

# Labor Market Analysis for Program Recommendation Neurodiagnostic Technician Occupations Foothill College

Prepared by the Bay Region Center of Excellence for Labor Market Research

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#### Recommendation

Based on all available data, there appears to be an "undersupply" of Neurodiagnostic Technician workers compared to the demand for this cluster of occupations in the Bay Region and in the Silicon Valley Sub-Region (Santa Clara County). There is a projected annual gap of about 513 students in the Bay Region and 114 students in the Silicon Valley Sub-Region.

#### Introduction

This report provides student outcomes data on employment and earnings for TOP 1212.00 - Electro-Neurodiagnostic Technology programs in the state and region. It is recommended that this data be reviewed to better understand how outcomes for students taking courses on this TOP code compare to potentially similar programs at colleges in the state and region, as well as to outcomes across all CTE programs at Foothill College and in the region.

This report profiles Neurodiagnostic Technician Occupations in the 12 county Bay Region and in the Silicon Valley Sub-Region for program recommendation at Foothill College. There is no labor market data for Neurodiagnostic Technologists (29-2099.01) occupation. Therefore, the report includes the broader occupation, Health Technologists and Technicians, All Other (29-2099), which encompasses this position. However, analyses that depend on job posting data include both occupations, as shown in Tables 3, 4, 9, 10, and 11.

 Health Technologists and Technicians, All Other (29-2099): All health technologists and technicians not listed separately.

Entry-Level Educational Requirement: Postsecondary nondegree award

Training Requirement: None

Percentage of individuals 25+ with an associate degree, certificate, or some postsecondary coursework as their highest level of education attainment: 49%

Neurodiagnostic Technologists (29-2099.01): Conduct electroneurodiagnostic (END) tests such as
electroencephalograms, evoked potentials, polysomnograms, or electronystagmograms. May perform nerve
conduction studies.

Entry-Level Educational Requirement: Postsecondary nondegree award

Training Requirement: None

Percentage of individuals 25+ with an associate degree, certificate, or some postsecondary coursework as their highest level of education attainment: NA

# **Occupational Demand**

Table 1. Employment Outlook for Neurodiagnostic Technician Occupations in the Bay Region

Occupation	2023 Jobs	2028 Jobs	5-yr Change	5-yr % Change	5-yr Total Openings	Annual Openings	25% Hourly Earning	Median Hourly Wage
Health Technologists and Technicians, All Other	4,937	5,740	803	16%	2,565	513	\$26	\$32
Total	4,937	5,740	803	16%	2,565	513	\$26	\$32

Source: Lightcast 2024.3

The Bay Region includes: Alameda, Contra Costa, Marin, Monterey, Napa, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano and Sonoma Counties

Table 2. Employment Outlook for Neurodiagnostic Technician Occupations in the Silicon Valley Sub-Region

Occupation	2023 Jobs	2028 Jobs	5-yr Change	5-yr % Change	5-yr Total Openings	Annual Openings	25% Hourly Earning	Median Hourly Wage
Health Technologists and Technicians, All Other	1,196	1,345	149	12%	568	114	\$28	\$33
Total	1,196	1,345	149	12%	568	114	\$28	\$33

Source: Lightcast 2024.3

Silicon Valley Sub-Region includes: Santa Clara County

# Job Postings in the Bay Region and Silicon Valley Sub-Region

Table 3. Number of Job Postings by Occupation for the latest 12 months

Occupation	Bay Region	Silicon Valley
Health Technologists and Technicians, All Other	2,251	437
Neurodiagnostic Technologists	133	12

Source: Lightcast 2024.4; "Job Posting Analytics." Dec. 2023 - Nov. 2024

Table 4a. Top Job Titles in Job Postings for Neurodiagnostic Technician Occupations in the Bay Region

Title	Bay	Title	Bay
Patient Care Technicians	361	Emergency Room Technicians	34
Emergency Medical Technicians	220	Medical Technicians	34
Emergency Department Technicians	120	Dialysis Patient Care Technicians	31
Polysomnographers	77	Obstetrics Technicians	31
Certified Clinical Hemodialysis Technicians	76	Hospital Service Technicians	29

Title	Bay	Title	Bay
Orthopedic Technicians	49	Neurodiagnostic Technicians	27
Telemetry Technicians	44	AMR Emergency Medical Technicians	25
Polysomnographic Technologists	43	Emergency Technicians	25
Web Technicians	39	Imaging Technicians	25

Source: Lightcast 2024.4; "Job Posting Analytics." Dec. 2023 - Nov. 2024

Table 4b. Top Job Titles in Job Posting for Neurodiagnostic Technician Occupations in the Silicon Valley Sub-Region

Title	Silicon Valley	Title	Silicon Valley
Patient Care Technicians	58	Orthopedic Technicians	11
Emergency Medical Technicians	32	Health Technicians	9
Certified Clinical Hemodialysis Technicians	21	Emergency Services Technicians	8
Obstetrics Technicians	21	Hospital Service Technicians	8
Emergency Department Technicians	19	Hospitalists	8
Polysomnographic Technologists	15	Neurodiagnostic Technicians	8
Emergency Technicians	12	Diagnosticians	7
Web Technicians	12	Travel Technologists	7
Medical Technicians	11	Dialysis Patient Care Technicians	6

