

Map Your Career

Understanding career pathway options – whether you are in a particular sector already or exploring entering the industry – can be very helpful for career planning. Career pathway diagrams help illustrate the occupations as well as industry-wide pathways available in a particular sector. This can be invaluable for both job seekers and workers as they consider how to progress in a career.

Learn about career pathways in five key industries in Seattle-King County: **Construction, Healthcare, Information Technology, Manufacturing, and Life Sciences**. For each industry learn about the current trends, sample wages and career pathways offered. Finally, take some time to “map your career” by using the template provided in this packet.

If you would like additional career services, feel free to access resources at your local Seattle-King County WorkSource sites. Go to: www.worksourceskc.org for locations and information on the wide range of employment resources available. For WorkSource locations throughout Washington State and additional career planning resources, visit www.go2worksource.com.



Career Paths in Construction



Wage Ranges *	
Starting	+ Experience/Education
Electrician	\$13.59 → \$36.38
Heating, AC	\$14.21 → \$35.12
Carpenter	\$15.46 → \$35.02
Drywall Installer	\$16.33 → \$36.12
First Line Supervisor	\$23.51 → \$52.95
Civil Engineer	\$25.61 → \$53.62
Urban Planner	\$26.64 → \$44.60
Construction Manager	\$34.08 → \$61.57

For apprenticeship programs in WA state, go to www.ini.wa.gov, click on “Trades and Licensing,” and then click on “Apprenticeship Programs in WA.”

A wide range of certificates and degrees are offered by the 11 community and technical colleges located throughout King County. To locate a college near you and learn more about the programs available, visit www.sbctc.ctc.edu and click on “Colleges.”

* Average hourly wages in the Seattle-Bellevue-Everett MSA, March 2007, www.workforceexplorer.com

Company Owner
Site/Corporate Manager
Senior Project Manager

Construction Manager

First-Line Supervisor

Apprenticeship
*Trained by Master Craftsperson
2-6 yrs.:*

- Journey person (example: carpenter, electrician, mason, plumber, painter, laborer)

Associates Degree
*Community/ Technical College
up to 2 yr. Certification or Degree:*

- Architectural Drafter
- Building Inspector
- Carpenter
- Plumber
- Real Estate Appraiser
- Cost Estimator

On-the-Job/ Pre-Apprenticeship Training

Short-Term, up to 1-month:

- Craft Helper
- Craft Laborer
- Flagger

Moderate-Term, 1-12 mos.:

- Drywall Installer
- Roofer
- Title Examiner

Long-Term, 12 mos. plus:

- Heating, AC
- Tile & Marble Setter
- Painter

Bachelors/Masters Degree
*College/ University
4 + yrs.:*

- Architect
- Auditor
- Civil Engineer
- Construction Manager
- Interior Designer
- Landscape Architect
- Urban Planner

Secondary Education

- Middle School
- High School
- GED
- Vocational School

Construction

Trends:

The construction industry has been a leading source of job growth in Washington State over the last decade. King County's construction industry as a whole is predicted to grow at an average annual rate of 2.7% through 2009, followed by a 1.4% growth rate through 2014 (WA State Employment Security Department). Jobs in high demand include carpenters, laborers, construction managers, painters and electricians with average growth rates of 28% through 2014. Training is primarily offered through apprenticeship programs or on-the-job. Due to implementation of multiple large public projects, a strong real estate market and high levels of retirement among the population, long-term forecasts predict continued growth in construction employment demand through 2014.

Wages:

The average annual wage in King County for construction in 2006 was \$50,565 (Source: WA State Employment Security Department).

[Note: Wages are averages of all occupations within the sector – including entry level to high level positions.]

