

To: MaryJeanne Kuhar, Executive Dean, Career Technical Education and Dawn DeWolf, Vice President, Academic and Student Affairs, Lane Community College

From: Andrea Newton

Date: 2/9/15

Subject: Career Technical Information

CTE Programs to research:

Auto Body, Culinary/Hospitality, Nursing, CIT, MOA, Electronics, Aviation Maintenance/Flight Tech

Some information provided on Drafting and Child Care.

Four Parts of the Project:

- I. Employer Interviews with key Lane County businesses in each of the selected programs
- II. Employment information on the selected programs: Current Wages and Projected Openings by Occupation
- III. Information by Program
- IV. Future Considerations/Recommendations

I. Employer Interviews:

The goal was for me to interview at least three employers in Lane County for each of the programs that you selected and to ask them prepared questions. I attached the list of those who completed the phone interviews with me. Their individual comments are also included. Each interview took approximately 15 minutes. I made an effort to call larger employers in the field and at least one that was not suggested by a dean or co-op person. Lane County has approximately 90% of its businesses with less than 50 employees so it is not a simple matter to find those who can speak for all. I tried for CEOs and owners who could comment on the "big" picture. (There is no list of companies with names attached to rely on, so I did my share of networking and searching!!)

See List of Employer Contacts Attachment #1, Questionnaire Attachment #2, and Individual comment sheets.

Summary of Employer Interviews:

1. Respect for LCC—
From my interviews, employers made very positive comment about the college. Lane is still highly regarded as a training and education provider in these CTE areas. All businesses expressed a need for training in their area and felt that the college could do that.
2. Technical skills of instructors not keeping up with industry—
Some of the employers indicated that the instructors and curriculum could use updating to be current with technology and processes (MOA, Auto Body, and Electronics)

Nursing:

Even though this is a high cost program for the college, it serves a large number of students who definitely get jobs in their field. The employment projections are the largest of all occupations, 953 in Lane County alone over the 2012-2022 period. The employers verified that they do not see this changing because of continued growth and retirement. One thing for Lane to consider is the move toward RNs needing Bachelor's degrees and specializations. Even if hospitals openings don't grow as fast, there are skilled nursing openings and these definitely will increase as well.

Keep program as is and look for ways to reduce cost of instruction. Job openings are there.

Medical Office Assistants:

This area is difficult to follow up on with employers since many of the graduates go to smaller doctor's offices. There is a definite need in the community for this training, 205 positions projected in Lane County 2012-22, but employers say that this will grow faster. MOAs must have a CMA and work at the top of their level. Students definitely need technical skills and the ability to work with electronic medical records as verified by employers. Students will need to scribe and be trained to work as part of teams (new approach at Peacehealth). Our program doesn't teach that. Experience is important as well for hiring. CNAs, the lower level of care (training provided by our continuing ed. program) are needed twice as much as CMAs. (445 openings)

Consider closing the program for a year and re-vamping it to better meet the needs of employers. Involve employers from the beginning in the changes. Do not close the program as it is needed and will continue to be needed.

Culinary/Hospitality:

Although only the occupation of Chefs and Head Cooks requires some post-secondary training, there are a tremendous number of jobs in the field in general. The industry will grow at a good pace in the next few years. This area did not suffer from the downturn in the economy. Four new hotels will be added in Lane County soon. Having classes and experience gives students a competitive edge over others who are applying for positions even though entry level salaries aren't high. One employer commented about the unrealistic expectations of some the LCC students believe they should be hired at higher salaries. Experience is very important. More follow-up work needs to be done about the success of students in the program.

There may be ways for the students to get basics through a one year certificate or continuing education program. Problems develop when the community gets confused about which training the student has experienced. The college wouldn't want to dilute the quality the community sees in the current program.

Electronics

It is very difficult to determine where Lane students are working in this field. Many companies are small and do electrical work but there doesn't appear to be a wide range of jobs in the electronic technician area in Lane County. The bulk of openings are for electricians who are trained through the apprenticeship programs, not electronics. High school education is all that is needed to enter those programs.

Kim and I included several different occupations under the Electronics umbrella. According to the employment projections, even including 10 or more possible careers in electronics, the total openings for the specific occupations are low for the ten year period. Production jobs are not plentiful. Skills in electronic processes are definitely needed. Manufacturing in Lane County is a targeted sector and money for training in electronics and other areas may be available.

Consider just having electronics classes available for many of the other disciplines and offering associate degrees or certificates if there appears to be a need in the community. More follow up needs to be done here. I could not find the direct conn

Auto Body Technician and Refinishing

There are only 103 total positions in Lane County with three openings annually; high school diploma is all that is required for entry. Training gives interview preference. Field is increasing. Experience is key. Internships should be considered. Some employers would consider offering them. Newest Technology processes are not taught in our program. Industry is fast-paced and people work in teams. Look at cost to see if it justifies having a two year program. Student follow up is needed to determine benefit.

Consider continuing education or a combination with credit. One of the employers said that he thought Lane's program was more of a personal hobby program rather than a workforce program.

Aviation Maintenance/Flight Tech

Even though not on the original list, I was able to talk with the Airport Manager Tim Doll and Shad Nelson, Owner of Lawrence Air about the Aviation Academy. Both are convinced that there is a need for the programs and that the students have excellent preparation. There are not a high number of jobs locally. Many of the students do leave Lane County and the state; several have gone to Alaska to work for private companies. The airport is pursuing being a regional maintenance center for aircraft and the program will definitely be a reason for that happening. Mr. Nelson pointed out that there are only two major AMP programs in the nation and Lane is the one he hires from. One of the employers believes that there is a "disconnect" in understanding between main campus administration and the programs.

Consider the value of the program to attract students from across the country and world.

See Attachments #9 Oregon CC approved program list and #10 Occupational Summaries

IV. Futures Considerations/Recommendations:

1. Look at the Occupations that have the greatest numbers of openings over the next 10 years in Lane County and make sure the need is being addressed by the college (See handout)
2. Map out more detailed costs of each program. How can the costs be better matched up with the outcomes?
3. Look at the number of graduates for each program over the last 5 -10 years. (there seems to be conflicting information on the LCC website) Some of the fields do not need degrees but training makes them competitive. Having a gap in the summer of two year programs may cause students to opt out for jobs. Looks at ways to shorten time spent and increase grad rates.
4. Take some of the programs with lower numbers of job openings and offer them less often if there is a cost savings. (Auto Body, Aviation Maintenance, Flight Tech, Computer Programming)

I included the list of programs available at each of the community colleges. Maybe work with the other colleges to offer programs every other year or if Lane needs to close a program, find ways to send students to those programs to finish. Look at data as a statewide group of deans and determine if the colleges are covering the state's and students' needs.

5. Look at programs that do not need degrees and consider converting them to continuing education or making them one-year certificates. Consider specific training for both non-credit and credit students in the fall, winter, and spring terms. Construct common "packages" of courses so that students can complete their general education in summers or nights or breaks.
6. Find ways to solve the financial aid problem. Are there ways students can borrow money at a decent rate for non-credit programs? Will the new law authorizing certificates for non-credit be of assistance with financial aid? Look at EMT example for a credit and non-credit mix. Can students still get the non-credit certificate and later convert it to credit?
7. Follow up with the students who leave or graduate. E-mail exit survey? Lane County has small businesses and stories of student successes are anecdotal. For every one student success from Lane CC, there are many that we don't know what happened to them.
8. Continue to work closely with the Oregon Employment Department and Lane Workforce Partnership to be more consistent in matching programs to need. The Classification of Occupations does not naturally match up with the college's programs. For example, many jobs use electronics skills and it is not easy to determine what training is needed for what jobs. In contrast, registered nurses must have a license and a degree to work in the field and are easier to quantify. Also, try to develop ways to track student employment that would benefit all.
9. Look at occupations where experience is needed and make sure Lane's programs provide co-op/internships for those students. This is how many get the experience needed to get jobs. This can be part of the program saving money on costs for instruction and also involves community employers.
10. Continue the involvement of employers. Improve the advisory committee system.

