Career Maps

San Francisco Bay Area
For Students and Recent Graduates

Marshall Street
AT SUMMIT PUBLIC SCHOOLS
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- Getting Started Quiz
- Don’t see a career you like?

## The Career Maps

- Cloud Computing
- Construction / Trades
- Cybersecurity
- Dentistry
- Education
- Electronics Technology
- Facilities Management
- Nursing
- Sales
- Software Engineering
About these maps

The career maps are overviews of the **top 10 most in-demand careers** in the **San Francisco Bay Area**. The top 10 careers were determined as those with the highest number of projected job openings, with salaries over $60,000 / year, and which could be accessed both with or without a four-year degree.

■ **Objective**

The maps are meant to provide high-level trends about careers. You may find that individual companies within these career fields have different role titles, job requirements, or entry points than are listed in the maps. That’s normal because jobs and companies change and trends don’t always reflect an individual’s experience of a career field. Approach these maps with curiosity and expect that real life will be different than what is on the maps. Use the maps as a tool to help you decide which careers you’d like to research further.

■ **Context**

The maps were researched in 2020 from January through June. This means the career information is reflective of both before and during COVID19 shelter-in-place. Shelter-in-place continues to impact the way businesses and colleges operate. Thus, make sure to verify the career and training pathways by talking with people in the field before you decide to pursue that pathway.
What you can find in the maps

1. **OVERVIEW**
   Quick characteristics about the career field, including common interests, job values, purpose, applicable industries, and companies you can work for.

2. **JOBS MAP**
   Overview of the most common job titles within the career field, organized from entry-level roles (top of chart) to advanced roles (bottom of chart).

3. **GETTING STARTED STORIES**
   Two narratives about how to launch into this career field - with or without a four-year degree.

4. **TRAINING OPTIONS**
   Details such as cost, program length, and program location for local training options, both college and non-college options.

5. **ACTION STEPS**
   A list of actions you can take now to either “try on” the career or get started in pursuing the career.
How to use these maps

Jump straight to a career(s) that looks interesting

There are 10 career fields. See one that seems interesting just by the title? Go straight there by clicking on one of the links below:

- Cloud Computing
- Construction / Trades
- Cybersecurity
- Dentistry
- Education
- Electronics Technology
- Facilities Management
- Nursing
- Sales
- Software Engineering

Take the quiz to find careers that match your interests

Take a short quiz about your interests and values as it relates to a career. Then, see how your answers match up with the top 10 careers.

The quiz starts on the next page.
Quiz: Part I

What are your interests, values, and purpose as it relates to a career?

*Directions: select your top 3-4 answers for each question, then advance to Quiz: Part II on the next page.*

**What sorts of things are you currently into?**

- Psychology
- Sports (soccer, basketball, etc)
- Art / Fashion / Beauty
- Cars
- Biology / Chemistry / Science
- Animals
- Social justice / social change
- Math
- Cooking
- Health / Human Anatomy
- Computers / Electronics / Robotics
- Law / Criminal Justice
- English
- Music
- Finance / Business / Entrepreneurship
- Other:

**What are your top values or characteristics in a job?**

- Working with kids
- Working with adults
- Being really active / hands-on job
- Having lots of variety
- A flexible schedule
- Working as part of a team
- Working independently
- Diverse workplaces
- Fast track to making a good salary
- Being close to family, geographically
- Direct patient care
- Other:

**Right now in your life, what would you say really motivates you?**

- Helping others / building community
- Creating / discovering / inventing new things
- Fixing / repairing / building things
- Providing support for my family
- Solving problems in my community
- Growing in my faith / living out my faith
- Other:
How much overlap should there be between your interests, values, and purpose and a job?

There is no “right answer” in regards to the amount of overlap that will be fulfilling for you. The degree of overlap you desire may change from job to job as you advance in your career(s). Any degree of overlap, from less to more, can lead to a life of well-being and happiness.

You can, but do not need to live out all your interests at work. For example, you might really love to paint and to code. You may choose to take a software development job that has a flexible work schedule so you can leave work early one day a week to paint.

Directions: Alone or with a partner (such as a close friend or mentor), consider:
- What are the pros and cons of having a job that has more or less overlap with your interests, values, and purpose?
- Currently, would you desire less overlap or more overlap in your first career job?

After you’ve considered your answers to these questions, advance to Quiz: Part III on the next page.
Quiz: Part III

Match your answers to careers. Remember, typically, one career will not meet all of your interests, values, and motivations. Instead, see if any of the following careers meet a few of your interests, values, and motivations.

**Directions:** Make a copy of the chart below. Highlight the interests, values, and purpose columns based on your answers to Quiz: Part I. Then, identify if any of the top 10 careers in the Bay Area match 2+ of your interests, values, and motivations. Explore those careers starting on page 10.

<table>
<thead>
<tr>
<th>Things you are into</th>
<th>Values in a Job</th>
<th>Motivations / Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cloud Computing</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Construction / Trades</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Cybersecurity</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Dentistry</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Education</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Electronics Technology</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Facilities Management</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Healthcare</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Sales</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Software Engineering</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

[Click here for a larger version of the chart above]
Don’t see a career you like?

- **Explore new resources**
  There are other careers that might be a better fit for you besides the top 10 most in-demand careers in the San Francisco Bay Area. A helpful resource to explore additional careers is the [California Career Zone](#) website.

- **Explore new regions**
  Keep in mind that the San Francisco Bay Area’s economy is heavily driven by technology as well as healthcare and biotech. You may also want to explore other cities which have different economies to find a better career fit for you.