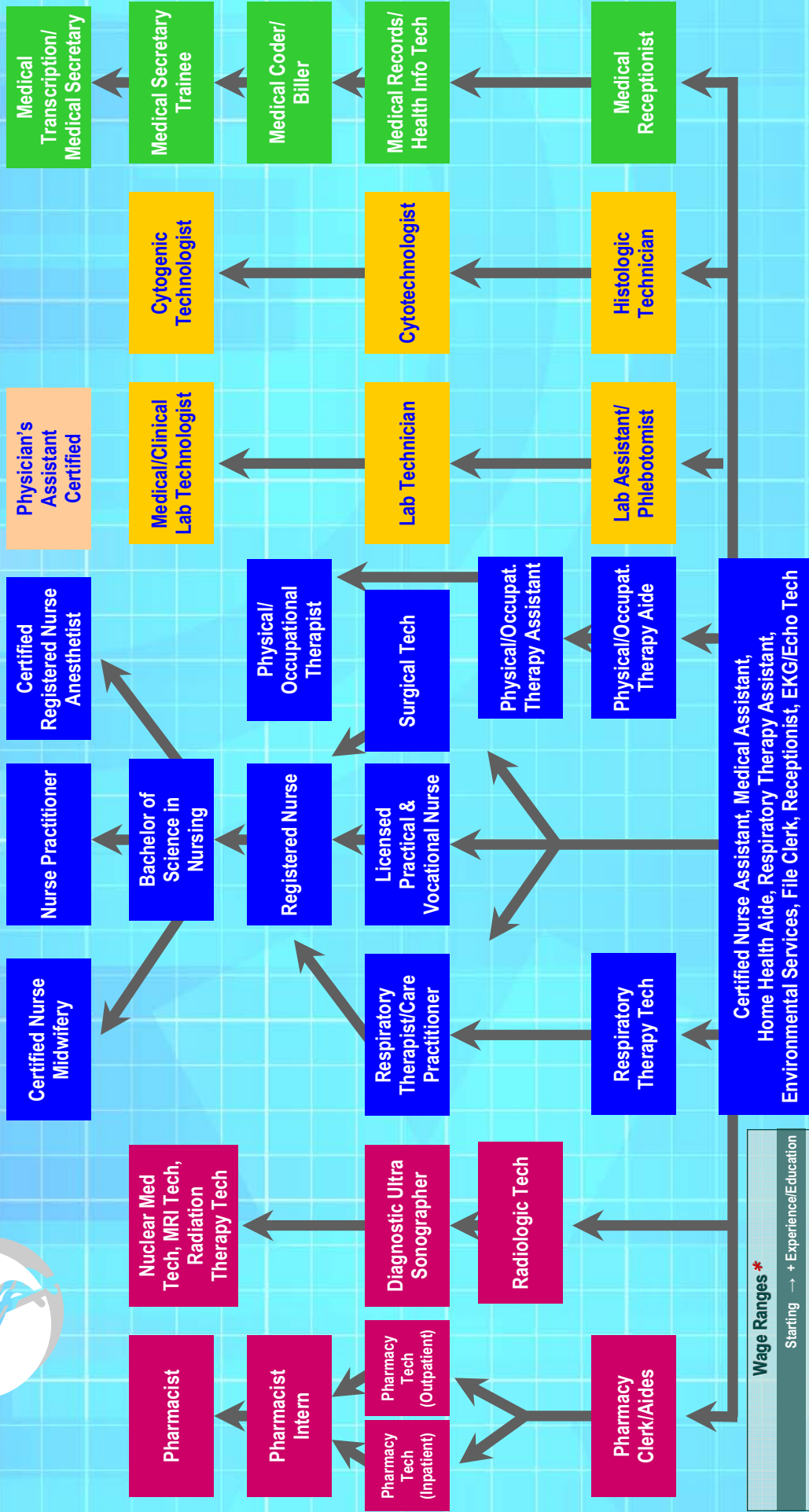
For detailed information about occupations within this sector (e.g. current wage ranges per occupations, training schools, employment projections, and a link to jobs listed at WorkSource):

1. Go to www.workforceexplorer.com,
2. Click on the 'wage and benefit information' link, and
3. Click on the 'occupation explorer' link to start your search.