Typical Entry Level Education: Postsecondary Training, 2012-2022 (Lane)

Oregon Employment Department, Workforce and Economic Research
 Brenda P. Turner Oregon.gov

Standard Occupational Classification Code and Title	2012 Employment	Average Annual Job Openings	2013 Average Wages
43-3031 Bookkeeping, Accounting, and Auditing Clerks	2,380	59	\$17.05
53-3032 Truck Drivers, Heavy and Tractor-Trailer (Lic.)	1,673	55	\$16.59
31-1014 Nursing Assistants (Lic.)	1,293	44	\$13.01
15-1151 Computer User Support Specialists	890	35	\$20.83
49-2023 Automotive Service Technicians and Mechanics*	561	22	\$20.43
31-9092 Medical Assistants	565	21	\$16.70
33-5012 Hairdressers, Hairstylists, and Cosmetologists* (Lic.)	324	17	\$12.41
41-9022 Real Estate Sales Agents* (Lic.)	542	17	NA
29-2061 Licensed Practical and Licensed Vocational Nurses (Lic.)	369	16	\$21.97
29-2052 Pharmacy Technicians (Lic.)	456	14	\$16.24
41-9021 Real Estate Brokers* (Lic.)	461	14	NA
31-9091 Dental Assistants (Lic.)	405	13	\$18.63
29-2071 Medical Records and Health Information Technicians	288	12	\$15.79
19-4061 Social Science Research Assistants	189	11	NA
15-1199 Computer Occupations, All Other	329	11	NA
49-9021 Heating, Air Conditioning, and Refrigeration Mechanics and Installers (Lic.)	219	10	\$22.93
41-3021 Insurance Sales Agents* (Lic.)	275	10	NA
33-2011 Firefighters (Lic.)	212	8	\$30.11
25-4031 Library Technicians	110	7	\$19.96
29-2053 Psychiatric Technicians	30	7	NA
49-3092 Recreational Vehicle Service Technicians	130	6	\$19.75
31-9011 Massage Therapists* (Lic.)	234	6	NA
29-2012 Medical and Clinical Laboratory Technicians	105	6	\$18.17
51-4012 Numerical Tool and Process Control Programmers	58	5	\$25.14
49-9051 Electrical Power-Line Installers and Repairers	106	4	\$40.87
43-6012 Legal Secretaries	336	4	\$19.75
31-9093 Medical Equipment Preparers	138	4	\$15.50
29-2041 Emergency Medical Technicians and Paramedics (Lic.)	96	4	\$18.25
51-8031 Water and Wastewater Treatment Plant and System Operators (Lic.)	84	4	\$30.34
13-2082 Tax Preparers* (Lic.)	125	3	NA
29-2055 Surgical Technologists	115	3	\$23.22
35-1011 Chefs and Head Cooks* (Lic.)	95	3	\$16.77
31-9094 Medical Transcriptionists*	130	3	\$19.96
29-2099 Health Technologists and Technicians, All Other	85	2	\$18.77
49-2098 Security and Fire Alarm Systems Installers	57	2	NA
49-2094 Electrical and Electronics Repairers, Commercial and Industrial Equipment	66	2	\$27.28
49-9062 Medical Equipment Repairers*	40	2	NA
27-4011 Audio and Video Equipment Technicians*	66	2	\$16.95
49-2022 Telecommunications Equipment Installers and Repairers, Except Line Installers	133	2	\$33.19
17-3011 Architectural and Civil Drafters	94	2	\$20.89
53-2021 Air Traffic Controllers	27	2	NA
39-5092 Manicurists and Pedicurists (Lic.)	34	2	NA
39-5094 Skincare Specialists* (Lic.)	36	1	NA
27-4012 Broadcast Technicians*	66	1	\$10.64
31-9097 Phlebotomists	37	1	\$17.72
23-2099 Legal Support Workers, All Other (Lic.)	45	1	\$23.09
21-1094 Community Health Workers	34	1	\$19.35
49-2021 Radio, Cellular, and Tower Equipment Installers and Repairers	51	1	NA
29-2057 Ophthalmic Medical Technicians	44	1	\$15.97
17-3013 Mechanical Drafters	65	1	\$19.71
49-2097 Electronic Home Entertainment Equipment Installers and Repairers*	25	1	NA
43-9031 Desktop Publishers	47	1	\$21.22
17-3019 Drafters, All Other	26	1	\$19.93
49-3011 Aircraft Mechanics and Service Technicians	23	1	\$23.42
13-2021 Appraisers and Assessors of Real Estate* (Lic.)	54	1	\$27.68
49-2092 Electric Motor, Power Tool, and Related Repairers	27	1	\$17.97
53-6041 Traffic Technicians	12	1	NA
51-8013 Power Plant Operators	18	1	NA
49-9063 Musical Instrument Repairers and Tuners* †	12	1	NA
49-2095 Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	19	0	NA
17-3012 Electrical and Electronics Drafters	21	0	\$23.73
49-2093 Electrical and Electronics Installers and Repairers, Transportation Equipment	14	0	NA
49-2096 Electronic Equipment Installers and Repairers, Motor Vehicles*	36	0	NA
27-4014 Sound Engineering Technicians*	5	0	NA
51-9071 Jewelers and Precious Stone and Metal Workers*	8	0	NA
33-2021 Fire Inspectors and Investigators	3	0	NA
49-9097 Signal and Track Switch Repairers	10	0	NA
23-2091 Court Reporters (Lic.)	8	0	NA

*More than 10% of employment in this occupation is self-employment

Typical Entry Level Education: Associate Degree, 2012-2022 (Lane)
 Oregon Employment Department, Workforce and Economic Research
 Pre-1970 Percentages Changed

Standard Occupational Classification Code and Title	2012 Employment	Average Annual Job Openings	2013 Average Wages
29-1141 Registered Nurses (Lic.)	2,674	95	\$38.53
25-2011 Preschool Teachers, Except Special Education (Lic.)	502	23	\$12.86
29-2021 Dental Hygienists (Lic.)	334	15	\$37.62
17-4099 Life, Physical, and Social Science Technicians, All Other	266	14	\$23.21
19-4021 Biological Technicians	222	10	\$17.35
27-1024 Graphic Designers*	223	9	\$19.18
11-9021 Construction Managers* (Lic.)	212	8	\$38.28
23-2011 Paralegals and Legal Assistants	141	6	\$22.47
29-2056 Veterinary Technologists and Technicians (Lic.)	170	5	NA
29-2034 Radiologic Technologists (Lic.)	175	5	\$28.81
29-1126 Respiratory Therapists (Lic.)	137	4	NA
29-2031 Cardiovascular Technologists and Technicians	83	3	NA
11-9031 Preschool and Child Care Administrators	73	3	\$20.16
17-3029 Engineering Technicians, Except Drafters, All Other	81	3	\$27.51
31-2021 Physical Therapist Assistants (Lic.)	48	2	\$29.74
19-4031 Chemical Technicians	51	2	\$17.08
53-2012 Commercial Pilots, Except Airline Pilots	37	2	\$75.133
33-3021 Detectives and Criminal Investigators	44	1	\$35.60
17-3023 Electrical and Electronics Engineering Technicians	69	1	\$29.61
29-9099 Healthcare Practitioners and Technical Workers, All Other	31	1	\$33.56
31-2011 Occupational Therapy Assistants (Lic.)	21	1	\$26.53
17-3025 Environmental Engineering Technicians	37	1	\$25.55
17-3022 Civil Engineering Technicians	48	1	\$30.18
29-2032 Diagnostic Medical Sonographers	25	1	\$36.09
29-1124 Radiation Therapists	32	1	NA
17-3027 Mechanical Engineering Technicians	34	1	\$24.08
49-9069 Precision Instrument and Equipment Repairers, All Other*	33	1	\$22.16
29-2035 Magnetic Resonance Imaging Technologists	25	1	\$37.21
33-9021 Private Detectives and Investigators* (Lic.)	16	1	\$20.59
27-1025 Interior Designers*	16	1	NA
19-4011 Agricultural and Food Science Technicians	10	1	NA
29-2033 Nuclear Medicine Technologists	21	1	NA
17-3026 Industrial Engineering Technicians	14	0	NA
11-9061 Funeral Service Managers (Lic.)	19	0	NA
27-4032 Film and Video Editors*	20	0	NA
39-4031 Morticians, Undertakers, and Funeral Directors	9	0	NA
19-4091 Environmental Science and Protection Technicians, Including Health	6	0	NA
17-3024 Electro-Mechanical Technicians	5	0	NA
19-4041 Geological and Petroleum Technicians	1	0	NA
11-9071 Gaming Managers	2	0	NA

