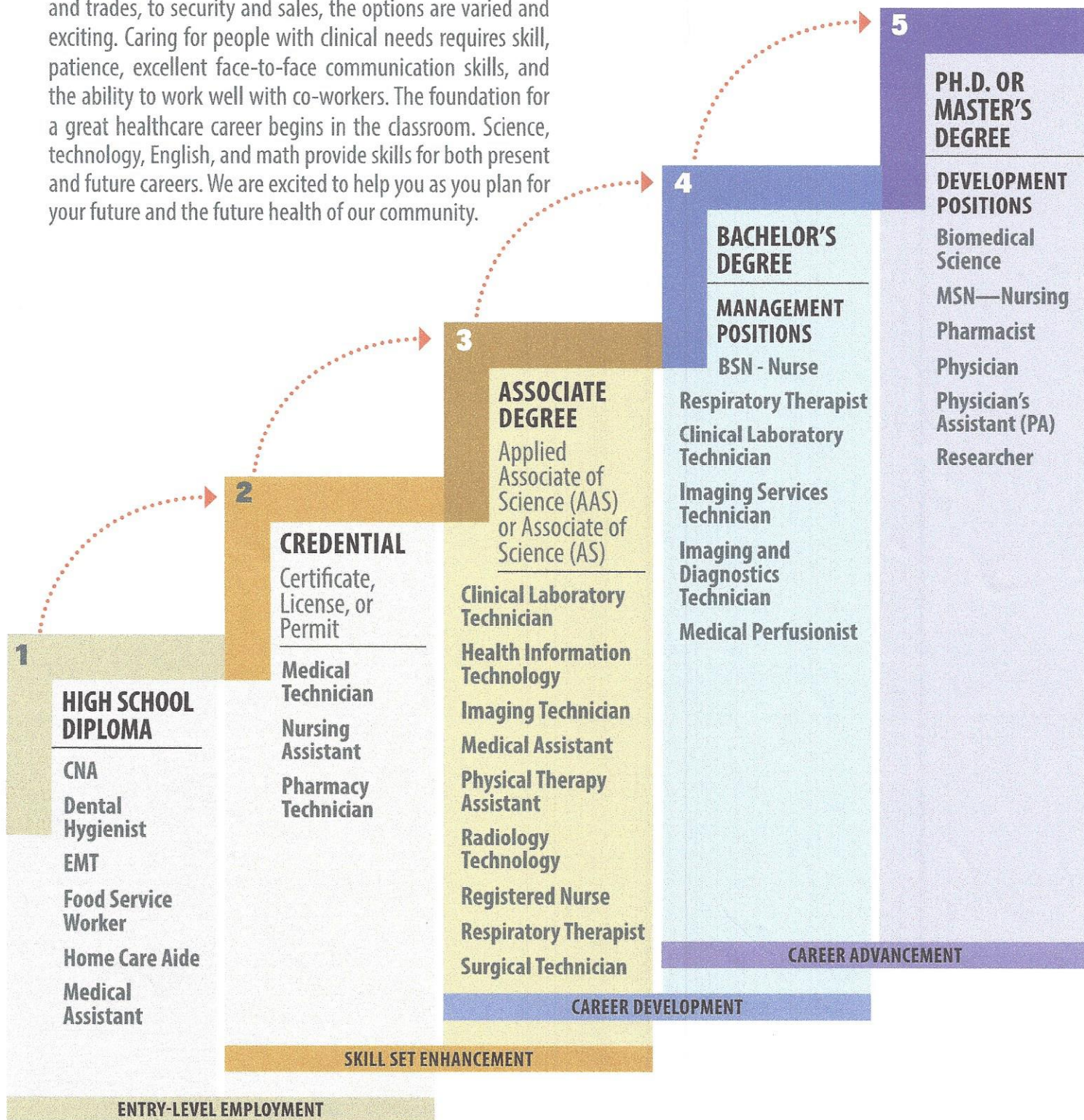# HEALTH CARE

▶ **STACKABLE CREDENTIALS:** Nationwide, one in ten people work in a healthcare related field. From clinical, business, and trades, to security and sales, the options are varied and exciting. Caring for people with clinical needs requires skill, patience, excellent face-to-face communication skills, and the ability to work well with co-workers. The foundation for a great healthcare career begins in the classroom. Science, technology, English, and math provide skills for both present and future careers. We are excited to help you as you plan for your future and the future health of our community.

