InterLink 2017~2022 Occupations Identified as high demand by regional employers \*Indicates critical employer need \*\* License or Certification Needed Wages are 2016 regional hourly entry and experienced Employment by education is entry level reported by O\*NET



**CAD Drafters:** Prepare detailed drawings of architectural and structural features of buildings or drawings and topographical relief maps used in civil engineering projects, such as highways, bridges, and public works. Use knowledge of building materials, engineering practices, and mathematics to complete drawings. Associates - \$16.78/29.98

Construction Managers: Plan, direct, or coordinate, usually through subordinate supervisory personnel, activities concerned with the construction and maintenance of structures, facilities, and systems. Participate in the conceptual development of a construction project and oversee its organization, scheduling, budgeting, and implementation. Includes managers in specialized construction fields, such as carpentry or plumbing. Bachelors - \$28.19.55.13

**\*\*Electricians:** Read blueprints, design, and install electrical wiring and equipment in all phases of construction. High School + 5 yrs. - \$15.27/24.40

General Maintenance & Repair Workers: Keep machines, mechanical equipment, and/or structure of an establishment in repair. High School \$12.12/20.97

**\*\*Heating/AC Technicians:** Climate control professionals that design operate and maintain heating and cooling systems. Post Secondary - \$14.27/24.71

\*\*Operating Engineers Heavy Equipment: Operate one or several types of power construction equipment, such as motor graders, bulldozers, scrapers, compressors, pumps, derricks, shovels, tractors, or front-end loaders to excavate, move, and grade earth, erect structures, or pour concrete or other hard surface pavement. May repair and maintain equipment in addition to other duties. High School - \$15.12/21.05

\*\*Plumbers/Pipefitters/Steamfitters: Assemble, install, altar and repair pipe systems that carry water, steam, air or other liquids or gases. High School+5 vrs ~ 513.61(25.38

\*\*Welders/Cutters/Solders/Brazers: Use hand-welding, flame-cutting, hand soldering, or brazing equipment to weld or join metal components or to fill holes, indentations, or seams of fabricated metal products. Post Secondary - \$12.51/22.68



General and Operations Managers: Plan, direct, or coordinate the operations of companies or organizations. Bachelors \$28.94/84.01

Customer Service Representatives: Interact with customers to provide information in response to inquiries about products and products and services and to handle and resolve complaints. High School - \$11.56/19.74



**\*\*Teachers, Elementary:** Teach basic academic, social, and other formative skills. Bachelors. – Annual: \$46,596/62,419

\*\*Teachers, Middle School: Teach students in one or more subjects in public or private schools at the middle, intermediate, or junior high level, which falls between elementary and senior High School as defined by applicable laws and regulations. Bachelors. – Annual: \$46,068/59,734

\*\*Teachers, Secondary (HIGH SCHOOL): Teach students in one or more subjects, such as English, mathematics, or social studies at the secondary level in public or private schools. May be designated according to subject matter specialty. Bachelors. – Annual: \$44,029/61,063



\*\*Accountants & Auditors: Examine, analyze, and interpret accounting records to advise and/or prepare financial and budgetary data for individuals or businesses. Bachelors - \$23.95/46.04

**Bookkeepers:** Compute, classify, and record numerical data to keep financial records complete. Perform duties to obtain primary financial data for use in maintaining accounting records. High School - \$13.99/23.07

**\*\*Financial Analysts:** Conduct quantitative analyses of information affecting investment programs of public or private institutions. Bachelors - \$26.28/51.62

**\*\*Financial Managers:** Plan, direct, or coordinate accounting, investing, banking, insurance, securities, and other financial activities of a branch, office, or department of an establishment. Bachelors - \$41.30/81.22



**\*\*Diagnostic Medical Sonographers:** Produce ultrasonic recordings of internal organs for use by physicians. Associates \$26.70/41.33

**\*\*Family and General Practitioners:** Physicians who diagnose, treat, and help prevent diseases and injuries that commonly occur in the general population. May refer patients to specialists when needed for further diagnosis or treatment. Doctorate \$46.18/114.52

\*\*Home Health Aides: Provide routine individualized healthcare to the elderly, convalescents, or persons with disabilities at the patient's home or in a care facility. High School - \$8.65/12.12