*More than 10% of employment in this occupation is self-employment

*Apprenticeship typically needed to attain competency in the skills needed in the occupation.

The **Occupation Profiles** tool is located on QualityInfo.org, a website of the Oregon Employment Department

Electrical and Electronics Engineering Technicians

Lane

Description: Apply electrical and electronic theory and related knowledge, usually under the direction of engineering staff, to design, build, repair, calibrate, and modify electrical components, circuitry, controls, and machinery for subsequent evaluation and use by engineering staff in making engineering design decisions. Excludes "Broadcast Technicians" (27-4012).

Employment Projections					
Region	Employment		Projected Annual Openings		
	2012	2022	Growth	Replacement	Total
Oregon	2,777	2,989	21	58	79
Lane	69	66	0	1	1
Current Job Openings					
Current job listings for this occupation: 1.					
Job Title	Location	Order Number	Wage Offered		
Manufacturing Technician	Eugene	1316608	\$15.00/hr to \$20.00/hr DOE		

Wages			
Region	----- 2014 Wages -----		
	Median Hourly	Avg Annual	Middle Range
Oregon	\$28.02	\$59,728	\$22.70 - 34.00
Lane	28.70	56,099	20.67 - 32.42
Industries of Employment			
Private Sector Only			
Industry	2012 Employment		
Total All Industries	34		
Manufacturing	16		
Professional, Scientific, and Technical Services	10		
Occupations with Similar Skills			
Occupation	Skill Overlap		
Electro-Mechanical Technicians	53%		
Electronics Engineers, Except Computer	45%		
Computer Hardware Engineers	40%		
Electrical Engineers	38%		
Mechanical Engineering Technicians	37%		

Statewide Employment Analysis: Employment in this occupation in 2012 was somewhat larger than the statewide average for all occupations. The total number of job openings is projected to be somewhat higher than the statewide average number of job openings for all occupations through 2022. This occupation is expected to grow at a somewhat slower rate than the statewide average growth rate for all occupations through 2022. Reasonable employment opportunities exist for trained workers.

Regional Employment Analysis: Employment in this occupation in 2012 was at about the regional average for all occupations. The total number of job openings is projected to be at about the regional average number of job openings for all occupations through 2022. Employment in this occupation is expected to decline in this region between 2012 and 2022.

Educational Requirements: The typical entry level education for this occupation is an Associate's degree.

Occupational Summary

The Occupation Profiles tool is located on QualityInfo.org, a website of the Oregon Employment Department

Medical Assistants

Lane

Description: 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. Excludes "Physician Assistants" (29-1071).

Region	Employment Projections				
	Employment 2012	Employment 2022	Projected Annual Growth	Projected Annual Openings Replacement	Total
Oregon	7,691	9,744	205	147	352
Lane	565	662	10	11	21

Current Job Openings
Current job listings for this occupation: 27

Job Title	Location	Order Number	Wage Offered
Clinic Medication Assistant Job	Florence	1319219	
Lab Assistant - Inpatient - Nights Job	Springfield	1319201	
Medical Assistant - Neurology Job	Springfield	1319200	
Medical Assistant/LPN - ENT (Per-Diem) Job	Eugene	1319196	
Lab Assistant - Outpatient Float Pool Job	Eugene	1316253	
Medical Assistant Educator Job	Springfield	1312176	
Ophthalmic Assistant Certified Job	Eugene	1311378	
LABORATORY ASSISTANT	Springfield	1310654	
CVU/ICU - MONITOR TECHNICIAN/UNIT SECRETARY	Springfield	1310647	
Medical Assistant - Pediatrics Job	Eugene	1308316	

Region	Wages		
	Median Hourly	Avg Annual	Middle Range
Oregon	\$16.35	\$34,162	\$14.01 - 18.47
Lane	15.86	32,791	12.92 - 17.96

Industries of Employment

Private Sector Only

Industry	2012 Employment
Total All Industries	552
Health Care and Social Assistance	540
Administrative and Support and Waste Management and Remediation Services	10

Occupations with Similar Skills

Occupation	Skill Overlap
Dental Assistants	53%
Healthcare Support Workers, All Other	39%
Veterinary Assistants and Laboratory	39%
Animal Caretakers	
Licensed Practical and Licensed Vocational Nurses	31%

Statewide Employment Analysis: Employment in this occupation in 2012 was much larger than the statewide average for all occupations. The total number of job openings is projected to be much higher than the statewide average number of job openings for all occupations through 2022. This occupation is expected to grow at a much faster rate than the statewide average growth rate for all occupations through 2022. Reasonable employment opportunities exist for trained workers largely due to the significant number of job openings projected for this occupation.

Regional Employment Analysis: Employment in this occupation in 2012 was much larger than the regional average for all occupations. The total number of job openings is projected to be much higher than the regional average number of job openings for all occupations through 2022. This occupation is expected to grow at about the regional average growth rate for all occupations through 2022.

Educational Requirements: The typical entry level education for this occupation is a postsecondary non-degree award.

Occupational Summary

The **Occupation Profiles** tool is located on QualityInfo.org, a website of the Oregon Employment Department

Automotive Body and Related Repairers Lane

Description: Repair and refinish automotive vehicle bodies and straighten vehicle frames. Excludes "Painters, Transportation Equipment" (51-9122) and "Automotive Glass Installers and Repairers" (49-3022).

Employment Projections					Wages				
Region	Employment		Projected Annual Openings		Region	----- 2014 Wages -----			
	2012	2022	Growth	Replacement		Total	Median Hourly	Avg Annual	Middle Range
Oregon	1,374	1,540	17	26	43	Oregon	\$18.98	\$43,066	\$15.34 - 24.89
Lane	107	120	1	2	3	Lane	20.58	43,429	14.98 - 26.24
Current Job Openings					Industries of Employment				
Current job listings for this occupation: 1.					Private Sector Only				
Job Title	Location	Order Number	Wage Offered		Industry		2012 Employment		
Body Shop Technician	Springfield	1296070	\$12.00/hr to \$20.00/hr DOE		Total All Industries		107		
					Other Services (except Government)		80		
					Retail Trade		14		
					Occupations with Similar Skills				
					Occupation		Skill Overlap		
					Automotive Glass Installers and Repairers		41%		
					Rail Car Repairers		37%		
					Automotive Service Technicians and Mechanics		33%		
					Recreational Vehicle Service Technicians		33%		
					Motorcycle Mechanics		33%		

Statewide Employment Analysis: Employment in this occupation in 2012 was at about the statewide average for all occupations. The total number of job openings is projected to be at about the statewide average number of job openings for all occupations through 2022. This occupation is expected to grow at a somewhat slower rate than the statewide average growth rate for all occupations through 2022. Reasonable employment opportunities exist.