Source: Lightcast 2024.4; "Job Posting Analytics." Dec. 2023 - Nov. 2024

# **Industry Concentration**

Table 5. Industries Hiring for Neurodiagnostic Technician Occupations in the Bay Region

Industry - 6 Digit NAICS (No. American Industry Classification) Codes	Jobs in Industry (2023)	Jobs in Industry (2028)	% Change (2023-28)	% Occupation Group in Industry (2023)
HMO Medical Centers	2,102	2,493	19%	43%
General Medical and Surgical Hospitals	623	638	3%	13%
All Other Outpatient Care Centers	419	552	32%	8%
Freestanding Ambulatory Surgical and Emergency Centers	289	292	1%	6%
Offices of Physicians (except Mental Health Specialists)	283	284	0%	6%
Hospitals (Local Government)	207	246	19%	4%

Industry - 6 Digit NAICS (No. American Industry Classification) Codes	Jobs in Industry (2023)	Jobs in Industry (2028)	% Change (2023-28)	% Occupation Group in Industry (2023)
Kidney Dialysis Centers	158	166	5%	3%
Hospitals (State Government)	92	111	20%	2%
Medical Laboratories	80	89	12%	2%
Family Planning Centers	59	65	11%	1%

Source: Lightcast 2024.4

Table 6. Top Employers Posting Neurodiagnostic Technician Occupations in the Bay Region and the Silicon Valley Sub-Region

Employer	Bay	Employer	Silicon Valley
Kaiser Permanente	204	Kaiser Permanente	57
DaVita	176	Satellite Healthcare	36
Sutter Health	102	El Camino Health	24
Satellite Healthcare	99	Stanford Health Care	15
University of California	96	Actalent	14
Fresenius	90	DaVita	13

Source: Lightcast 2024.4; "Job Posting Analytics." Dec. 2023 - Nov. 2024

## **Educational Supply**

There are no community colleges in the Bay Region issuing awards (2021-23) on TOP 1212.00 - Electro-Neurodiagnostic Technology. There are no other educational institutions in the Bay Region issuing awards on average annually (2020-22) on CIP 51.0903- Electroneurodiagnostic/Electroencephalographic Technology/Technologist.

#### Gap Analysis

Based on the data included in this report, there is a labor market gap in the Bay Region with 513 annual openings for the Neurodiagnostic Technician occupational cluster and no annual (3-year average) awards for an annual undersupply of 513 students. In the Silicon Valley Sub-Region, there is also a gap with 114 annual openings and no annual (3-year average) awards for an annual undersupply of 114 students.

## **Student Outcomes**

Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 1212.00 - Electro-Neurodiagnostic Technology

Metric Outcomes	Bay All CTE Program	Foothill College All CTE Program	State 1212.00	Bay 1212.00	Silicon Valley 1212.00	Foothill College1212.00
Students with a Job Closely Related to Their Field of Study	74%	88%	100%	NA	NA	NA
Median Annual Earnings for SWP Exiting Students	\$53,090	\$73,174	\$63,693	NA	NA	NA
Median Change in Earnings for SWP Exiting Students	24%	42%	55%	NA	NA	NA
Exiting Students Who Attained the Living Wage	54%	66%	68%	NA	NA	NA

Source: Launchboard Strong Workforce Program Median of 2018 to 2021.

#### **Skills and Education**

Table 9. Top Skills in Job Postings for Neurodiagnostic Technician Occupations in the Bay Region

Skill	Posting	Skill	Posting
Nursing	586	Obstetrics And Gynaecology	226
Vital Signs	396	Hemodialysis	225
Medical Terminology	371	Patient Treatment	224
Patient Transport	347	Emergency Departments	216
Direct Patient Care	333	Sterilization	209
Dialysis	332	End-Stage Renal Disease	198
Medical Records	312	Infection Control	194
Patient Observation	280	Medical Ultrasonography	191
Cardiopulmonary Resuscitation (CPR)	262	Medical Assistance	190
Electrocardiography	239	Patient Assistance	190

Source: Lightcast 2024.4; "Job Posting Analytics." Dec. 2023 - Nov. 2024

Table 10. Education Requirements for Neurodiagnostic Technician Occupations in the Bay Region

Education Level	Job Postings	% of Total
High school or GED	1,327	71%
Associate degree	296	16%
Bachelor's degree & higher	241	13%

Source: Lightcast 2024.4; "Job Posting Analytics." Dec. 2023 - Nov. 2024

Note: 35% of records have been excluded because they do not include a degree level. As a result, the chart above may not be representative of the full sample.

# Methodology

Occupations for this report were identified by use of job descriptions and skills listed in O\*Net. Labor demand data is sourced from Lightcast occupation and job postings data. Educational supply and student outcomes data is retrieved from multiple sources, including CCCCO Data Mart and CTE Launchboard.

#### Sources

O\*Net Online
Lightcast
CTE LaunchBoard www.calpassplus.org
Launchboard
Statewide CTE Outcomes Survey
Employment Development Department Unemployment Insurance Dataset
Living Insight Center for Community Economic Development
Chancellor's Office MIS system

#### **Contacts**

For more information, please contact:

- Yumi Huang, Research Analyst, Bay Region Center of Excellence, <u>yuhuang@cabrillo.edu</u> or (831) 275-0043
- Marcela Reyes, Director, Research and Center of Excellence, <u>mareyes@cabrillo.edu</u> or (831) 219-8875