- **Engage with professionals in real life**
  Consider that a career on paper isn’t the same as a career in real life. If you aren’t feeling inspired by any of these careers on paper, try doing a few informational interviews with professionals in these career fields. You may find that talking with a person in the field makes the career more interesting for you.

- **Build your own map**
  If you find an alternative career of interest, consider making a career map of your own. There is a [blank template](#) that you can use to make your own map.

- **Share your maps with others**
  Help us build out the career database! If you make your own career map, send it to us so we can add it to our career maps database and share with others. You can send your maps to collegereadiness@summitps.org.
The Career Maps

In alphabetical order
CLOUD COMPUTING

Do you like to pay attention to details? Would you like to be in an environment where you are constantly growing by trying new things, making mistakes, and learning from those mistakes? Do you like computers, coding, and technology? If yes, check out the Cloud Computing career field!

INTERESTS
Computing, coding, technology, software, math

JOB VALUES
Learning new things, working on interesting projects, problem solving, ability to make a lot of money (over $100K per year)

PURPOSE
Providing for family

APPLICABLE INDUSTRIES
Tech, retail, finance, government, healthcare

COMPANIES YOU COULD WORK AT
Big tech (such as Cisco or Symantec), any of the big three cloud computer companies (Amazon Web Services, Microsoft, Google), big retail (such as Macy's, Williams Sonoma, or Levi Strauss), finance banks (such as Bank of America, Chase, or credit unions)
JOBS MAP: CLOUD COMPUTING

Use this map to explore jobs in the field of cloud computing and decide which might be the best fit for you based on the type of training and resulting salaries.

Salaries quoted above are for the San Francisco Bay Area as of 2020 and may change.

Yellow boxes indicate a job that is in-demand, stable, with salaries of $65,000+/year (for the Bay Area)

= Bootcamp, certificate, or credential
⯐ = Apprenticeship or residency
● = Associate's degree (2 years)
◼ = Bachelor's degree (4 years)
⬤ = Master's degree or above (2–3 years)

$ = minimum wage
$$ = $25,000 to $50,000 per year
$$$ = $50,001 to $100,000 per year
$$$$ = $100,001+ per year
GETTING STARTED: CLOUD COMPUTING

There are many ways to get started in a career field. Use the two possible paths below to plan out what’s best for you based on your time and financial needs.

WORK/LEARN

“Right after high school, I enrolled in JobTrain’s 11 week IT Service and Support Training Program. It’s free and they help you find your first job in tech support. After the program, I got a job doing tech support at a tech startup, which I did full-time so I could enroll in the one-year Cloud Computing certificate program at Cañada College. The tech support job isn’t 100% related to cloud computing, but it helped me earn money to pay for my certificate and it helped me learn customer service skills and how computer systems work.

While I was in the certificate program, I networked with as many professionals in cloud computing as I could, so that I could get a job right after I finished the program. Thanks to the certificate program and the networking I did, I was able to get a job as an junior systems analyst at Amazon once I finished the program.

Cloud computing is a field that is really changing and growing, so I will need to continuously build my skillset to keep up. I eventually want to become a cloud solutions architect, so I am working to get more certifications, both in Amazon Web Services as as well as Microsoft Azure. I’m also taking on additional projects at work and am looking at going to college for a bachelor’s degree next.”

SCHOOL FIRST

“Right after high school, I enrolled in the computer science program at Sonoma State. Sonoma State is a good school, but it isn't a top computer science program, so I knew I had to build out a portfolio of work experience while I was in school so I could stand out from the crowd when applying for my first job. Each summer of my bachelor’s degree program I did an internship - paid and unpaid - to build up work experience. Some of the internships were similar tech support but some let me do more things related to cloud computing. I also did informational interviews, followed people on Twitter, read blogs, went to virtual conferences, and completed Amazon Web Services and Google Cloud certifications to learn as much as I could about cloud computing. It's a field that changes really quickly, so you have to be always learning to keep up.

After school, thanks to my networking and internship experience, I was able to get a job as a Jr. Cloud Engineer at a tech analytics company in San Jose. I'm still doing lots of informational interviewing to figure out what I want to do next - either cloud networking or solutions architect. And to keep current, I'm still reading blogs, going to conferences, etc, and I started test prep for my next step of certifications.”
## LOCAL EDUCATION AND TRAINING OPTIONS: CLOUD COMPUTING