Regional Employment Analysis: Employment in this occupation in 2012 was at about the regional average for all occupations. The total number of job openings is projected to be at about the regional average number of job openings for all occupations through 2022. This occupation is expected to grow at a somewhat slower rate than the regional average growth rate for all occupations through 2022.

Educational Requirements: The typical entry level education for this occupation is a high school diploma or equivalent. Those with a postsecondary non-degree award have a competitive advantage in the labor market. In addition, moderate-term on-the-job training is typically needed, once employed, to attain competency in the skills needed in this occupation.

Questionnaire for Lane Community College Employers

Name of Business:

Name and Title of Person Interviewed:

Date of Interview:

Lane Program:

1. Have you hired any Lane Community College students in the last 5 years?
☐ Yes How many?
☐ No Why not?
2. Do you feel Lane Community college students are prepared to be successful in their program area?
☐ Yes, very well prepared
☐ Somewhat prepared
☐ No, What specific additional skills or changes in preparation are needed?
3. If you have openings, would you hire more Lane Community College students?
☐ Yes, How many do you estimate you might hire in the next five years? _____
☐ No, Why not?
4. What is your perception of the employment opportunities and trends in this field over the next 5 years?
5. Do you have current Lane students doing internships or co-ops at your business?
6. Have you participated in any Lane Community College advisory committees over the last 5 years?
☐ Yes, What are the strengths and weaknesses of the system?
☐ No, Would you be willing to serve?
7. Other comments?

Contact	Title	Company	number	program
Loni Foster	Manager	Old Dominion	541-485-3368	Auto body
Byron Davis	Manager	Autobody Specialists	541-747-4983	Auto body
Kevin Hurley	Manager	Kendall Collision Center	541-345-1515	Auto body
Dennis Chong	Sr. Manager, Tech	Symantec	541-335-5928	CIS/CIT
Steve Darby	VP, IT Operations	IP Services, Inc.	541-343-5974 x2186	CIS/CIT
Todd Edman	CEO	Lunar Logic	541-554-6558	CIS/CIT
George Rogers	Gen. Manager	Vally River Inn	541-681-5079	Cul/Hosp
Jody Hall	Gen. Manager	Hilton	541-342-2000	Cul/Hosp message
John Zemick	CEO	Applied Scientific Instrumentation	541-461-8181	Electronics
Eric Scofield	Owner	Scofield Electric	541-686-8612	Electronics
Jon Eeds	Plant Manager	Data-logic	541-302-1120	Electronics
Ethan Ralston	CEO	Feeney Inc FW	541-685-9405	Electronics message
Tim Doll	Airport Manager	Eugene Airport	541-682-5430	Flight AMT
Shad Turner	Owner	Lawrence Air	541-689-2894	Flight AMT
Tim Doll will provide		Horizon Air		Flight AMT
Cheryl Boyum	CEO	Cascade Health Solutions	541-228-3002	MOA
Thomas Potter	EMR Manager	Eugene Pediatric Assoc	541-357-3089	MOA
Ronaca Busler	Clinic supervisor	Oregon Cardiology	541-684-3730	MOA
Jim Connolly	VP of Provider Affairs	Trillium	541-431-1908	MOA message
Michael Jay	no knowledge of prog	Volunteers in Medicine	541-686-3797	MOA declined
Shelley Vitus	Human Resources Dir.	Oregon Medical Group	541-687-9000	MOA message
Jennifer Carson	CNO	McKenzie-Willamette	541-744-8508	Nursing message
Lori Davis	Dir of Nursing	Cascade Manor	541-342-5901	Nursing
Erica D. Carr	Sr. Talent Acq. Manager	Peacehealth	541-222-2514	Nursing

A Associates Degrees

P - Certificates 12-44 credits (Credit Pathway Certificate within an Associate Degree, Less Than One Year (LTC) or Certificate 12-44 credits)

C Certificates 45+ credits (Associate Degree or Certificate of Completion)

APPROVED CAREER AND TECHNICAL EDUCATION PROGRAMS

PROGRAM	Blue Mountain	Central Oregon	Chemeketa	Clatsop	Columbia College	Klamath	Lane	Linn Benton	Mt Hood	Oregon Coast	Portland	Rogue	Southwestern	Tillamook Bay	Treasure Valley	Umpqua	PROGRAM	Blue Mountain	Central Oregon	Chemeketa	Clatsop	Columbia College	Klamath	Lane	Linn Benton	Mt Hood	Oregon Coast	Portland	Rogue	Southwestern	Tillamook Bay	Treasure Valley	Umpqua		
BUSINESS AND MANAGEMENT (cont.)																	HEALTH SERVICES (cont.)																		
General Office Occupations and Clerical Services	C	C	P	C	P	P	P	P	P	C	P	P	C				Medical Informatics		A						AP	A	A		A	C	A	A			
Hospitality Administration/Management, General	A	A	C						A	C					AP	C	Medical Insurance Coding Specialist/Coder									P	C	C				C			
Hospitality Administration/Management, Other								P									Medical Insurance Specialist/Medical Biller									C									
Hotel/Motel Administration/Management		A	P														Medical Office Management/Administration		A																
Legal Administrative Assistant/Secretary	A							P	A							A	Medical Radiologic Technology/Science - Radiation Therapist												A						
Management Information Systems, General		A									P				AP	AP	C	Medical Reception/Receptionist											P	C		C			
Marketing, Other							C										Medical Transcription/Transcriptionist		C													A			
Marketing/Marketing Management, General		C		AP	C	C	C				A	C	A				A	Medical/Clinical Assistant		C		C	P	C	C	A		P	C	P	AP				
Medical Administrative/Executive Assistant and Medical Secretary	A	C	A						A	C	A		C			A	A	Mental Health Counseling/Counselor												A					
Medical Insurance Coding Specialist/Coder																	C	Nursing Assistant/Aide and Patient Care Assistant/Aide												P					
Medical Transcription/Transcriptionist		C															A	Occupational Therapist Assistant												A					
Meeting and Event Planning										C								Ophthalmic Technician/Technologist												A					
Office Management and Supervision			P		A	C					A	C					A	Pharmacy Technician/Assistant		C	A									P			C		
Operations Management and Supervision				AP														Phlebotomy/Phlebotomist												P			C		
Organizational Leadership				P														Physical Education Teaching and Coaching																	
Public Relations/Image Management																	P	Physical Fitness Technician															P		
Purchasing, Procurement/Acquisitions and Contracts Management		A	C															Physical Therapist Assistant												A					
Real Estate																		Radiologic Technology/Science - Radiographer													A				
Receptionist																		Registered Nursing, Nursing Administration, Nursing Research and Clinical Nursing, Other												P					
Resort Management																	P	Registered Nursing/Registered Nurse		A	A	A	A	A	A	A	A	A	A	A	A	A	A		
Restaurant, Culinary, and Catering Management/Manager																		Renal/Dialysis Technologist/Technician			C														
Restaurant/Food Services Management							A											Respiratory Care Therapy/Therapist												A					
Retailing and Retail Operations		P	C	P	AP	C	P	P	P	AP	P	P	AP	P	AP	P	P	Sport and Fitness Administration/Management												A					
Small Business Administration/Management																	P	Substance Abuse/Addiction Counseling																	
Taxation			P															Surgical Technology/Technologist																	
Tourism and Travel Services Management			AP	C														Veterinary/Animal Health Technology/Technician and Veterinary Assistant		C	A									P		A			
Web Page, Digital/Multimedia and Information Resources Design			A	C														Youth Services/Administration												C					
Word Processing							P																												

You can also complete a portion of your bachelor's degree at most community colleges in areas such as business administration and economics.