5 PH.D. OR MASTER'S DEGREE

DEVELOPMENT POSITIONS

Biomedical Science

MSN—Nursing

Pharmacist

Physician

Physician's Assistant (PA)

Researcher

4 BACHELOR'S DEGREE

MANAGEMENT POSITIONS

BSN - Nurse

Respiratory Therapist

Clinical Laboratory Technician

Imaging Services Technician

Imaging and Diagnostics Technician

Medical Perfusionist

3 ASSOCIATE DEGREE

Applied Associate of Science (AAS) or Associate of Science (AS)

Clinical Laboratory Technician

Health Information Technology

Imaging Technician

Medical Assistant

Physical Therapy Assistant

Radiology Technology

Registered Nurse

Respiratory Therapist

Surgical Technician

2 CREDENTIAL

Certificate, License, or Permit

Medical Technician

Nursing Assistant

Pharmacy Technician

1 HIGH SCHOOL DIPLOMA

CNA

Dental Hygienist

EMT

Food Service Worker

Home Care Aide

Medical Assistant

CAREER ADVANCEMENT

CAREER DEVELOPMENT

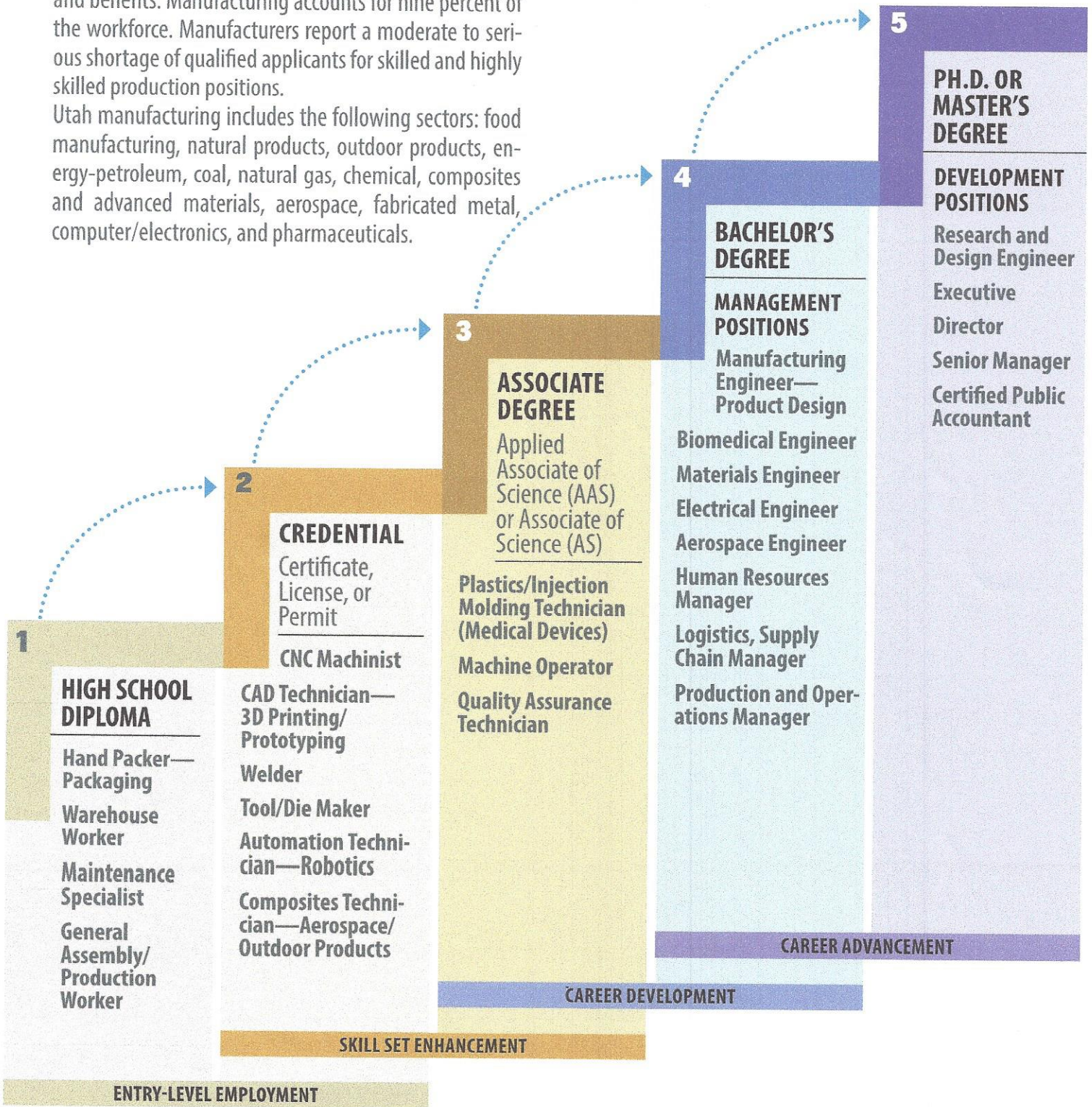**SKILL SET ENHANCEMENT**

ENTRY-LEVEL EMPLOYMENT

« HANDS-ON

ANALYTICAL »

MANUFACTURING

▶ **STACKABLE CREDENTIALS:** In 2015, the average manufacturing worker earned $79,553 annually, including pay and benefits. Manufacturing accounts for nine percent of the workforce. Manufacturers report a moderate to serious shortage of qualified applicants for skilled and highly skilled production positions.

Utah manufacturing includes the following sectors: food manufacturing, natural products, outdoor products, energy-petroleum, coal, natural gas, chemical, composites and advanced materials, aerospace, fabricated metal, computer/electronics, and pharmaceuticals.

1 HIGH SCHOOL DIPLOMA

Hand Packer—Packaging

Warehouse Worker

Maintenance Specialist

General Assembly/Production Worker

2 CREDENTIAL

Certificate, License, or Permit

CNC Machinist

CAD Technician—3D Printing/Prototyping

Welder

Tool/Die Maker

Automation Technician—Robotics

Composites Technician—Aerospace/Outdoor Products

3 ASSOCIATE DEGREE

Applied Associate of Science (AAS) or Associate of Science (AS)

Plastics/Injection Molding Technician (Medical Devices)