Career Paths in Health Care



Wage Ranges *	
	Starting → + Experience/Education
Medical Assistant	\$13.13 → \$21.21
Pharmacy Clerk/Aide	\$9.11 → \$19.30
Physical/Occ. Therapy Asst.	\$15.55 → \$27.20
Lab Technician	\$12.88 → \$24.18
Medical Secretary	\$13.25 → \$24.08
Registered Nurse	\$24.52 → \$46.25
Respiratory Therapist	\$23.03 → \$36.25
Radiologic Technologist	\$20.90 → \$41.17

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* Average hourly wages in the Seattle-Bellevue-Everett MSA, March 2007. www.workforceexplorer.com

Source: Career Path adapted from www.HealthCareWork.info, a project of the Northwest Alliance for Health Skills and NW WDC

Health Care

Trends:

Health care has become one of the largest employment sectors in Washington State. Hospitals alone employ over 75,000 people—more than Boeing, Microsoft, or Safeway (“Business of Caring,” WA State Hospital Association, 2004). Employment growth in the industry is expected to continue, creating over 10,000 new health care jobs in Seattle-King County alone by 2012 (Economic Contribution of the Healthcare Industry to the City of Seattle, June 2004). Statewide, growth is projected in a wide range of health care occupations between 2006 and 2011, with the highest growth projected in home health aide, medical assistant, and registered nurse positions (“Gap Analysis Regional Overview,” prepared for WA State by Economic Modeling Specialists, Inc., 2007). Employers in King County and across the State continue to report job vacancies for health care practitioners and support personnel. In particular, hospital vacancies have increased in most professions for the second straight year (“Results of the 2007 Hospital Work Force Survey, WA State Hospital Association/Health Workforce Institute, 2007). This trend, combined with an aging nursing workforce, ensures that jobs in nursing and allied health will continue to be in-demand.

Wages:

The average annual wage in King County for healthcare in 2006 was \$42,387 (Source: WA State Employment Security Department).

[Note: Wages are averages of all occupations within the sector – including entry level to high level positions.]

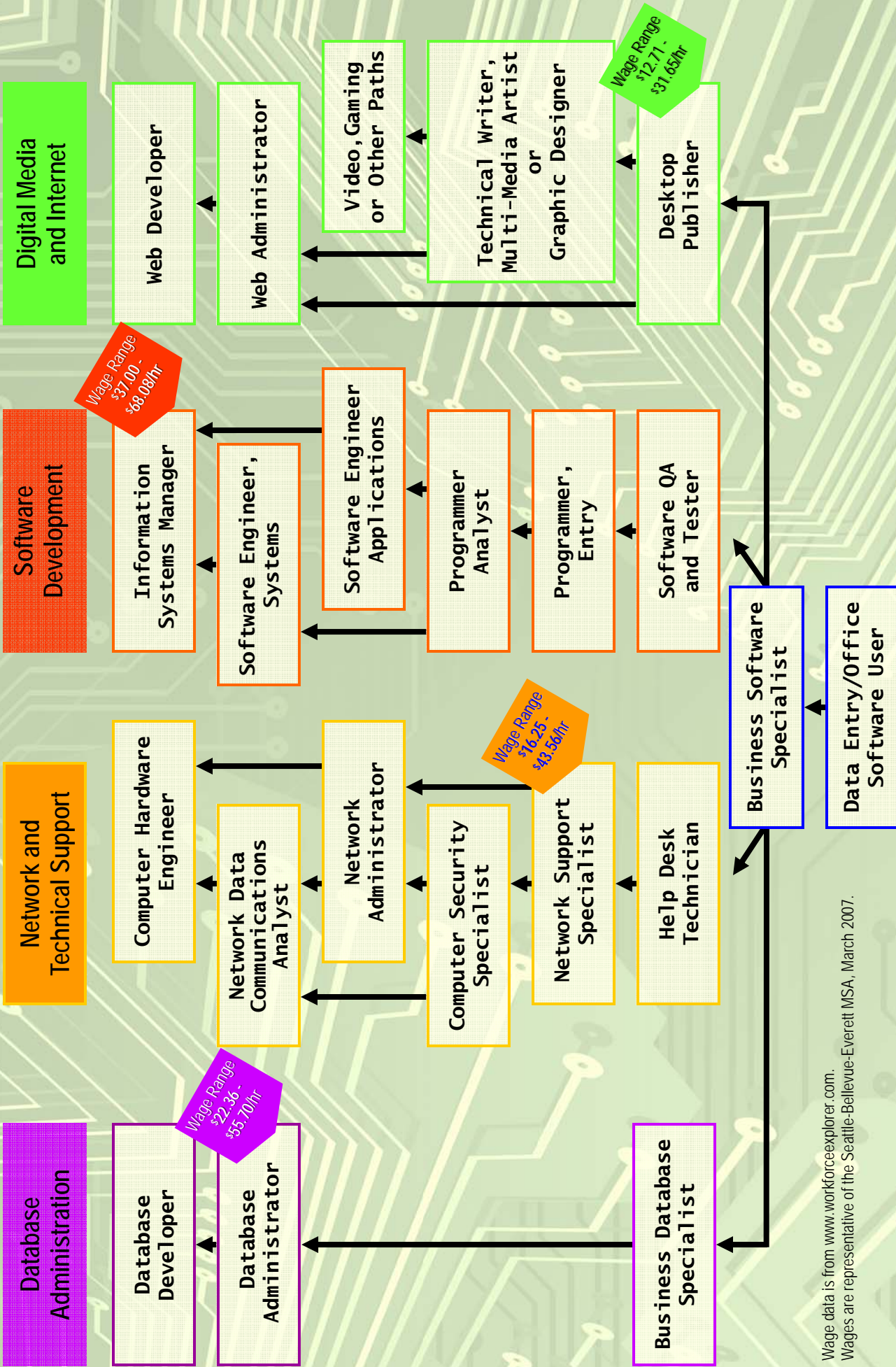
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Career Paths in Information Technology