You can also complete a portion of your bachelor's degree at most community colleges in areas such as biology, chemistry, dentistry, health and physical education, optometry, occupational therapy and pharmacy.

HEALTH SERVICES

Allied Health and Medical Assisting Services, Other																	P
Biotechnology																	AP
Clinical/Medical Laboratory Assistant		P	C														P
Clinical/Medical Laboratory Science and Allied Professions, Other																	P
Clinical/Medical Laboratory Technician																	A
Community Health Services/Union/Counseling																	P
Dental Assisting/Assistant		C	C	C	C			C	C								C
Dental Hygiene/Hygienist																	AP
Dental Laboratory Technology/Technician																	A
Emergency Medical Technology/Technician (EMT Paramedic)		C	A	A	C			C	C	A							AP
Fire Science/Fire-fighting		A	A	A	AP	AP											AP
Gerontology																	AP
Health Aide																	C
Health and Medical Administrative Services, Other																	P
Health and Physical Education, General																	AP
Health Information/Medical Records Technology/Technician		AP	C					P	A	C							A
Health Services/Allied Health/Health Sciences, General																	P
Licensed Practical/Vocational Nurse Training																	C
Massage Therapy/Therapeutic Massage																	P
Maternal/Child Health and Neonatal Nurse/Nursing																	P
Medical Administrative/Executive Assistant and Medical Secretary		A	C														C

HUMAN RESOURCES

Adult Development and Aging																	P
Basic Skills, General																	C
Career Exploration/Awareness Skills		P															C
Child Care and Support Services Management		A	AP	AP													A
Child Care Provider/Assistant																	C
Child Development																	P
Community Organization and Advocacy																	A
Corrections and Criminal Justice, Other																	P
Corrections																	C
Criminal Justice/Police Science																	AP
Criminal Justice/Safety Studies		AP	A	A													C
Culinary Arts/Chef Training																	A
Early Childhood Education and Teaching		AP	C	P													A
Education, General																	AP
Education/Teaching of Individuals with Speech or Language Impairments																	A
Elementary Education and Teaching																	AP
Fire Protection and Safety Technology/Technician																	A
Fire Science/Fire-fighting		A	A	A	AP	AP											AP
Funeral Service and Mortuary Science, General																	A
Gerontology																	P
Health and Physical Education, General																	C

A Associates Degrees

P - Certificates 12-44 credits (Certificate and Program Dependence: 44 credits or more)

C Certificates 45+ credits (Certificate and Program Dependence: 45 credits or more)

APPROVED CAREER AND TECHNICAL EDUCATION PROGRAMS

PROGRAM	Blue Mountain	Central Oregon	Chemeketa	Clatsop	Columbia College	Klamath	Lane	Linn Benton	Mt Hood	Oregon Coast	Portland	Regina	Southwestern	Tillamook Bay	Treasure Valley	Umpqua
HUMAN RESOURCES (cont.)																
Human Development and Family Studies, General							C									
Human Resources Development							C									
Human Services, General																A
Juvenile Corrections	C	A	C					C	C		C			C	C	
Kindergarten/Preschool Education and Teaching																
Legal Assistant/Paralegal										A	C					
Library Assistant/Technician										A	C					
Public Administration										A	C					
Security and Protective Services, Other										C						
Sign Language Interpretation and Translation										A	C					
Social Work			A	AP	C					A						
Substance Abuse/Addiction Counseling		A	A	C						AP	C			A		
Teacher Assistant/Aide	AP	C			C		C	AP	C	A	C			A	C	
UNDEFINED					C											
INDUSTRIAL AND ENGINEERING SYSTEMS																
Aircraft Powerplant Technology/Technician										C						
Airframe Mechanics and Aircraft Maintenance Technology/Technician									A	C						
Airline/Commercial/Professional Pilot and Flight Crew	A						A	A		A			AP	A		
Architectural Drafting and Architectural CAD/CADD										A						
Architectural Engineering Technology/Technician									AP							
Autobody/Collision and Repair Technology/Technician			C	AP			A	C		AP	C					
Automobile/Automotive Mechanics Technology/Technician	AP	C	AP	AP	AP	C	AP	A	C	AP	A	C	C			
Basic Skills, Other										C						
Biomedical/Medical Engineering										A						
Building/Construction Site Management/Manager										A						
Building/Home/Construction Inspection/Inspector										A						
CAD/CADD Drafting and/or Design Technology/Technician	A	C		A	C											
Career Exploration/Awareness Skills	P		C	C			C	P	C	P	C	C	P			
Carpentry/Carpenter														A	C	
Cartography							AP									
Civil Engineering Technology/Technician	A							C	A		A	C				
Computer and Information Sciences, General	P	A	C	AP						A				AP	C	
Computer and Information Systems Security										A						
Computer Programming, Specific Applications			A	C			AP	AP		AP	C					
Computer Programming/Programmer, General							AP									
Computer Support Specialist								A						AP	C	
Computer Systems Networking and Telecommunications		A		A	C					A	C					
Computer Technology/Computer Systems Technology			A					AP								
Computer/Information Technology Services Administration and Management, Other														P		
Construction Engineering Technology/Technician									A	C			AP	AP	C	
Construction Trades, General	AP	C	A	A	AP	C	A		A	C	AP		AP	A	C	
Customer Service Management			A											P		
Data Modeling/Warehousing and Database Administration										A	C					
Diesel Mechanics Technology/Technician	AP	P				AP	A	C	C		AP	A	C	C		
Drafting and Design Technology/Technician, General	AP	C	A	C				A	C		P			AP		
Electrical and Power Transmission Installation/Installer, General	AP	C	A	AP	C	A		A	AP	AP	AP	C	C	AP	AP	C
Electrical, Electronic and Communications Engineering Technology/Technician			AP	C		A				AP	A	C				
INDUSTRIAL AND ENGINEERING SYSTEMS (cont.)																
Electrical, Electronics and Communications Engineering															A	
Electrical/Electronics Drafting and Electrical/Electronics CAD/CADD																P
Electrician															P	
Electromechanical and Instrumentation and Maintenance Technologies/Technicians, Other															A	
Energy Management and Systems Technology/Technician													A			C
Engine Machinist															C	
Engineering, Other															AP	
Environmental Design/Architecture																
Environmental Engineering Technology/Environmental Technology															A	C
Fire Science/Fire-fighting	A	A	A	C	AP	AP							AP	P	AP	C
Heating, Air Conditioning and Refrigeration Technology/Technician (A/C/HVAC/HRV/HVAC/HVAC/AC Technology)															A	
Heating, Air Conditioning, Ventilation and Refrigeration Maintenance Technology/Technician (HAC, HACR, HVAC, HVACR)																AP
Heavy Equipment Maintenance Technology/Technician															A	
Historic Preservation and Conservation															AP	C
Industrial Engineering															AP	C
Industrial Mechanics and Maintenance Technology															AP	C
Industrial Production Technologies/Technicians, Other															P	
Industrial Radiologic Technology/Technician															AP	C
Industrial Technology/Technician															AP	C
Industrial/Manufacturing Technology/Technician															P	
Information Science/Studies															C	
Information Technology															A	C
Instrumentation Technology/Technician															AP	
Logistics and Materials Management															P	C
Machine Shop Technology/Assistant															AP	C
Machine Tool Technology/Machinist															AP	C
Management Information Systems, General															A	
Manufacturing Technology/Technician															AP	C
Mechanical Drafting and Mechanical Drafting CAD/CADD																A
Mechanical Engineering/Mechanical Technology/Technician															A	C
Mechanics and Repairs, General															P	C
Quality Control Technology/Technician																C
Science Technologies/Technicians, Other															A	C
Solar Energy Technology/Technician																A
Surveying Technology/Surveying															A	C
System Administration/Administrator																
System, Networking, and LAN/WAN Management/Manager															AP	
Truck and Bus Driver/Commercial Vehicle Operation															P	P
UNDEFINED																C
Water Quality and Wastewater Treatment Management and Recycling Technology/Technician															AP	C
Web Page, Digital/Multimedia and Information Resources Design															A	C
Welding Technology/Welder															P	C