<table>
<thead>
<tr>
<th>JOB DESCRIPTION</th>
<th>DEGREE OR CERTIFICATE TYPE</th>
<th>DEGREE OR CERTIFICATE PROGRAM</th>
<th>PREREQS</th>
<th>PROGRAM LOCATIONS</th>
<th>PROGRAM LENGTH</th>
<th>PROGRAM COST</th>
<th>EXAMS REQUIRED AT END OF PROGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tech Aide / Tech Support Specialist</td>
<td>Certificate</td>
<td>“Bootcamp” program</td>
<td>High school diploma</td>
<td>Year Up — Information Technology Program</td>
<td>1 year (6 months training, 6 months internship at a company)</td>
<td>No charge: you earn a weekly stipend throughout the length of the program</td>
<td>None</td>
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<tr>
<td>Minimum wage</td>
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<tr>
<td>Ensures proper computer operations so that end users can accomplish organizational tasks, including receiving, prioritizing, documenting, and actively resolving end user help requests.</td>
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<tr>
<td>High school diploma</td>
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<td>None</td>
</tr>
<tr>
<td>Junior Systems Analyst / Administrator</td>
<td>Registered Apprenticeship Program OR ⬇</td>
<td>U.S. Department of Labor</td>
<td>High school diploma plus high score on Apprenti's in-house assessment</td>
<td>Apprenti — Cloud Operations Specialist 1 and 2</td>
<td>10–20 weeks classroom training + 1 year on-the-job training</td>
<td>No charge: you earn a weekly stipend through the length of the program</td>
<td>Certification in Amazon Web Services Cloud Practitioner, Microsoft Certified Azure Fundamentals, and/or Google Cloud Platform Fundamentals are often required or preferred for systems admin roles</td>
</tr>
<tr>
<td>$46,000–$93,000/year</td>
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<tr>
<td>Studies an organization’s current computer systems and procedures and designs information systems solutions to help the organization operate more efficiently and effectively.</td>
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<tr>
<td>High school diploma</td>
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</tr>
<tr>
<td>Junior Systems Analyst / Administrator</td>
<td>Certificate</td>
<td>Cloud Computing</td>
<td>High school diploma</td>
<td>Cañada College</td>
<td>1 year</td>
<td>Less than $2,000</td>
<td></td>
</tr>
<tr>
<td>$46,000–$93,000/year</td>
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<tr>
<td>Junior Systems Analyst / Administrator</td>
<td>Certificate</td>
<td>Cloud Computing</td>
<td>High school diploma</td>
<td>Foothill College</td>
<td>1 year</td>
<td>Less than $2,000</td>
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<td>$46,000–$93,000/year</td>
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<td>High school diploma</td>
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</tr>
<tr>
<td>Junior Systems Analyst / Administrator</td>
<td>Certificate</td>
<td>Cloud Computing</td>
<td>High school diploma</td>
<td>Las Positas Community College</td>
<td>1 year</td>
<td>Less than $2,000</td>
<td></td>
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<tr>
<td>$46,000–$93,000/year</td>
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<td>High school diploma</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Junior Systems Analyst / Administrator</td>
<td>Certificate</td>
<td>Cloud Computing</td>
<td>High school diploma</td>
<td>Coming soon to De Anza College, Mission College, College of San Mateo, City College of San Francisco</td>
<td>1 year</td>
<td>Less than $2,000</td>
<td></td>
</tr>
<tr>
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Program cost is total “sticker” price and does not include financial aid, including grants and scholarships. Prices are as of 2020 and may change.
## LOCAL EDUCATION AND TRAINING OPTIONS: CLOUD COMPUTING

<table>
<thead>
<tr>
<th>JOB DESCRIPTION</th>
<th>DEGREE OR CERTIFICATE TYPE</th>
<th>DEGREE OR CERTIFICATE SUBJECT</th>
<th>PREREQS</th>
<th>PROGRAM LOCATIONS</th>
<th>PROGRAM LENGTH</th>
<th>PROGRAM COST</th>
<th>EXAMS REQUIRED AT END OF PROGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cloud Engineer</td>
<td>Bachelor's degree</td>
<td>Computer Science or Software Engineering</td>
<td>High school degree</td>
<td>CSUs, UCs, private colleges</td>
<td>4 years</td>
<td>Cost varies, Averages: $30,000 (CSU), $45,000 (UC), $130,000 (private college)</td>
<td>Advanced Certifications in Amazon Web Services, Microsoft Azure, and/or Google Cloud are often required or preferred for these roles</td>
</tr>
<tr>
<td>Cloud DevOps Engineer</td>
<td>High school degree</td>
<td>Computer Science with a specialization in Virtualization and Cloud Computing</td>
<td>High school degree</td>
<td>Colorado State University Global Online Program</td>
<td>4 years</td>
<td>~$45,000</td>
<td></td>
</tr>
<tr>
<td>Cloud Security Engineer</td>
<td>High school degree</td>
<td>Computer Science or Software Engineering</td>
<td>High school degree</td>
<td>CSUs, UCs, private colleges</td>
<td>4 years</td>
<td>Cost varies, Averages: $30,000 (CSU), $45,000 (UC), $130,000 (private college)</td>
<td>Advanced Certifications in Amazon Web Services, Microsoft Azure, and/or Google Cloud are often required or preferred for these roles</td>
</tr>
<tr>
<td>Cloud Network Engineer</td>
<td>High school degree</td>
<td>Computer Science or Software Engineering</td>
<td>High school degree</td>
<td>CSUs, UCs, private colleges</td>
<td>4 years</td>
<td>Cost varies, Averages: $30,000 (CSU), $45,000 (UC), $130,000 (private college)</td>
<td>Advanced Certifications in Amazon Web Services, Microsoft Azure, and/or Google Cloud are often required or preferred for these roles</td>
</tr>
<tr>
<td>Cloud Developer</td>
<td>High school degree</td>
<td>Computer Science or Software Engineering</td>
<td>High school degree</td>
<td>CSUs, UCs, private colleges</td>
<td>4 years</td>
<td>Cost varies, Averages: $30,000 (CSU), $45,000 (UC), $130,000 (private college)</td>
<td>Advanced Certifications in Amazon Web Services, Microsoft Azure, and/or Google Cloud are often required or preferred for these roles</td>
</tr>
<tr>
<td>Cloud Architect</td>
<td>High school degree</td>
<td>Computer Science or Software Engineering</td>
<td>High school degree</td>
<td>CSUs, UCs, private colleges</td>
<td>4 years</td>
<td>Cost varies, Averages: $30,000 (CSU), $45,000 (UC), $130,000 (private college)</td>
<td>Advanced Certifications in Amazon Web Services, Microsoft Azure, and/or Google Cloud are often required or preferred for these roles</td>
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</tr>
</thead>
</table>
| **Cloud Solutions Architect**  
$150,000–$285,000/year  
Responsible for converting the technical requirements of a project into the architecture and design that will guide the final product, bridging the gaps between complex business problems and solutions in the cloud.  
Can specialize in:  
- Amazon Web Services (AWS)  
- Google Cloud  
- Microsoft Azure | Bachelor's degree  
AND  
[See previous page](#) | Software Engineering or Computer Science | Bachelor's degree | CSUs, UCs, or private colleges | 2 years | Cost varies | Advanced certifications in AWS, Google Cloud, or Microsoft Azure are often preferred or required for these roles |
| **Cloud Security Architect**  
$150,000–$210,000/year  
Designs applications to help reduce attacks on cloud service data storage, creates preventative features, and implements corrective controls when breaches do occur. | Bachelor's degree  
AND  
[See previous page](#) | Software Engineering or Computer Science | Bachelor's degree | CSUs, UCs, or private colleges | 2 years | Cost varies | Advanced certifications in AWS, Google Cloud, or Microsoft Azure are often preferred or required for these roles |
| **Cloud Security Subject Matter Expert (SME)**  
$135,000-$235,000 / year  
Provides the highest level of security expertise to large scale and complex projects as an internal and client resource as well as leading teams from workflow design to cloud solutions deliverable using the cloud platform.  
Can specialize in:  
- Amazon Web Services (AWS)  
- Google Cloud  
- Microsoft Azure | Master's degree | Software Engineering, specialization in Cloud and Mobile Computing | Bachelor's degree | San Jose State University | 2 years | ~$30,000 |  