Machine Operator

Quality Assurance Technician

4 BACHELOR'S DEGREE

MANAGEMENT POSITIONS

Manufacturing Engineer—Product Design

Biomedical Engineer

Materials Engineer

Electrical Engineer

Aerospace Engineer

Human Resources Manager

Logistics, Supply Chain Manager

Production and Operations Manager

5 PH.D. OR MASTER'S DEGREE

DEVELOPMENT POSITIONS

Research and Design Engineer

Executive

Director

Senior Manager

Certified Public Accountant

ENTRY-LEVEL EMPLOYMENT

SKILL SET ENHANCEMENT

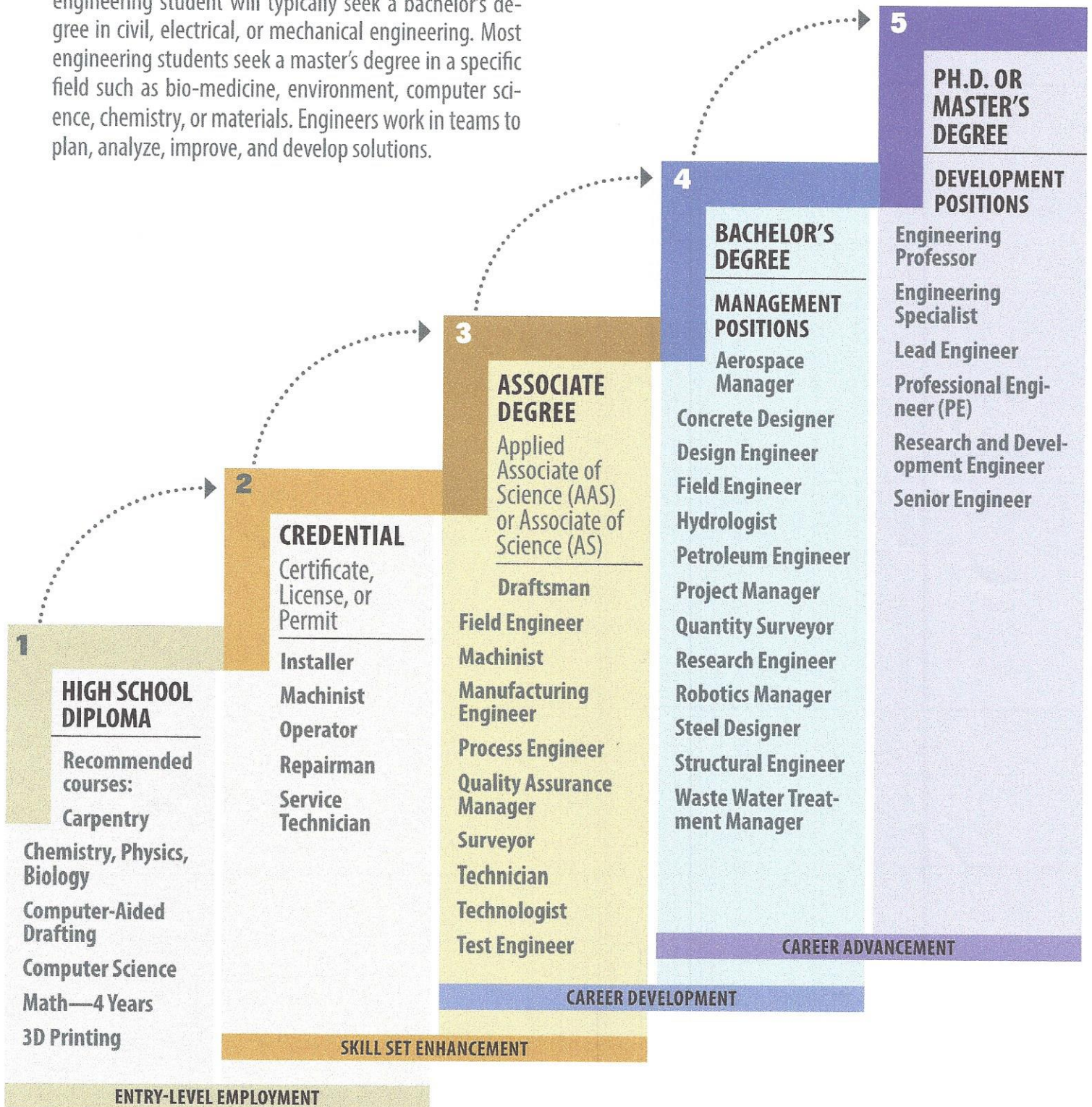**CAREER DEVELOPMENT**

CAREER ADVANCEMENT

◀◀ HANDS-ON

ANALYTICAL ▶▶

ENGINEERING

▶ **STACKABLE CREDENTIALS:** In a very basic sense, engineers use math and science to solve world problems. An engineering student