Employment Projections Summary, 2012-2022 (Lane)

Oregon Employment Department, Workforce and Economic Research

Occupational Group	2012		2022		Employment Change	Percent Change	Growth		Replacement		Total
	Employment	Employment	Employment	Openings			Openings	Openings	Openings		
Management, Business, and Financial	11,159	12,858	1,699	15.2%	1,703	2,280	3,983				
Professional and Related	24,587	28,063	3,476	14.1%	3,491	4,953	8,444				
Health Care	12,375	14,835	2,460	19.9%	2,460	2,462	4,922				
Service	24,752	29,472	4,720	19.1%	4,731	7,671	12,402				
Sales and Related	15,106	17,007	1,901	12.6%	1,929	4,495	6,424				
Office and Administrative Support	23,752	26,332	2,580	10.9%	2,729	5,106	7,835				
Farming, Fishing, and Forestry	1,556	1,913	357	22.9%	357	359	716				
Construction and Extraction	4,471	5,505	1,034	23.1%	1,034	750	1,784				
Installation, Maintenance, and Repair	5,104	5,816	712	13.9%	722	1,211	1,933				
Production	8,145	9,322	1,177	14.5%	1,205	1,700	2,905				
Transportation and Material Moving	9,647	10,944	1,297	13.4%	1,297	2,212	3,509				
Nonclassifiable	1,650	1,831	181	11.0%	181	0	181				
Total All Occupations	142,304	163,898	21,594	15.2%	21,839	33,199	55,038				

Top 20 occupations by largest percent change by 2022 in Lane County
Oregon Employment Department, Workforce and Economic Research

Standard Occupational Classification Code and Title	2012 Employment	2022 Employment	Change	Percent Change	On-the-Job Training	Education	Work Experience	On-the-Job Training
29-2053 Psychiatric Technicians	30	93	63	210.0%	63	3	66	Short-term on-the-job training
31-1013 Psychiatric Aides	42	126	84	200.0%	84	8	92	Short-term on-the-job training
19-3092 Geographers	1	2	1	100.0%	1	0	1	None
19-4041 Geological and Petroleum Technicians	1	2	1	100.0%	1	0	1	Moderate-term on-the-job training
25-4011 Archivists	1	2	1	100.0%	1	0	1	None
29-1125 Recreational Therapists	10	20	10	100.0%	10	2	12	None
53-5022 Motorboat Operators	1	2	1	100.0%	1	0	1	Short-term on-the-job training
47-2021 Brickmasons and Blockmasons	16	26	10	62.5%	10	2	12	Apprenticeship
47-3011 Brickmasons, Stonemasons, and Tile and Marble Setters' Helpers	13	21	8	61.5%	8	2	10	Short-term on-the-job training
27-1027 Set and Exhibit Designers	2	3	1	50.0%	1	1	2	None
29-9012 Occupational Health and Safety Technicians	4	6	2	50.0%	2	3	3	Moderate-term on-the-job training
39-7012 Travel Guides	2	3	1	50.0%	1	1	2	Moderate-term on-the-job training
47-2132 Insulation Workers, Mechanical	4	6	2	50.0%	2	1	3	Apprenticeship
51-4012 Numerical Tool and Process Control Programmers	58	87	29	50.0%	29	16	45	Long-term on-the-job training
43-4131 Reservation and Transportation Ticket Agents and Travel Clerks	87	129	42	48.3%	42	12	54	Short-term on-the-job training
27-2032 Choreographers	9	13	4	44.4%	4	3	7	Long-term on-the-job training
15-2041 Statisticians	43	62	19	44.2%	19	14	33	None
15-1011 Agents and Business Managers of Artists, Performers, and Athletes	7	10	3	42.9%	3	2	5	None
47-1131 Insulation Workers, Floor, Ceiling, and Wall	36	51	15	41.7%	15	5	20	Short-term on-the-job training
45-4022 Logging Equipment Operators	27	38	11	40.7%	11	35	11	Moderate-term on-the-job training