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ARE YOU ALL IN? **HERE’S HOW TO GET STARTED.**

To be successful in any career field, focus on four key areas: social capital, work experience, degree/credential, and technical and professional skills. Here’s how you can begin building those four areas in the cloud computing field.

**WANT TO LEARN MORE BUT NOT READY YET TO COMMIT?**

**“TRY ON” THE CAREER**
- Conduct informational interviews
- Conduct job shadows
- Try out coding, such as through Khan Academy’s [Hour of Code](https://www.khanacademy.org)

**WORK EXPERIENCE**

- Work as an entry-level IT tech support provider

**SOCIAL CAPITAL**

- Conduct informational interviews
  - Conduct job shadows

**DEGREE/ CREDENTIAL**

- Research cloud computing apprentice, training, and degree programs
- Apply to apprenticeship, training or degree programs

**SKILLS (TECHNICAL/ PROFESSIONAL)**

- [AWS Educate](https://awseducate.com) (online intro to cloud computing for all ages)
- Volunteer as a tech aide / tech support to better understand computer systems by walking other people through them
CONSTRUCTION / TRADES

Would you like to build and repair the buildings of the Bay Area? Do you value feeling pride and satisfaction in seeing a job well done? Do you want to work as part of a highly collaborative team in a close-knit community with structured advancement opportunities? If yes, check out the Construction / Trades career field!

INTERESTS
Architecture, project management, construction, math, science

JOB VALUES
Physically active job, working as part of a team, work with adults

PURPOSE
Build/fix/repair things, provide for family

APPLICABLE INDUSTRIES
Construction

COMPANIES YOU COULD WORK AT
Big commercial construction companies (such as Turner Construction or Skyline Construction), smaller companies that support residential construction (such as local plumbers, electricians, general contractors, or sheet metal companies), or be an independent contractor

Pro tips: Construction / trades is looking for new talented workers, but it has long wait times to get into the apprenticeship training programs. Increase your chances of being admitted to the programs by building a network of professional contacts who can advocate for you, by getting a high score on the apprenticeship exam, doing the pre-apprenticeship programs, and applying to multiple different apprenticeship programs.

Foothill College is the information hub for apprentices for across the Bay Area. Call them to get advice on how to ace the apprenticeship assessment, for understanding wait times for apprenticeship programs, and helping you find the apprenticeship programs that feel like the best fit for you. While you will call Foothill College for advice, the actual training will be done by the local unions that are all across the Bay Area, from Richmond to San Jose and everywhere in between.
Use this map to explore jobs in the field of construction and decide which might be the best fit for you based on the type of training and resulting salaries.

Salaries quoted above are for the San Francisco Bay Area as of 2020 and may change.

Yellow boxes indicate a job that is in-demand, stable, with salaries of $65,000+/year (for the Bay Area)

- Electrician: $25,000 to $50,000 per year
- Plumber: $25,000 to $50,000 per year
- Sheet Metalist: $25,000 to $50,000 per year
- Air Conditioning Mechanic: $25,000 to $50,000 per year
- Pipe Fitter: $25,000 to $50,000 per year
- Sound & Communications: $25,000 to $50,000 per year
- General Foreman: $50,001 to $100,000 per year
- Superintendent: $100,001+ per year
GETTING STARTED: CONSTRUCTION / TRADES

There are many ways to get started in a career field. Use the two possible paths below to plan out what’s best for you based on your time and financial needs.

WORK/LEARN

“During my senior year of high school, I studied for and then took the trades apprenticeship aptitude entrance test. I got a decent score, but not the highest, so I was placed on a long wait list for my chosen apprenticeship, electrician. There are more than 700 people on the waitlist for electrician, so it was several years before I could get into that apprenticeship.

I graduated high school and while I was still on the electrician program waitlist, I enrolled in the Sound & Communications apprenticeship program, which doesn’t have a waitlist. It’s a great program to start with because it gives me work experience in the trades and there is an electrical component, so I was building my skills.