will typically seek a bachelor's degree in civil, electrical, or mechanical engineering. Most engineering students seek a master's degree in a specific field such as bio-medicine, environment, computer science, chemistry, or materials. Engineers work in teams to plan, analyze, improve, and develop solutions.
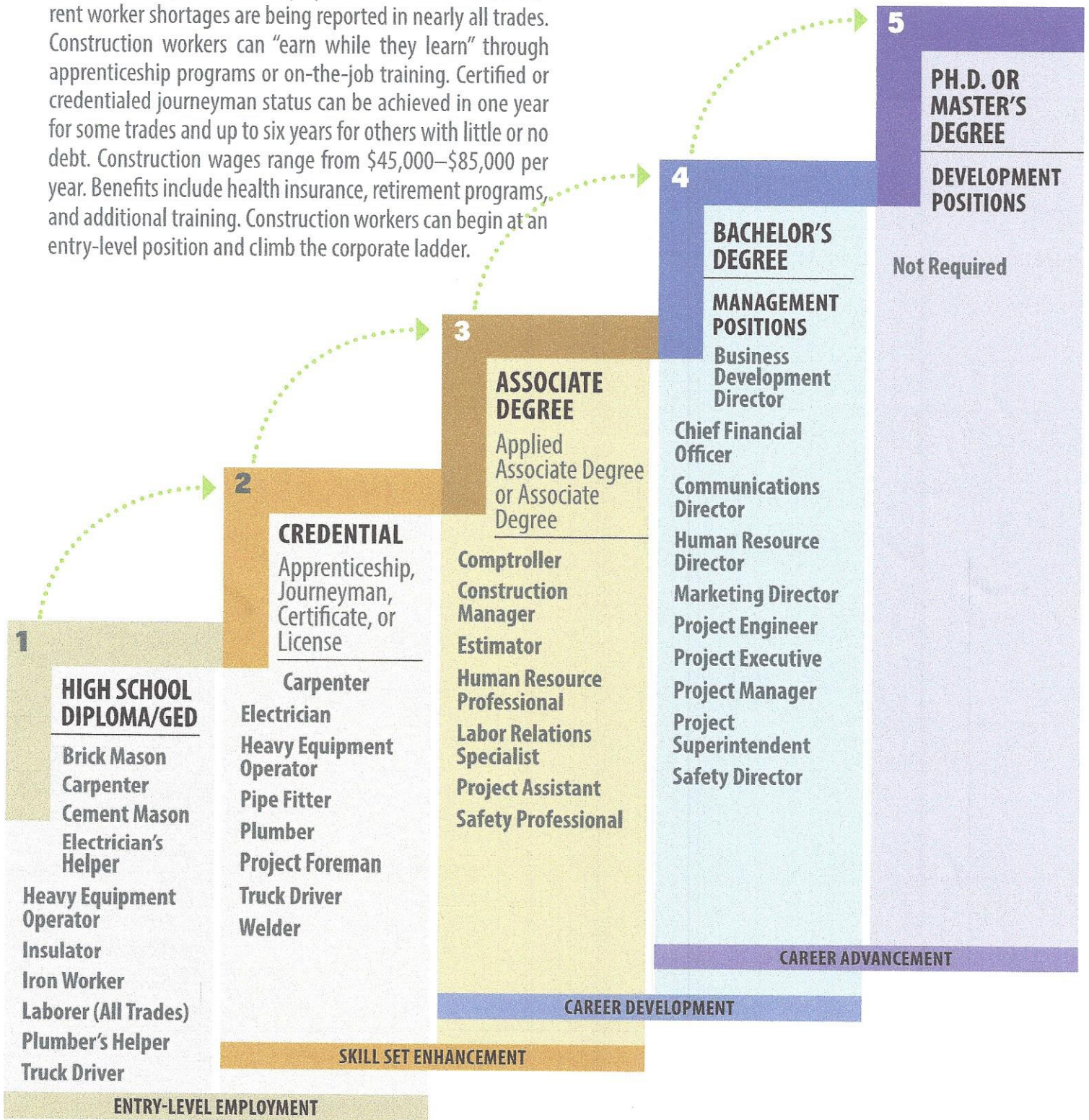
1 HIGH SCHOOL DIPLOMA

Recommended courses:

Carpentry

Chemistry, Physics, Biology

Computer-Aided Drafting

Computer Science

Math—4 Years

3D Printing

ENTRY-LEVEL EMPLOYMENT

2 CREDENTIAL

Certificate, License, or Permit

Installer

Machinist

Operator

Repairman

Service Technician

SKILL SET ENHANCEMENT

3 ASSOCIATE DEGREE

Applied Associate of Science (AAS) or Associate of Science (AS)