Standard Occupational Classification Code and Title	2012 Employment	2022 Employment	Change	Percent Change	Growth	Replacement	Total	Typical Entry Level Education	Competitive Education	Work Experience	On-the-Job	2014 Lane Wages	Oregon Wages
CIS/CIT													
15-1121 Computer Systems Analysts	205	254	49	23.9%	49	32	81	Bachelor's degree	Bachelor's degree	None	None	\$ 73,802	\$2,811
15-1131 Computer Programmers	275	285	20	7.3%	20	72	92	Bachelor's degree	Bachelor's degree	None	None	\$ 50,986	\$3,806
15-1132 Software Developers, Applications	319	397	78	24.5%	78	41	119	Bachelor's degree	Bachelor's degree	None	None	\$ 83,521	\$8,937
15-1133 Software Developers, Systems Software	57	65	8	14.0%	8	7	15	Bachelor's degree	Bachelor's degree	None	None	\$ 84,140	\$10,395
15-1151 Computer User Support Specialists	890	1,101	211	23.7%	211	140	351	Postsecondary training (non-degree)	Bachelor's degree	None	Moderate	\$ 46,178	\$7,342
15-1152 Computer Network Support Specialists	58	60	2	3.5%	2	9	11	Bachelor's degree	Bachelor's degree	None	None	\$ 57,585	\$1,808
15-1199 Computer Occupations, All Other	329	387	58	17.6%	58	52	110	Postsecondary training (non-degree)	Bachelor's degree	None	None	\$ 63,011	\$10,820
43-9011 Computer Operators	32	29	-3	-9.4%	0	3	3	High school diploma or equivalent	High school diploma or equivalent	None	Moderate	\$ 31,975	\$3,191
Drafters													
17-3012 Electrical and Electronics Drafters	21	22	1	4.8%	1	3	4	Postsecondary training (non-degree)	Postsecondary training (non-degree)	None	None	\$ 56,099	\$2,133
17-3011 Architectural and Civil Drafters	94	99	5	5.3%	5	13	18	Postsecondary training (non-degree)	Postsecondary training (non-degree)	None	None	\$ 44,533	\$1,445
17-3013 Mechanical Drafters	65	67	2	3.1%	2	9	11	Postsecondary training (non-degree)	Postsecondary training (non-degree)	None	None	\$ 45,583	\$7,001
17-3019 Drafters, All Other	26	31	5	19.2%	5	3	8	Postsecondary training (non-degree)	Postsecondary training (non-degree)	None	None	\$ 41,498	\$3,237
Early Childhood													
11-9031 Preschool and Child Care Administrators	73	84	11	15.1%	11	19	30	Associate's degree	Bachelor's degree	Less than 5	None	\$ 41,903	\$8,313
25-2011 Preschool Teachers, Except Special Education	502	587	85	16.9%	85	141	228	Associate's degree	Bachelor's degree	None	None	\$ 27,279	\$7,282
25-9041 Teacher Assistants	2,198	2,482	284	13.4%	284	499	783	High school diploma or equivalent	Associate's degree	None	None	\$ 26,957	\$7,244
39-9011 Childcare Workers	520	591	71	13.7%	71	153	224	High school diploma or equivalent	Postsecondary training (non-degree)	None	Short-term	\$ 2,442	\$2,723
Nursing and MOA													
29-1141 Registered Nurses	2,674	3,109	435	16.3%	435	518	953	Associate's degree	Bachelor's degree	None	None	\$ 76,923	\$1,484
31-1014 Nursing Assistants	1,293	1,490	197	15.2%	197	246	443	Postsecondary training (non-degree)	Postsecondary training (non-degree)	None	None	\$ 28,071	\$7,938
31-9092 Medical Assistants	563	662	97	17.2%	97	108	205	Postsecondary training (non-degree)	Postsecondary training (non-degree)	None	None	\$ 32,781	\$4,162
31-9093 Medical Equipment Preparers	138	153	15	10.9%	15	28	41	Postsecondary training (non-degree)	Postsecondary training (non-degree)	None	Moderate	\$ 30,915	\$5,598
Culinary/Hospitality													
11-9051 Food Service Managers	255	293	38	14.9%	38	46	84	High school diploma or equivalent	Associate's degree	Less than 5	None	\$ 31,979	\$7,048
11-9081 Lodging Managers	58	68	10	17.2%	10	18	28	High school diploma or equivalent	Associate's degree	Less than 5	None	\$ 29,775	\$8,931
35-1011 Chefs and Head Cooks	95	110	15	15.8%	15	15	30	Postsecondary training (non-degree)	Postsecondary training (non-degree)	5 years +	None	\$ 22,995	\$2,440
35-1012 Supervisors and Managers of Food Preparation and Serving Workers	789	997	208	26.4%	208	223	431	High school diploma or equivalent	Postsecondary training (non-degree)	Less than 5	None	\$ 44,140	\$5,616
35-2014 Cooks, Institution and Cafeteria	518	616	98	18.9%	98	102	200	Less than high school	High school diploma or equivalent	None	Short-term	\$ 36,168	\$9,120
35-2012 Cooks, Restaurant	907	1,173	266	29.3%	266	179	445	Less than high school	High school diploma or equivalent	None	Moderate	\$ 22,595	\$6,931
35-2021 Food Preparation Workers	1,280	1,462	182	14.2%	182	367	549	Less than high school	High school diploma or equivalent	None	Short-term	\$ 21,458	\$3,240
51-3011 Bakers	308	346	38	12.3%	38	75	113	Less than high school	High school diploma or equivalent	None	Long-term	\$ 25,306	\$9,396
Electronics													
17-3023 Electrical and Electronics Engineering Technicians	69	66	-3	-4.4%	0	14	14	Associate's degree	Associate's degree	None	None	\$ 59,159	\$6,728
17-3024 Electro-Mechanical Technicians	5	5	0	0.0%	0	1	1	Associate's degree	Associate's degree	None	None		\$8,129
17-3029 Engineering Technicians, Except Drafters, All Other	81	90	9	11.1%	9	17	26	Associate's degree	Associate's degree	None	None	\$ 57,561	\$8,796
47-2111 Electricians	539	631	92	17.1%	92	102	194	High school diploma or equivalent	Postsecondary training (non-degree)	None	Apprentice	\$ 56,448	\$9,139
47-3013 Electrician's Helpers	9	11	2	22.2%	2	1	3	High school diploma or equivalent	High school diploma or equivalent	None	Short-term		\$8,804
48-1011 Supervisors and Managers of Mechanics, Installers, and Repairers	418	456	40	9.6%	40	113	153	High school diploma or equivalent	Postsecondary training (non-degree)	Less than 5	None	\$ 34,404	\$6,798
49-2082 Electric Motor, Power Tool, and Related Repairs	27	29	2	7.4%	2	5	7	Postsecondary training (non-degree)	Postsecondary training (non-degree)	None	Long-term		\$3,501
49-2093 Electrical and Electronics Installers and Repairers, Transportation Equipment	14	15	1	7.1%	1	3	4	Postsecondary training (non-degree)	Associate's degree	None	Long-term		\$7,484
49-2094 Electrical and Electronics Repairers, Commercial and Industrial Equipment	66	75	9	13.6%	9	13	22	Postsecondary training (non-degree)	Associate's degree	None	Long-term	\$ 58,230	\$3,104
49-2095 Electrical and Electronics Repairers, Powerhouse, Substation and Relay	19	19	0	0.0%	0	4	4	Postsecondary training (non-degree)	Postsecondary training (non-degree)	None	Long-term		
49-2096 Electronic Equipment Installers and Repairers, Motor Vehicles	36	34	-2	-5.6%	0	3	3	Postsecondary training (non-degree)	Postsecondary training (non-degree)	None	Short-term		
49-2097 Electronic Home Entertainment Equipment Installers and Repairers	25	23	-2	-8.0%	0	9	9	Postsecondary training (non-degree)	Postsecondary training (non-degree)	None	None		\$8,620
49-9031 Home Appliance Repairers	20	24	4	20.0%	4	6	10	High school diploma or equivalent	Postsecondary training (non-degree)	None	Moderate	\$ 34,551	\$7,307
49-9041 Industrial Machinery Mechanics	344	466	122	35.5%	122	59	221	High school diploma or equivalent	Postsecondary training (non-degree)	None	Long-term	\$ 50,840	\$4,742