**\*\*Licensed Practical and Vocational Nurses:** Care for ill, injured, convalescent, and handicapped persons in hospitals, clinics, private homes, and similar institutions. Associates. - \$18.60/25.22

\*\*Medical and Clinical Health Technologists: Perform complex medical laboratory tests for diagnosis, treatment, and prevention of disease. May train or supervise staff. Bachelors. - 823.47/35.52

\*\*Medical Assistants: Perform administrative and certain clinical duties under the direction of a physician. Administrative duties may include scheduling appointments, maintaining medical records, billing, and coding information for insurance purposes. Clinical duties may include taking and recording vital signs and medical histories, preparing patients for examination, drawing blood, and administering medications as directed by physician. Bachelors - S32.02/52.70

\*\*Medical Records/Health Information Technicians: Compile, process, and maintain medical records of hospital and clinic patients. High School- \$13.12/25.50

\*\*Nurse Practitioners: Diagnose and treat acute, episodic, or chronic illness, independently or as part of a healthcare team. May focus on health promotion and disease prevention. May order, perform, or interpret diagnostic tests such as lab work and x rays. May prescribe medication. Must be registered nurses who have specialized graduate education. Master's \$39.00/56.33

\*\*Nursing Assistants (CNA): Provide basic patient care under direction of nursing staff. High School- \$10.02/13.51 **\*\*Pharmacy Technicians:** Prepare medications under the direction of a pharmacist. May measure, mix, count out, label, and record amounts and dosages of medications according to prescription orders. High School - \$12.86/17.74

**\*\*Radiologic Technologists:** Take x rays and CAT scans or administer nonradioactive materials into patient's blood stream for diagnostic purposes. Includes technologists who specialize in other scanning modalities. Associates - \$21.60/32.74

**\*\*Registered Nurses/BSN Nurses:** Administer care to ill or injured persons in hospitals, clinics, private homes, and similar institutions. Bachelors - \$26.49/39.25

\*\*Respiratory Therapist: Assess, treat, and care for patients with breathing disorders. Assume primary responsibility for all respiratory care modalities, including the supervision of respiratory therapy technicians. Initiate and conduct therapeutic procedures; maintain patient records; and select, assemble, check, and operate equipment. Associates - \$23.28/31.95

\*\*Veterinary Technicians/Technologists: Perform medical tests in a laboratory environment for use in the treatment and diagnosis of diseases in animals. Prepare vaccines and serums for prevention of diseases. Prepare tissue samples, take blood samples, and execute laboratory tests, such as urinalysis and blood counts. Clean and sterilize instruments and materials and maintain equipment and machines. May assist a veterinarian during surgery. Associates - \$13.20/17.26



**\*\*Chefs and Head Cooks:** Plan, price, direct and/or prepare foodstuffs in restaurants. Associates. - \$16.13/30.86

**\*\*Food Service Managers:** Plan, direct, or coordinate activities of an organization or department that serves food and beverages. High School - \$20.01/41.25



\*\*Computer & Information Systems Mgrs.: Plan, direct, or coordinate activities in such fields as electronic data processing, information systems, systems analysis, and computer programming. Bachelors - \$46.57(85.34)

\*\*Computer Hardware Engineers: Research, design, develop, or test computer or computer-related equipment for commercial, industrial, military, or scientific use. May supervise the manufacturing and installation of computer or computer-related equipment and components. Bachelors - \$35,45/60.22

\*\*Computer Network Architects: Design and implement computer and information networks, such as local area networks (LAN), wide area networks (WAN), intranets, extranets, and other data communications networks. Perform network modeling, analysis, and planning. May also design network and computer security measures. May research and recommend network and data communications hardware and software. Bachelors - \$25.25/30.21

\*\*Computer Network Support Specialists: Analyze, test, troubleshoot, and evaluate existing network systems, such as local area network (LAN), wide area network (WAN), and Internet systems or a segment of a network system. Perform network maintenance to ensure networks operate correctly with minimal interruption. Bachelors - \$25,25/30,21

\*\*Computer Programmers: Convert project specifications and statements of problems and procedures to detailed logical flow charts for coding into computer language. Develop and write computer programs to store, locate, and retrieve specific documents, data, and information. May program web sites. Bachelors - \$24.19/50.89 \*\*Computer Systems Analysts: Analyze science, engineering, business, and all other data processing problems for application to electronic data processing systems. Bachelors. - \$29.52/52.59