Draftsman

Field Engineer

Machinist

Manufacturing Engineer

Process Engineer

Quality Assurance Manager

Surveyor

Technician

Technologist

Test Engineer

CAREER DEVELOPMENT

4 BACHELOR'S DEGREE

MANAGEMENT POSITIONS

Aerospace Manager

Concrete Designer

Design Engineer

Field Engineer

Hydrologist

Petroleum Engineer

Project Manager

Quantity Surveyor

Research Engineer

Robotics Manager

Steel Designer

Structural Engineer

Waste Water Treatment Manager

CAREER ADVANCEMENT

5 PH.D. OR MASTER'S DEGREE

DEVELOPMENT POSITIONS

Engineering Professor

Engineering Specialist

Lead Engineer

Professional Engineer (PE)

Research and Development Engineer

Senior Engineer
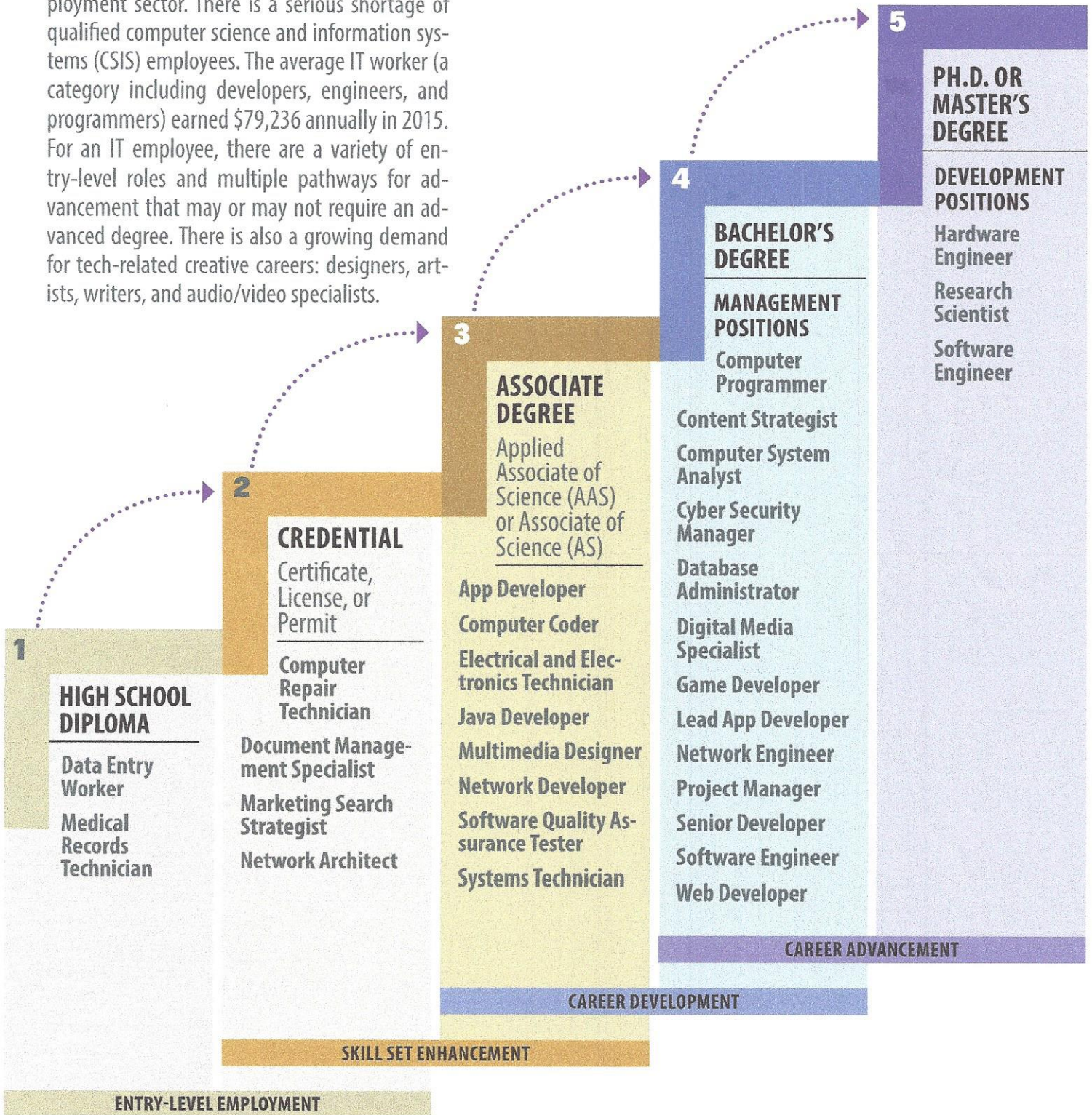
◀◀ HANDS-ON

ANALYTICAL ▶▶

CONSTRUCTION

▶ **STACKABLE CREDENTIALS:** Utah's construction industry will need about 95,000 new employees from 2016–2019. Current worker shortages are being reported in nearly all trades. Construction workers can "earn while they learn" through apprenticeship programs or on-the-job training. Certified or credentialed journeyman status can be achieved in one year for some trades and up to six years for others with little or no debt. Construction wages range from $45,000–$85,000 per year. Benefits include health insurance, retirement programs, and additional training. Construction workers can begin at an entry-level position and climb the corporate ladder.

1 HIGH SCHOOL DIPLOMA/GED

Brick Mason
Carpenter
Cement Mason
Electrician's Helper
Heavy Equipment Operator
Insulator
Iron Worker
Laborer (All Trades)
Plumber's Helper
Truck Driver

ENTRY-LEVEL EMPLOYMENT

2 CREDENTIAL

Apprenticeship, Journeyman, Certificate, or License

Carpenter
Electrician
Heavy Equipment Operator
Pipe Fitter
Plumber
Project Foreman
Truck Driver
Welder

SKILL SET ENHANCEMENT

3 ASSOCIATE DEGREE

Applied Associate Degree or Associate Degree

Comptroller
Construction Manager
Estimator
Human Resource Professional
Labor Relations Specialist
Project Assistant
Safety Professional