Standard Occupational Classification Code and Title

SOC/IT	2012 Employment	2022 Employment	Employment Change	Percent Change	Growth Openings	Replacement Openings	Total Openings	Typical Entry Level Education	Competitive Education	Work Experience	On-the-Job Training	2014 Oregon Wages
15-1121 Computer Systems Analysts	4,794	6,110	1,316	27.5%	1,316	753	2,069	Bachelor's degree	Bachelor's degree	None	None	\$ 39,191
15-1131 Computer Programmers	2,999	3,344	345	11.5%	345	345	1,128	Bachelor's degree	Bachelor's degree	None	None	\$ 83,371
15-1132 Software Developers, Applications	7,563	9,610	2,047	27.1%	2,047	970	3,017	Bachelor's degree	Bachelor's degree	None	None	\$ 73,606
15-1133 Software Developers, Systems Software	3,471	4,015	544	15.7%	544	445	989	Bachelor's degree	Bachelor's degree	None	None	\$ 85,997
15-1151 Computer User Support Specialists	7,779	9,647	1,868	24.0%	1,868	1,222	3,090	Postsecondary training	Postsecondary training	None	Moderate-term on-the-job training	\$ 48,848
15-1152 Computer Network Support Specialists	997	1,033	41	4.1%	41	157	198	Bachelor's degree	Bachelor's degree	None	None	\$ 61,908
15-1159 Computer Occupations, All Other	5,003	5,911	908	18.2%	908	786	1,694	Postsecondary training	Postsecondary training	None	Moderate-term on-the-job training	\$ 60,820
43-9011 Computer Operators	635	638	3	0.4%	0	62	62	High school diploma or equivalent	High school diploma or equivalent	None	Moderate-term on-the-job training	\$ 20,584
Drafting												
17-3011 Architectural and Civil Drafters	1,267	1,301	34	2.7%	34	169	203	Postsecondary training	Postsecondary training	None	None	\$ 51,440
17-3012 Electrical and Electronics Drafters	265	291	26	9.8%	26	34	70	Postsecondary training	Postsecondary training	None	None	\$ 52,335
17-3013 Mechanical Drafters	667	697	30	4.5%	30	89	119	Postsecondary training	Postsecondary training	None	None	\$ 50,001
17-3018 Drafters, All Other	416	498	82	19.7%	82	55	137	Postsecondary training	Postsecondary training	None	None	\$ 53,247
Early Childhood Education												
11-9031 Preschool and Child Care Administrators	669	788	119	17.8%	119	178	297	Associate's degree	Associate's degree	Less than 5 years	None	\$ 46,313
25-2011 Preschool Teachers, Except Special Education	5,344	6,357	1,013	19.0%	1,013	1,500	2,513	Associate's degree	Associate's degree	None	None	\$ 27,92
25-9041 Teacher Assistants	17,376	19,678	2,300	13.2%	2,300	3,942	6,242	High school diploma or equivalent	High school diploma or equivalent	None	None	\$ 20,584
39-9011 Childcare Workers	5,369	6,130	761	14.2%	761	1,576	2,339	High school diploma or equivalent	High school diploma or equivalent	None	Short-term on-the-job training	\$ 22,440
Nursing & MOA												
29-1141 Registered Nurses	30,677	35,636	4,959	16.2%	4,959	5,948	10,907	Associate's degree	Associate's degree	None	None	\$ 81,481
31-1014 Nursing Assistants	13,546	16,308	2,762	20.4%	2,762	2,576	5,338	Postsecondary training	Postsecondary training	None	None	\$ 27,938
31-9092 Medical Assistants	7,681	9,744	2,063	26.7%	2,063	1,467	3,520	Postsecondary training	Postsecondary training	None	None	\$ 34,162
31-9093 Medical Equipment Preparers	1,207	1,381	174	14.4%	174	230	404	Postsecondary training	Postsecondary training	None	Moderate-term on-the-job training	\$ 28,088
Culinary/Hospitality												
11-9051 Food Service Managers	2,767	3,254	487	17.6%	487	494	981	High school diploma or equivalent	High school diploma or equivalent	Less than 5 years	None	\$ 47,046
11-9081 Lodging Managers	751	832	81	10.8%	81	231	312	High school diploma or equivalent	High school diploma or equivalent	Less than 5 years	None	\$ 23,931
35-1011 Chefs and Head Cooks	1,281	1,493	212	16.6%	212	208	420	Postsecondary training	Postsecondary training	None	None	\$ 26,249
35-1012 Supervisors and Managers of Food Preparation and Serving Workers	9,473	11,180	1,707	18.0%	1,707	2,673	4,380	High school diploma or equivalent	High school diploma or equivalent	None	None	\$ 45,616
35-2012 Cooks, Institution and Cafeteria	5,344	6,363	1,019	19.1%	1,019	1,054	2,073	Less than high school diploma or equivalent	Less than high school diploma or equivalent	Short-term on-the-job training	Short-term on-the-job training	\$ 120
35-2014 Cooks, Restaurant	14,535	17,103	2,568	17.7%	2,568	2,887	5,435	Less than high school diploma or equivalent	Less than high school diploma or equivalent	Short-term on-the-job training	Short-term on-the-job training	\$ 28,848
35-2021 Food Preparation Workers	11,728	13,514	1,786	15.2%	1,786	3,362	5,148	Less than high school diploma or equivalent	Less than high school diploma or equivalent	Short-term on-the-job training	Short-term on-the-job training	\$ 28,882
51-3011 Bakers	2,373	2,698	325	13.7%	325	575	900	Less than high school diploma or equivalent	Less than high school diploma or equivalent	Long-term on-the-job training	Long-term on-the-job training	\$ 268
Electronics												
17-3023 Electrical and Electronics Engineering Technicians	2,777	2,969	192	7.0%	192	575	767	Associate's degree	Associate's degree	None	None	\$ 59,728
17-3024 Electro-Mechanical Technicians	280	309	29	10.4%	29	58	87	Associate's degree	Associate's degree	None	None	\$ 48,679
17-3029 Engineering Technicians, Except Drafters, All Other	1,658	1,786	128	7.7%	128	345	473	Associate's degree	Associate's degree	None	None	\$ 56,796
47-2111 Electricians	7,270	8,559	1,289	17.7%	1,289	1,370	2,659	High school diploma or equivalent	High school diploma or equivalent	None	Apprenticeship	\$ 69,152
47-3013 Electricians, Helpers	193	230	37	19.2%	37	30	67	High school diploma or equivalent	High school diploma or equivalent	None	Short-term on-the-job training	\$ 38,674
49-1011 Supervisors and Managers of Mechanics, Installers, and Repairers	4,472	4,950	478	10.7%	478	1,209	1,687	High school diploma or equivalent	High school diploma or equivalent	None	Short-term on-the-job training	\$ 63,738
49-2092 Electric Motor, Power Tool, and Related Repairs	244	270	26	10.7%	26	43	69	Postsecondary training	Postsecondary training	None	Long-term on-the-job training	\$ 40
49-2093 Electrical and Electronics Installers and Repairers, Transportation Equipment	232	259	27	11.6%	27	47	74	Postsecondary training	Postsecondary training	None	Long-term on-the-job training	\$ 464
49-2094 Electrical and Electronics Repetitors, Commercial and Industrial Equipment	533	1,075	142	15.2%	142	188	330	Postsecondary training	Postsecondary training	None	Long-term on-the-job training	\$ 104
49-2095 Electrical and Electronics Repetitors, Powerhouse, Substation, and Relay	209	223	14	6.7%	14	42	56	Postsecondary training	Postsecondary training	None	Long-term on-the-job training	\$ 104
49-2096 Electronic Equipment Installers and Repairers, Motor Vehicles	252	237	-15	-6.0%	0	23	23	Postsecondary training	Postsecondary training	None	Short-term on-the-job training	\$ 36,620
49-2097 Electronic Home Entertainment Equipment	311	308	-3	-1.0%	0	110	110	Postsecondary training	Postsecondary training	None	None	\$ 36,620
49-9031 Home Appliance Repairers	537	598	61	11.3%	61	172	233	High school diploma or equivalent	High school diploma or equivalent	None	Moderate-term on-the-job training	\$ 38,608
49-9041 Industrial Machinery Mechanics	3,723	4,946	1,223	32.9%	1,223	1,075	2,298	High school diploma or equivalent	High school diploma or equivalent	None	Long-term on-the-job training	\$ 742
51-2022 Electrical and Electronic Equipment Assemblers	4,519	4,833	314	7.0%	314	548	862	High school diploma or equivalent	High school diploma or equivalent	None	Short-term on-the-job training	\$ 45
Avionics												
49-2091 Avionics Technicians	82	87	5	6.1%	5	17	22	Postsecondary training	Postsecondary training	None	None	\$ 30,458
49-3011 Aircraft Mechanics and Service Technicians	1,095	1,137	42	4.8%	42	291	343	Postsecondary training	Postsecondary training	None	None	\$ 55,628
53-2011 Airframe Mechanics, Aircraft Engines, and Flight Engineers	542	568	26	4.8%	26	157	183	Associate's degree	Associate's degree	Less than 5 years	Moderate-term on-the-job training	\$ 74,848
53-2012 Commercial Pilots, Except Airline Pilots	675	700	25	3.7%	25	195	220	Associate's degree	Associate's degree	None	Moderate-term on-the-job training	\$ 64,108
Auto Body and Paint												
49-3021 Automobile Body and Repair Technicians	1,374	1,540	166	12.1%	166	264	430	High school diploma or equivalent	High school diploma or equivalent	None	Moderate-term on-the-job training	\$ 44,848
49-3023 Automotive Service Technicians and Mechanics	5,732	6,738	1,006	17.5%	1,006	1,449	2,455	Postsecondary training	Postsecondary training	None	Long-term on-the-job training	\$ 174