Wage data is from www.workforceexplorer.com.
Wages are representative of the Seattle-Bellevue-Everett MSA, March 2007.

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Information Technology

Trends:

Technology and technology-related jobs are evolving rapidly, making the idea of information technology as a stand-alone sector to work in somewhat of an anachronism. In this age of a technology-based economy, core technology skills are increasingly a critical skill set for a broad spectrum of occupations and sectors. Some of the most recognizable names in the information technology industry reside in King County, including Amazon, Expedia, Nintendo, and Microsoft (EnterpriseSeattle). In 2006 the bulk of IT jobs, 65%, in King County were in publishing – which mostly includes software related jobs (WA State Employment Security Department). Examples of some current in-demand IT jobs in King County include database administrators, computer systems analysts, computer software engineers, and computer programmers. Looking long-term, King County's IT sector is predicted to have an estimated total employment of 78,600 by 2009, with an average annual growth rate of 2.8% between 2004 and 2009 (ESD).

Wages:

The average annual wages for the Information Technology sector in King County in 2006 was \$107,580 (Source: WA State Employment Security Department).

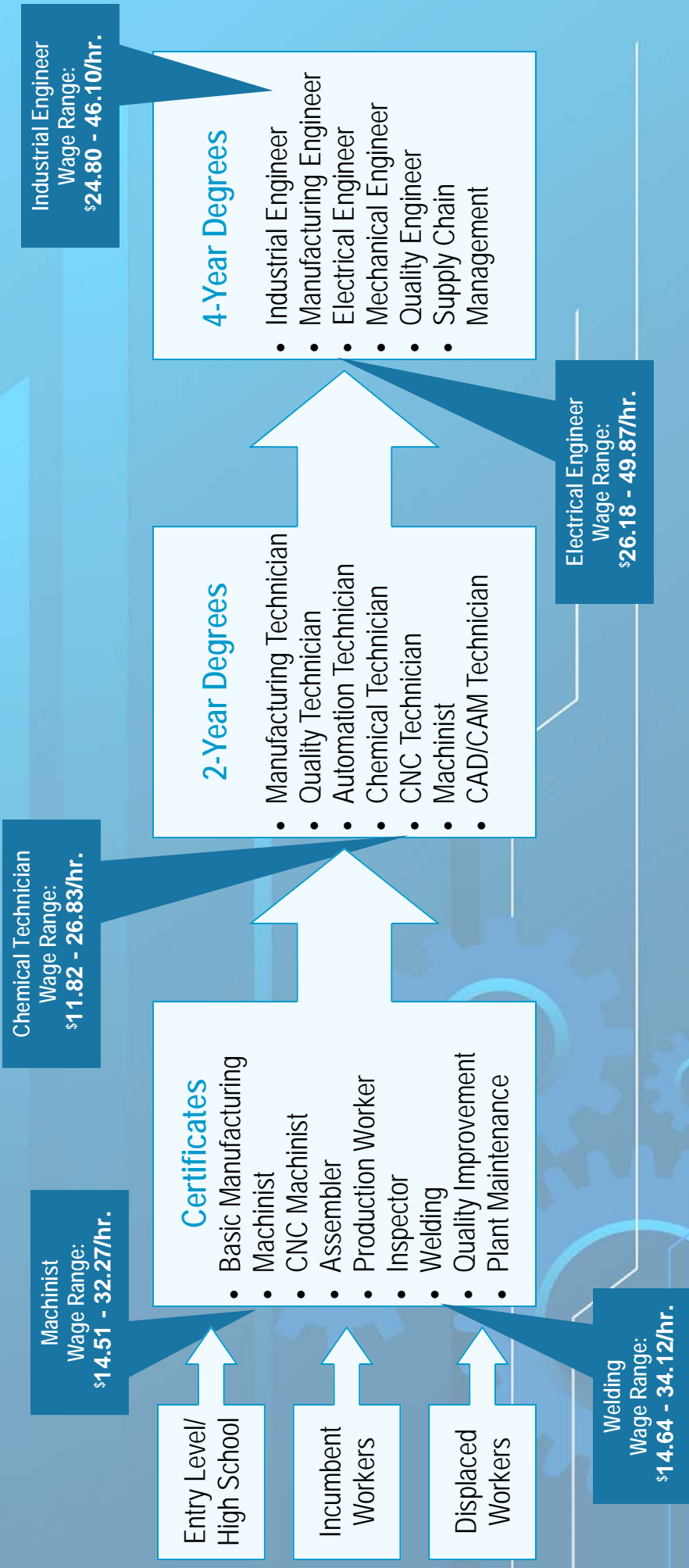
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Career Paths in Manufacturing