Sound & Communications is a three year apprenticeship and you are paid to be trained on-the-job for those three years, so I earned a wage with regular salary increases throughout the program. When I graduated from that program, I got a job as a sound and communication technician. I did that job for about a year when I was notified that a spot was open for me in the electrician apprenticeship program. I’ve just started that program, which is a five-year program.”

WORK/LEARN

“Right after high school, I was accepted into the Trades Introduction Program (TIP) in San Mateo, which is an 120-hour pre-apprenticeship program that gives you an overview of all the trades. Through TIP, I learned I was most interested in becoming a sheet metalist. When you graduate TIP, you get help getting placed into the apprenticeship programs, so TIP helped me get an interview for the sheet metalist pre-apprenticeship program.

I secured a spot in the sheet metal pre-apprenticeship program. Pre-apprenticeship and apprenticeship programs are really great for me because they pay you to learn! I got paid a regular salary while they trained me on-the-job. After the pre-apprenticeship program, I was accepted into the sheet metal apprenticeship program, which is five years long. Like the pre-apprenticeship program, I was paid throughout the five years while I trained on-the-job and I got regular salary increases. I’ve just finished the apprenticeship and I started my job as a Sheet Metal Technician last month.

I want to become a supervisor, so I’ve been talking to my boss a lot about this dream so I can be eligible for more training and advancement.”
<table>
<thead>
<tr>
<th>JOB DESCRIPTION</th>
<th>DEGREE OR CERTIFICATE TYPE</th>
<th>DEGREE OR CERTIFICATE PROGRAM</th>
<th>PREREQS</th>
<th>PROGRAM LOCATIONS</th>
<th>PROGRAM LENGTH</th>
<th>PROGRAM COST</th>
<th>EXAMS REQUIRED AT END OF PROGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrician</td>
<td>Certificate of Achievement or Associate's degree</td>
<td><a href="#">Foothill College Electrician Trade Program</a></td>
<td>High school diploma / GED, at least 18 years old, high score on aptitude test</td>
<td>Local unions across the Bay Area</td>
<td>6–12 months</td>
<td>$45,000–$100,000/year</td>
<td>No student fees, California state certification exam</td>
</tr>
<tr>
<td>Plumber</td>
<td>Certificate of Achievement or Associate's degree</td>
<td><a href="#">Plumbing Technology</a></td>
<td>High school diploma / GED, at least 18 years old, high score on aptitude test</td>
<td>Local unions across the Bay Area</td>
<td>5 years of classroom instruction and work experience</td>
<td>No student fees, California State Plumbing and Licensing Exam</td>
<td></td>
</tr>
<tr>
<td>Sheet Metalist</td>
<td>Certificate of Achievement or Associate's degree</td>
<td><a href="#">Sheet Metal Work</a></td>
<td>High school diploma / GED, at least 18 years old, high score on aptitude test</td>
<td>Local unions across the Bay Area</td>
<td>4–5 years of classroom instruction and work experience</td>
<td>No student fees, C-43 Sheet Metal License Exam</td>
<td></td>
</tr>
<tr>
<td>Air Conditioning Mechanic</td>
<td>Certificate of Achievement or Associate's degree</td>
<td><a href="#">Air Conditioning and Refrigeration</a></td>
<td>High school diploma / GED, at least 18 years old, high score on aptitude test</td>
<td>Local unions across the Bay Area</td>
<td>5 years of classroom instruction and 9,000 hours of experience</td>
<td>No student fees, A business and law exam and a trade-specific exam</td>
<td></td>
</tr>
<tr>
<td>Pipefitter</td>
<td>Certificate of Achievement or Associate's degree</td>
<td><a href="#">Steamfitting and Pipelining</a></td>
<td>High school diploma / GED, at least 18 years old, high score on aptitude test</td>
<td>Local unions across the Bay Area</td>
<td>5 years of classroom instruction, 9,000 hours of experience, and 1,080 hours of related class training work</td>
<td>No student fees, California state-certified Pipe Trades exam</td>
<td></td>
</tr>
<tr>
<td>Sound &amp; Communications</td>
<td>Career certificate</td>
<td><a href="#">Sound Installation and Communication</a></td>
<td>High school diploma / GED, at least 18 years old, high score on aptitude test</td>
<td>Local unions across the Bay Area</td>
<td>4,800 hours of on the job training</td>
<td>No student fees</td>
<td></td>
</tr>
<tr>
<td>General Foreman</td>
<td>Any of the trades certificates or degrees AND <a href="#">See above</a></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Superintendent</td>
<td>Training given internally by the local union</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Program cost is total "sticker" price and does not include financial aid, including grants and scholarships. Prices are as of 2020 and may change.
TAKE ACTION: CONSTRUCTION / TRADES

WANT TO LEARN MORE BUT NOT READY YET TO COMMIT?

“TRY ON” THE CAREER

- Conduct informational interviews
- Talk with Foothill College Advisors, who serve as the information hub for trade apprentices across the entire Bay Area
- Observe apprenticeship programs
- Conduct job shadows
- Learn about being a trades apprentice

ARE YOU ALL IN? HERE’S HOW TO GET STARTED.

To be successful in any career field, focus on four key areas: social capital, work experience, degree/credential, and technical and professional skills. Here’s how you can begin building those four areas in the construction/trades field.