CAREER DEVELOPMENT

4 BACHELOR'S DEGREE

MANAGEMENT POSITIONS

Business Development Director
Chief Financial Officer
Communications Director
Human Resource Director
Marketing Director
Project Engineer
Project Executive
Project Manager
Project Superintendent
Safety Director

CAREER ADVANCEMENT

5 PH.D. OR MASTER'S DEGREE

DEVELOPMENT POSITIONS

Not Required

◀◀ HANDS-ON　　　　　**ANALYTICAL ▶▶**

INFORMATION TECHNOLOGY

▶ **STACKABLE CREDENTIALS:** Information technology (IT) positions are found in every employment sector. There is a serious shortage of qualified computer science and information systems (CSIS) employees. The average IT worker (a category including developers, engineers, and programmers) earned $79,236 annually in 2015. For an IT employee, there are a variety of entry-level roles and multiple pathways for advancement that may or may not require an advanced degree. There is also a growing demand for tech-related creative careers: designers, artists, writers, and audio/video specialists.

1 HIGH SCHOOL DIPLOMA

Data Entry Worker

Medical Records Technician

2 CREDENTIAL
Certificate, License, or Permit

Computer Repair Technician

Document Management Specialist

Marketing Search Strategist

Network Architect

3 ASSOCIATE DEGREE
Applied Associate of Science (AAS) or Associate of Science (AS)

App Developer

Computer Coder

Electrical and Electronics Technician

Java Developer

Multimedia Designer

Network Developer

Software Quality Assurance Tester

Systems Technician

4 BACHELOR'S DEGREE

MANAGEMENT POSITIONS

Computer Programmer

Content Strategist

Computer System Analyst

Cyber Security Manager

Database Administrator

Digital Media Specialist

Game Developer

Lead App Developer

Network Engineer

Project Manager

Senior Developer

Software Engineer

Web Developer

5 PH.D. OR MASTER'S DEGREE

DEVELOPMENT POSITIONS

Hardware Engineer

Research Scientist

Software Engineer

ENTRY-LEVEL EMPLOYMENT

SKILL SET ENHANCEMENT

CAREER DEVELOPMENT

CAREER ADVANCEMENT

《《 HANDS-ON

ANALYTICAL 》》