\*\*Information Security Analysts including Cyber Security: Emerging Occupation – Use information technology (IT) to advance their organization's goals. Security analysts ensure a firm's information stays safe from cyber-attacks. Bachelors. -\$27.92(47.51) Multimedia Artists Animation Techs.: Create special effects, animation, or other visual images using film, video, computers, or other electronic tools and media for use in products or creations, such as computer games, movies, music videos, and commercials. Bachelors - \$26.44/54.10

\*\*Network & Computer Systems Admin: Install, configure, and support an organization's local area network (LAN), wide area network (WAN), and Internet systems or a segment of a network system. Monitor network to ensure network availability to all system users and may perform necessary maintenance to support network availability. May monitor and test Web site performance to ensure Web sites operate correctly and without interruption. May assist in network modeling, analysis, planning, and coordination between network and data communications hardware and software. May supervise computer user support specialists and computer network support specialists. May administer network security measures. Bachelors -\$28.53/40.21

\*\*Software Developers, Applications: Develop, create, and modify general computer applications software or specialized utility programs. Analyze user needs and develop software solutions. Bachelors \$39.16/59.36

**\*\*Software Developers, Systems Software:** Apply principles and techniques of computer science, engineering, and mathematical analysis to research, design, develop, and test operating systems-level software, compilers, and network distribution software for medical, industrial, military, communications, aerospace, business, scientific, and general computing applications. Bachelors - \$35.38/57.32

Survey & Mapping Tech (GPS Tech): Perform surveying and mapping duties, usually under the direction of an engineer, surveyor, cartographer, or photogrammetrist to obtain data used for construction, mapmaking, boundary location, mining, or other purposes. May calculate mapmaking information and create maps from source data, such as surveying notes, aerial photography, satellite data, or other maps to show topographical features, political boundaries, and other features. May verify accuracy and completeness of maps. Post Secondary - \$14.00/25.31



**\*\*Fire Fighters including EMT:** Control and extinguish fires or respond to emergency situations where life, property, or the environment is at risk. Post Secondary - \$18.17/31.86

\*\*Lawyers: Represent clients in criminal and civil litigation and other legal proceedings, draw up legal documents, or manage or advise clients on legal transactions. May specialize in a single area or may practice broadly in many areas of law. Professional Degree - \$35.58/85.64

\*\*/Police & Sheriff's Patrol Officers: Maintain order, enforce laws and ordinances. Patrol, direct traffic, issue summons, investigate, apprehend, and arrest. High School - \$22.43/36.03



Aircraft Structure, Surfaces, Rigging, and Systems Assemblers: Assemble, fit, fasten, and install parts of airplanes, space vehicles, or missiles, such as tails, wings, fuselage, bulkheads, stabilizers, landing gear, rigging and control equipment, or heating and ventilating systems. High School - \$14.70/30.72

Computer Numeric Control (CNC) Operator: Use machine tools and technology to produce precision products for aerospace, automobile and, machine parts, and compressors. HIGH SCHOOL - \$17.9731.88

Machinists: Set up and operate a variety of machine tools to produce precision parts and instruments. Includes precision instrument makers who fabricate, modify, or repair mechanical instruments. May also fabricate and modify parts to make or repair machine tools or maintain industrial machines, applying knowledge of mechanics, mathematics, metal properties, layout, and machining procedures. High School – \$12.12/20.97

©InterLink 2017 ~ All rights reserved. <u>www.interlink-nt</u> The information contained herein is subject to change without notice.



\*\*Civil Engineers: Perform engineering duties in planning, designing, and overseeing construction and maintenance of building structures, and facilities, such as roads, railroads, airports, bridges, harbors, channels, dams, irrigation projects, pipelines, power plants, and water and sewage systems. Bachelors - \$30.18/52.08

**\*\*Electrical Engineers:** Research, design, develop, test, or supervise the manufacturing and installation of electrical equipment, components, or systems for commercial, industrial, military, or scientific use. Bachelors - \$31.68/54.66

\*\*Industrial Engineers: Design, develop, test, and evaluate integrated systems for managing industrial production processes, including human work factors, quality control, inventory control, logistics and material flow, cost analysis, and production coordination. Bachelors - \$29.63/5.2.4