WORK EXPERIENCE

- Conduct informational interviews
- Conduct job shadows
- Research trade apprenticeship programs
- Apply to apprenticeship programs
- Study and take the Apprenticeship Aptitude test (need to be age 17 or older)

SOCIAL CAPITAL

- Work at an entry-level role at a local union
- Take an afterschool job at a local residential construction company
- Complete pre-apprenticeship programs, such as TIP and TOP

DEGREE/ CREDENTIAL

- Complete pre-apprenticeship programs, such as TIP and TOP

SKILLS (TECHNICAL/ PROFESSIONAL)
Are you drawn to complex puzzles and challenges? Do you want a work environment that prizes curiosity, continuous learning, and charting your own path? Would you love a job keeping information safe and protecting your company from digital attacks? If so, check out the cybersecurity career field!

INTERESTS
Computers, coding, hacking, math

JOB VALUES
Problem solving, highly collaborative work environment, learn new things, working on interesting projects, ability to make a lot of money (over $100k a year), working with adults, working as part of a team

PURPOSE
Providing for family, protecting others

APPLICABLE INDUSTRIES
Tech

COMPANIES YOU COULD WORK AT
Zoom, big tech (Facebook, Google, Apple, etc.), Amazon, Cisco, small companies that offer cybersecurity services to other companies

Pro tip: Because Cybersecurity is a newer career field, there are few Cybersecurity degree options available. To successfully enter this career field, you need to know people in the field and prove that you have the skills, outside of a degree. To prepare to enter this career field, you will want to spend most of your time building a professional network of contacts in this field and gaining the skills you need through a variety of classes, certifications, and building a portfolio of cybersecurity project experience.
JOBS MAP: CYBERSECURITY

Use this map to explore jobs in the field of cybersecurity and decide which might be the best fit for you based on the type of training and resulting salaries.

Salaries quoted above are for the San Francisco Bay Area as of 2020 and may change.

Yellow boxes indicate a job that is in-demand, stable, with salaries of $65,000+/year (for the Bay Area).
GETTING STARTED: CYBERSECURITY

There are many ways to get started in a career field. Use the two possible paths below to plan out what’s best for you based on your time and financial needs.

**WORK/LEARN**

“Right after high school I was accepted into Apprenti’s program for cybersecurity. It’s an apprenticeship program, so you get paid to learn on the job. The program starts with 12 weeks of technical training, which I did online. The training is 40 hours a week — full-time — so I wasn’t able to work on the side, but they do give a small stipend. After the training, I started the one-year on-the-job training as a Cybersecurity Technician at Microsoft. I got paid more than minimum wage for my on-the-job training, plus I got a raise six months in. The experience was a really good way to get trained in cybersecurity, because it gave me work experience, plus a 1:1 mentor, plus I met amazing people in my cohort.

After my apprenticeship I got hired on full-time at Microsoft as a Cybersecurity Technician. Even though I’m hired, there’s a lot to learn in cybersecurity so I am studying and taking a bunch of certificate exams: CompTIA, CISSP, etc. I want to advance to a Cybersecurity Analyst next, so I’m doing a lot of networking both within Microsoft and outside of Microsoft, as well as taking additional coursework on databases and information security online to build more skills.”

**SCHOOL FIRST**

“Right after high school I started at CSU East Bay, majoring in Computer Science. Not many colleges have a formal program in cybersecurity, but CSU East Bay at least helps you do test prep for cybersecurity certificates like CISSP, and CISM.

I went to school full-time and worked part-time as a tech support aide so I could learn even more about computers and how people use computers. In the summers, I built my hacker’s portfolio by participating in the “capture the flag” sessions online — they are hacking competitions and if you do well or win, then companies notice you. I also did a bunch of “bug bounties” where you get paid by companies to find security vulnerabilities. I also took the exams for a number of cybersecurity certificates.

After I graduated, I got hired by a local contractor to do security testing for companies and websites. I want to be a Cybersecurity Consultant next, so I am doing a lot of networking with other cybersecurity professionals and continuing to build my hacker’s portfolio. I’m also taking more exams for more certificates.”
## LOCAL EDUCATION AND TRAINING OPTIONS: CYBERSECURITY

<table>
<thead>
<tr>
<th>JOB DESCRIPTION</th>
<th>DEGREE OR CERTIFICATE TYPE</th>
<th>DEGREE OR CERTIFICATE PROGRAM</th>
<th>PREREQS</th>
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<th>PROGRAM LENGTH</th>
<th>PROGRAM COST</th>
<th>EXAMS REQUIRED AT END OF PROGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tech Support/Tech Aide</td>
<td>Certificate</td>
<td>“Bootcamp” program</td>
<td>High school diploma</td>
<td>Year Up — Information Technology Program</td>
<td>1 year (6 months training, 6 months internship at a company)</td>
<td>No charge; you earn a weekly stipend through the length of the program, which is paid for by the employer</td>
<td>None</td>
</tr>
<tr>
<td>Junior Systems Analyst</td>
<td>Apprenticeship program OR ⬇️ U.S. Department of Labor Registered Apprenticeship program</td>
<td>High school diploma plus pre-apprenticeship coursework or equivalency (such as CompTia or Cisco security certification or WozU Cyber Security)</td>
<td>City College of San Francisco — Cybersecurity Apprenticeship Program</td>
<td>18 months</td>
<td>No change; you earn a stipend during training and then wages during on-the-job training</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Cyber Security Specialist/Technician</td>
<td>Residency program</td>
<td>Associate's degree in a technical field or equivalent practical experience; 6 months of experience troubleshooting in a Linux, OS X, or Windows networked environment; customer service and/or help desk experience</td>
<td>Google's Information Technology Residency Program — Security Engineering</td>
<td>26 months</td>
<td>No charge, you get paid a wage during on-the-job training</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Cyber Crime Analyst/Investigator</td>
<td>Networking and Security</td>
<td>High school diploma</td>
<td>Los Medanos College</td>
<td>18 months to 2 years</td>
<td>Approximately $3,000</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Incident Analyst/Responder</td>
<td>Applied Cyber Security</td>
<td>2 years of college courses</td>
<td>SANS Technology Institute (online)</td>
<td>2 years</td>
<td>$23,000</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>IT Auditor</td>
<td>Certificate</td>
<td>“Bootcamp” program</td>
<td>High school diploma</td>
<td>Infosec Institute (online)</td>
<td>1 week per bootcamp</td>
<td>$5,000 per bootcamp</td>
<td>At the end of each bootcamp, you will test for a certificate and they will assist you until you pass.</td>
</tr>
</tbody>
</table>