Machinist
Wage Range:
\$14.51 - 32.27/hr.

Chemical Technician
Wage Range:
\$11.82 - 26.83/hr.

Electrical Engineer
Wage Range:
\$26.18 - 49.87/hr.

Industrial Engineer
Wage Range:
\$24.80 - 46.10/hr.

Entry Level/
High School

Incumbent
Workers

Displaced
Workers

- Certificates**
- Basic Manufacturing
 - Machinist
 - CNC Machinist
 - Assembler
 - Production Worker
 - Inspector
 - Welding
 - Quality Improvement
 - Plant Maintenance

- 2-Year Degrees**
- Manufacturing Technician
 - Quality Technician
 - Automation Technician
 - Chemical Technician
 - CNC Technician
 - Machinist
 - CAD/CAM Technician

- 4-Year Degrees**
- Industrial Engineer
 - Manufacturing Engineer
 - Electrical Engineer
 - Mechanical Engineer
 - Quality Engineer
 - Supply Chain Management

Welding
Wage Range:
\$14.64 - 34.12/hr.

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Wage data is from www.workforceexplorer.com. Source: Center for Manufacturing Excellence, Shoreline Community College. Wages are representative of the Bellevue-Everett-Seattle MSA, March 2007.

Manufacturing

Trends:

For many decades, the manufacturing industry in King County has been vital to our local economy and workforce. Although the sector experienced a decline between 1998 and 2004, it has generally been on an incline since then and remains a significant industry in terms of volume of jobs, quality of jobs and wages, and contribution to the local economy. The projected average annual growth rate for manufacturing in King County from 2004-2009 is 2.7% (WA State Employment Security Department).

The manufacturing industry in the Puget Sound region is a diverse composition that includes food processing, printing and publishing, fabricated metal products, industrial machinery, transportation equipment, textiles and apparel. In King County, approximately 42% of manufacturing employment in 2006 was in transportation equipment (ESD), with aerospace – including big companies like Boeing and a large number of smaller aerospace businesses – representing the largest portion of the sector. Examples of current in-demand jobs in King County include industrial engineers, production workers, electrical engineers, and team assemblers.

Wages:

The average annual wages for Manufacturing in King County in 2006 was \$69,527 (Source: WA State Employment Security Department).

[Note: Wages are averages of all occupations within the sector – including entry level to high level positions.]