\*\*Mechanical Engineers: Perform engineering duties in planning and designing tools, engines, machines, and other mechanically functioning equipment. Oversee installation, operation, maintenance, and repair of equipment such as centralized heat, gas, water, and steam systems. Bachelors - \$30.25/55.91



Automotive Body Repairer: Use special equipment and technology to restore damaged metal frames and body sections. High School - \$14.98/24.32

Automotive Service Technicians: Adjust, repair, and overhaul automotive vehicles using computer diagnostic equipment. High School - \$12.36/24.88

Diesel Engine Technicians: Repair and maintain trucks, buses and heavy equipment using computer diagnostic equipment. High School - \$15.97/24.34

**Logisticians:** Analyze and coordinate the logistical functions of a firm or organization. Responsible for the entire life cycle of a product, including acquisition, distribution, internal allocation, delivery, and final disposal of resources. Bachelors \$12.72/22.36

Truck Drivers, Heavy: Drives 3+ ton trucks; prepares paperwork; collects payments for goods delivered. Post Secondary - \$12.72/22.36

North Central Texas InterLink, Inc. www.interlink-ntx.org A Texas Model Program

## InterLink Emerging and Evolving Occupations Projected to Offer Future Employment

Emerging Occupations are new in the workforce with new titles, responsibilities and skills. Evolving Occupations are traditional occupations whose knowledge, skills and abilities have changed or evolved.

Education and wage information may vary by employer

Biochemists Emerging Occupation - Assists scientists in areas such as pharmaceuticals, medical technology, biotechnology, computational biology, proteomics, computer information science, biology and medical informatics. Apply bioinformatics tools to visualize, analyze, manipulate or interpret molecular data. May build and maintain databases for processing and analyzing genomic or other biological information. Bachelors - S18.42/79.22

Biomedical Technicians: Evolving Occupation - Apply knowledge of engineering, biology, and biomechanical principles to the design, development, and evaluation of biological and health systems and products, such as artificial organs, prostheses, instrumentation, medical information systems, and heath management and care delivery systems. Associates \$11.83/22.96

**\*\*Business Intelligence Analysts/Operations Research Analyst:** Emerging Occupation - Formulate and apply mathematical modeling and other optimizing methods to develop and interpret information that assists management with decision making, policy formulation, or other managerial functions. May collect and analyze data and develop decision support software, service, or products. Bachelors - \$35.84

\*\*Cloud Computing Architects: Emerging Occupation – Understand the basics of enterprise architecture, and how to configure IT assets around the needs of the business. Need an expert understanding of SOA. Must be an expert in: public, private, and hybrid cloud computing technology, including IaaS, PaaS, and SaaS. Bachelors. - \$15.00/20.00

\*\*Convergence Technology Specialists/Technicians: Emerging Occupation -Combines telephony, data networking, voice over IP and hand held devices, to solve real problems. Includes Home Technology Technicians who handle the multiple technologies needed in a home or small office environment and in large businesses who are merging legacy voice and data systems with voice over IP, wireless, etc. all in a secure environment. Associates > \$15.002.00

Drone Operators/ Remotely Piloted Vehicle Engineering Technician: Emerging Occupation - As the civilian use of drones is a relatively new phenomenon and industries are still emerging, there is little in the way of industry standardization in training at this point. Most drone pilots are trained by the military. Some civilian programs that offer training and certificates in drone piloting do exist, however. One such example is the drone pilot training certificate offered by the Unmanned Vehicle University of Phoenix, Ariz. The certificate program begins with a series of videos that students watch online as an introduction to the operational theory and construction of drones. Students then gain experience flying in a software simulator. For the final phase of the program, students travel to an airfield to work hands-on with actual drones. High School - \$24.00/26.00

**\*\*Environmental Engineering Technicians:** Emerging Occupation - Conduct research or perform investigation for the purpose of identifying, abating, or eliminating sources of pollutants or hazards that affect either the environment or the health of the population utilizing knowledge of various scientific disciplines. Bachelors - \$13.77/22.22

\*\*Forensics Science Technicians: Emerging Occupation – The science of conducting investigations related to computer crimes and abuse in a manner that is legally sound and reproducible. Using specialized hardware and software tools, computer forensics technicians gather evidence about all kinds of activity including fraud, embezzlement, child pornography, and intellectual property misappropriation. Associates. 514.26/21.17

\*\*Fuel Cell Technicians: Emerging Occupation – Conduct research and development from engineering drawings, assemble test products, and test those products under the direction of an engineer or scientist. Record and review all processes and testing results. Associates – \$25.68/37.22

Genetic Counselors - Emerging Occupation - Assess individual or family risk for a variety of inherited conditions, such as genetic disorders and birth defects.