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CONTINUED ON FOLLOWING PAGE.
## LOCAL EDUCATION AND TRAINING OPTIONS: CYBERSECURITY

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<th>PROGRAM COST</th>
<th>EXAMS REQUIRED AT END OF PROGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cybersecurity Analyst</td>
<td></td>
<td>Information Systems and Technology (emphasis in Cybersecurity)</td>
<td>High school diploma</td>
<td>CSU San Bernadino (located in Southern California, but one of the only 3 schools in California to emphasize Cybersecurity)</td>
<td>4 years</td>
<td>~$30,000</td>
<td>Certifications included in program</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Computer Science</td>
<td>High school diploma</td>
<td>San Francisco State University</td>
<td>4 years</td>
<td>~$30,000</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Management Information Systems or Accounting and Information Systems</td>
<td>High school diploma</td>
<td>San Jose State University</td>
<td>4 years</td>
<td>~$30,000</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Computer Engineering</td>
<td>High school diploma</td>
<td>CSU East Bay</td>
<td>4 years</td>
<td>~$30,000</td>
<td>Certification in CISM (Information Security Manager), CISA (Information Security Auditor) and CISSP (Information Systems Security Pro) are often required for cybersecurity roles. Cal State East Bay provides Continuing Education test prep courses for these exams.</td>
</tr>
<tr>
<td>Cybersecurity Consultant</td>
<td>Bachelor's degree preferred</td>
<td>Information Systems and Technology (emphasis in Cybersecurity)</td>
<td>High school diploma</td>
<td>CSU San Bernadino (located in Southern California, but one of the only 3 schools in California to emphasize Cybersecurity)</td>
<td>4 years</td>
<td>~$30,000</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Computer Science</td>
<td>High school diploma</td>
<td>San Francisco State University</td>
<td>4 years</td>
<td>~$30,000</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Management Information Systems or Accounting and Information Systems</td>
<td>High school diploma</td>
<td>San Jose State University</td>
<td>4 years</td>
<td>~$30,000</td>
<td>None</td>
</tr>
<tr>
<td>Cybersecurity Engineer</td>
<td>Bachelor’s degree</td>
<td>Information Systems and Technology (emphasis in Cybersecurity)</td>
<td>High school diploma</td>
<td>UC Berkeley</td>
<td>2 years</td>
<td>~$60,000</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>AND Master’s degree</td>
<td>Information Management and Systems</td>
<td>Bachelor’s degree</td>
<td>UC Berkeley</td>
<td>2 years</td>
<td>~$60,000</td>
<td>None</td>
</tr>
<tr>
<td>Cybersecurity Manager / Administrator</td>
<td>Bachelor’s degree preferred</td>
<td>Information Systems and Technology (emphasis in Cybersecurity)</td>
<td>High school diploma</td>
<td>UC Berkeley</td>
<td>2 years</td>
<td>~$60,000</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Computer Science</td>
<td>High school diploma</td>
<td>Santa Clara University</td>
<td>2 years</td>
<td>~$60,000</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Management Information Systems or Accounting and Information Systems</td>
<td>High school diploma</td>
<td>San Jose State University</td>
<td>4 years</td>
<td>~$30,000</td>
<td>None</td>
</tr>
</tbody>
</table>

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WANT TO LEARN MORE BUT NOT READY YET TO COMMIT?

“TRY ON” THE CAREER

- Explore the cybersecurity career field
- Conduct informational interviews with cybersecurity professionals
- Conduct job shadows with cybersecurity professionals
- Try out coding, such as through Khan Academy’s Hour of Code

ARE YOU ALL IN? HERE’S HOW TO GET STARTED.

To be successful in any career field, focus on four key areas: social capital, work experience, degree/credential, and technical and professional skills. Here’s how you can begin building those four areas in the cybersecurity field.

<table>
<thead>
<tr>
<th>SOCIAL CAPITAL</th>
<th>WORK EXPERIENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conduct informational interviews</td>
<td>Complete internships, such as Sandia Nation Labs Summer Internships</td>
</tr>
<tr>
<td>Conduct job shadows</td>
<td>Take on “bug bounty” challenges at companies, where you find and replicate security vulnerabilities in their systems for a cash reward and recognition</td>
</tr>
<tr>
<td>Join cybersecurity meetups online</td>
<td>Compete in “Capture the Flag” hacking competitions</td>
</tr>
<tr>
<td>and take on volunteer coding and cybersecurity projects</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DEGREE/ CREDENTIAL</th>
<th>SKILLS (TECHNICAL/ PROFESSIONAL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take the 18-week coding course put on by technest at San Jose City College</td>
<td>Build skills in coding, programming, databases, and information exchange by taking classes at places like Khan Academy, Coursera, Google Computer Science Summer Institute, your local community college, or Girls Teaching Girls to Code (Stanford program with female mentors)</td>
</tr>
<tr>
<td>Research cybersecurity, computer programming apprentice, training, and degree programs</td>
<td></td>
</tr>
<tr>
<td>Apply to apprenticeship, training or degree programs</td>
<td></td>
</tr>
</tbody>
</table>
DENTISTRY

Do you like to help people? Do you want a flexible schedule? Are you interested in biology, human health, and patient care? If so, check out the dentistry career field!

