Care Nurses al Nurse Specialists Anesthetists	O*NET Online O*NET Online O*NET Online O*NET Online
nced Practice Psychiatric Nurses al Care Nurses al Nurse Specialists e Anesthetists	O*NET Online O*NET Online O*NET Online
al Care Nurses al Nurse Specialists Anesthetists	O*NET Online O*NET Online
al Nurse Specialists Anesthetists	O*NET Online
Anesthetists	
	O*NET Online
Practitioners	O*NET Online
	O*NET Online
-	O*NET Online
-	O*NET Online
	O*NET Online
0	O*NET Online
5	O*NET Online
	O*NET Online
	O*NET Online
	O*NET Online
•	O*NET Online
	h Diagnosing and Treating Practitioners, All Other uncturists copathic Physicians optists cal and Clinical Laboratory Technologists cenetic Technologists echnologists technologists and Histologic Technicians cal and Clinical Laboratory Technicians cal and Clinical Laboratory Technicians cal and Clinical Laboratory Technicians al Hygienists ovascular Technologists and Technicians costic Medical Sonographers car Medicine Technologists logic Technologists etcic Resonance Imaging Technologists gency Medical Technicians and Paramedics tic Technicians nacy Technicians ratory Therapy Technicians cal Technologists inary Technologists and Technicians cal Technologists and Technicians cal Technologists

51-4121.06	Welders, Cutters, and Welder Fitters	COWIB Approval
51-4121.07	Solderers and Brazers Green Occupation	COWIB Approval
51-4122.00	Welding, Soldering, and Brazing Machine Setters, Operators, and	COWIB Approval
	Tenders	
51-9082.00	Medical Appliance Technicians	COWIB Approval

Equal Opportunity and Nondiscrimination Statement

All Recipients, and Sub-recipients / Sub-grantees must comply with WIOA's Equal Opportunity and Nondiscrimination provisions which prohibit discrimination on the basis of race, color, religion, sex (including pregnancy, childbirth, and related medical conditions, transgender status, and gender identity), national origin (including limited English proficiency), age, disability, political affiliation or belief, or, for beneficiaries, applicants, and participants only, on the basis of citizenship status or participation in a WIOA Title-I financially assisted program or activity.

Addenda / Revisions

The COWIB Chief Executive Officer is authorized to issue additional instructions, guidance, forms, etc., to further implement these procedures.

Questions about these procedures may be directed to the COWIB's Policy Analyst at (405) 622-2026.