Provide information to other healthcare providers or to individuals and families concerned with the risk of inherited conditions. Advise individuals and families to support informed decision making and coping methods for those at risk. May help conduct research related to genetic conditions or genetic counseling. Bachelor's \$30.57 median hourly

Materials/Smart Materials Analysts/Engineers: Emerging Occupation - Work with materials having a molecular structure that responds in a particular and controlled way to influences upon it ranging from magnetically-changed materials, to "memory" molecules that return to their original form, to materials that generate an electric charge when pressed, twisted, or warped. Associates - \$20.50/34.41

Nanosystems Engineers: Emerging Occupation - The Nanosystems engineer is a researcher and inventor on the cutting edge of science and engineering and is the initial investigator into the microscopic interactions between various materials. Most of the Nanosystems engineer's time is spent developing 3-D computer simulations based on the observed properties of materials, although hands-on work is also necessary to test theories in real world applications. Some of the most prominent advances have come in the development of bimolecular injection systems that allow medicines to be delivered to areas of the body on a cellular level. Other areas that are at the forefront of nanotech are cosmetics, computer parts, green energy, digital imaging and textiles. Bachelors. \$24.72 /70.76

Nanotechnology Technicians/Technologists/Engineers: Emerging Occupation – Develop, operate and service microscopy equipment capable of characterizing nanostructures. Must have extensive background in materials science and optics. Associates. 316.07/22.52

\*\*Patient Care Technicians (Certified): Emerging Occupation - Provide basic patient care under direction of nursing staff. High School - \$8.64/10.38

Remote Sensing Technicians: Emerging Occupation - Apply remote sensing technologies to assist scientists in areas such as natural resources, urban planning, or homeland security. May prepare flight plans or sensor configurations for flight trips. Bachelors - \$21.25

**Risk Management Specialists:** Evolving Occupation – A structured approach to managing uncertainty through risk assessment, developing strategies to manage it, and mitigation of risk using managerial resources. Bachelors. - \$28.53/44.34

Robotics Technicians/Electro Mechanical. Emerging Occupation - Install, program, and repair robots and related equipment, such as programmable controllers, robot controllers, end-of-arm tools, and conveyors. Robot manufacturers, assist in design and configuration. Associates. - \$16.07/22.52

Social Media Architect/Networking Specialists: Emerging Occupation - Drives the operations responsible for creating and executing social media programs to build the brand and increase business. Oversees all content creation, including written and video, execution of custom social media marketing plans and offers social tools for public and private clouds that redefine the role of social media for business. Bachelors. - \$23.44/38.28

\*\*Solar Photovoltaic (Electric) Technician/Installer: Emerging Occupation – The ideal candidate will have some construction experience, especially knowledge of basic electrical wiring with experience as a solar electric installation desirable but not required. Most likely to evolve from solar trained Electrician. Associates. -\$10.44/15.52

Virtual Reality Specialists: Emerging Occupation - Virtual Reality Designers, or Specialists, create the artificial, three-dimensional worlds that help researchers go about their imaginative work. There is increasing demand in STEM fields such as medicine, engineering, and architecture for workers who can apply virtual reality technology to problems and help solve them. The entertainment industry is also employing specialists to create virtual reality and 3D environments for games and movies. Bachelors. \$21.60/35.00.

**\*\*Wind Turbine Service Technicians:** Inspect, diagnose, adjust, or repair wind turbines. Perform maintenance on wind turbine equipment including resolving electrical, mechanical, and hydraulic malfunctions. Post Secondary \$20.65/28.35

The Career Clusters icons are being used with permission of the **Texas Education Agency ~www.tea.texas.gov/cte** 

TEXAS

North Central Texas InterLink, Inc. 2017~2022 Targeted Occupations



Identified by North Central Texas Employers as High Demand Career Opportunities