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Career Paths in Biomedical Research + Biotechnology

Salary Information

Hourly Wage Ranges:

- Biological Technicians → \$13.55 - \$26.01
- Lab Technologist → \$20.09 - \$31.26
- Technical Writer → \$24.23 - \$51.31
- Biological Scientists → \$21.22 - \$61.85
- Marketing Managers → \$36.50 - \$59.49

Source: www.workforceexplorer.com,
Seattle-Bellevue-Everett MSA, March 2007

Doctorate Degree

Career Opportunities:

- Scientist (Lab Director)
- Research Scientist
- Regulatory Affairs Director
- University Professor

Master of Science Degree

Career Opportunities:

- Teacher
- Lab Manager
- Clinical Research Manager
- Product & Marketing Manager

Community College

Areas of Study:

- Math
- Chemistry
- Biotechnology
- Biological Sciences

Degree:

- Associate of Science
- Associate of Technology

Career Opportunities:

- Lab Technician
- Lab Assistant
- Research Assistant
- Manufacturing
- Media Prep Specialist

To Community College

To expand hands-on skills and training

To University

To complete a four-year degree

University

Areas of Study:

- Math
- Physics
- Chemistry
- Biological Sciences

Degree:

- Bachelor of Science

Career Opportunities:

- Medical or Technical Writer
- Bioinformatics
- Clinical Research Assoc.
- Imaging Specialist
- Research Associate
- Environmental Health & Safety

High School

Areas of Study:

- Math
- Biology
- Chemistry
- Physics
- Biotechnology

Career Opportunities:

- Lab Glass Worker
- Animal Care
- Lab Assistant

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Life Sciences/Biotechnology

Trends:

Life sciences encompass a broad spectrum of industries from bioinformatics, biotechnology, research, healthcare, medical devices, genome sciences, and chemistry to manufacturing, nanotechnology, engineering, and physics. In addition to creating better treatments to improve and lengthen our quality of life, the life science sector is generating a slow, but positive economic impact for our region. Over 26,000 people are employed in this sector in Washington State and another 40,000 provide services and products that feed into the life sciences economy. Nearly 160 bioscience companies, with over 12,500 employees, reside in King County (EnterpriseSeattle). An example of a current in-demand job in King County is Medical and Clinical Laboratory Technologists.

The life sciences sector has the potential to impact thousands of jobs in King County. The breakthroughs in this sector not only provide new treatments for disease, but also help to create innovations in computer sciences, information technology bioprocessing, health care and manufacturing. According to the Brookings Institution, Greater Seattle is the fifth largest research and development sector in the country, worth over \$692 million.

Wages:

The average annual wages for the life science/bioscience sector in Washington State in 2004 was:

\$66,115 – Drugs & Pharmaceuticals
\$63,735 – Research, Testing & Medical Laboratories
\$57,466 – Medical Devices & Equipment
\$54,598 – Agricultural Feedstock & Chemicals

[Note: Wages are averages of all occupations within the sector – including entry level to high level positions.]
(Source: Battelle, based on Bureau of Labor Statistics, Bureau of Economic Analysis, and the Census Bureau's Economic Census)

For detailed information about occupations within this sector (e.g. current wage ranges per occupations, training schools, employment projections, and a link to jobs listed at WorkSource):

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Workforce Development Council of Seattle-King County



Occupation _____

Average starting wage per hour _____

Required training/experience _____

Training institution _____

Length of training _____

Training cost _____



Occupation _____

Average starting wage per hour _____

Required training/experience _____

Training institution _____

Length of training _____

Training cost _____



Occupation _____

Average starting wage per hour _____

Required training/experience _____

Training institution _____

Length of training _____

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Occupation _____

Average starting wage per hour _____

Required training/experience _____

Training institution _____

Length of training _____

Training cost _____



Map Your Career in _____!

Add the industry you are planning a career in here

As you plan your career in one industry, identifying your **transferable skills** is important.

What skills do you bring with you from another industry/occupation that can be transferred to this industry, and may be helpful as you move into a different industry in the future?

1. _____
2. _____
3. _____
4. _____

For detailed information about occupations within a sector (such as schools, employment projections, current wage ranges and a link to jobs listed at WorkSource):

- Go to www.workforceexplorer.com
- Click on the "Wage and Benefit Information" link
- Click on the "Occupation Explorer" link to start your search.