INTERESTS
Biology, health, human anatomy

JOB VALUES
Patient care, flexible schedule

PURPOSE
Helping others

APPLICABLE INDUSTRIES
Healthcare

COMPANIES YOU COULD WORK AT
Private dentist offices, local hospitals, Ultradent, Invisalign, Sonicare, Oral B
JOBS MAP: DENTISTRY

Use this map to explore jobs in the field of dentistry and decide which might be the best fit for you based on the type of training and resulting salaries.

Sterilization Assistant

- $ - minimum wage

Dental Assistant

- $ - $25,000 to $50,000 per year

Dental Assistant with Extended Functions

- $$ - $25,000 to $50,000 per year

Dental Hygienist

- $$$ - $50,001 to $100,000 per year

Sales Rep for Dental Company

- $$ - $50,001 to $100,000 per year

General Dentist

- $$$$ - $100,001+ per year

Yellow boxes indicate a job that is in-demand, stable, with salaries of $65,000+/year (for the Bay Area).

Salaries quoted above are for the San Francisco Bay Area as of 2020 and may change.
GETTING STARTED: DENTISTRY

There are many ways to get started in a career field. Use the two possible paths below to plan out what’s best for you based on your time and financial needs.

**WORK/LEARN**

“Right after high school, I got a part-time job as a sterilization assistant at a local dentist’s office to help me pay for school, help me get work experience, and to build a professional network of people who work in dentistry.

I went to Foothill College for two years — working as a sterilization assistant the whole time — to get my general education (GE’s) credits. After I completed my GE’s, I then applied for Foothill’s Dental Hygienist program, which is another two years and it’s full-time, so I’m not able to work at the same time.

I’m part-way through the Dental Hygienist program now, but after I’m done, I plan to work as a Dental Hygienist for a few years while I decide if I want to go to more school to become a dentist.”

**SCHOOL FIRST**

“Right after high school, I enrolled at the University of Pacific Pre-Dentistry program. The program is accelerated, so I will complete my bachelor’s degree in three years, and the Doctor of Dental Surgery degree in an additional three years. It’s year-round, full-time, so I just go to school — I’m not able to work at the same time.

Even though I’m not able to work while I’m in school, I still know it’s important to build my professional network of dentists so that I can find a dental practice who will hire me when I am done with school. So I try to do informational interviews with at least two dentists a month and I also try to attend conferences, workshops, and have strong relationships with my dental professors so they will recommend me for a job when I am done with school.”
<table>
<thead>
<tr>
<th>JOB DESCRIPTION</th>
<th>DEGREE OR CERTIFICATE TYPE</th>
<th>DEGREE OR CERTIFICATE PROGRAM</th>
<th>PREREQS</th>
<th>PROGRAM LOCATIONS</th>
<th>PROGRAM LENGTH</th>
<th>PROGRAM COST</th>
<th>EXAMS REQUIRED AT END OF PROGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sterilization Assistant</td>
<td>Minimum wage</td>
<td></td>
<td>N/A</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collects, prepares, and organizes surgical tools and environmental protection prior to and upon completion of dental procedures.</td>
<td>N/A</td>
<td>None</td>
<td>None</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>None</td>
</tr>
<tr>
<td>Dental Assistant</td>
<td>$33,000–$58,000/year</td>
<td>Certificate</td>
<td>Dental Assisting</td>
<td>None</td>
<td>College of San Mateo, Foothill College, San Jose City College, Diablo Valley College, City College of San Francisco, College of Alameda</td>
<td>9 months</td>
<td>$2,500</td>
</tr>
<tr>
<td>Registered Dental Assistant with Extended Functions</td>
<td>Increased pay over Dental Assistant</td>
<td>Certificate AND</td>
<td>Dental Assisting</td>
<td>See above</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dental assistant who performs more advanced tasks such as x-rays, sealants, and impressions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program Graduate</td>
<td>Program</td>
<td>Registered Dental Assistant with Extended Functions program</td>
<td>Dental Assisting Certificate</td>
<td>RDA EF @ University of the Pacific</td>
<td>1 month</td>
<td>~$17,000</td>
<td>California Board-approved clinical exam</td>
</tr>
<tr>
<td>Dental Hygienist</td>
<td>$88,000–$110,000/year</td>
<td>Bachelor’s degree</td>
<td>Dental Hygiene</td>
<td>Some classes; check school requirements</td>
<td>Foothill College</td>
<td>4 years</td>
<td>$20,000</td>
</tr>
<tr>
<td>Sales Rep for Dental Company</td>
<td>$30,000–$390,000/year, depending on commissions and experience</td>
<td>Bachelor’s degree</td>
<td>Dental Hygiene</td>
<td>See above</td>
<td>University of the Pacific</td>
<td>5 years</td>
<td>$360,000</td>
</tr>
<tr>
<td>General Dentist</td>
<td>$127,000–$260,000/year</td>
<td>Bachelor’s Degree AND</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performs surgeries, interprets x-rays, diagnoses oral problems, and sees to oral health and disease prevention.</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Doctoral degree</td>
<td>Dental Surgery or Dental Medicine</td>
<td>Bachelor's degree plus additional prereq classes</td>
<td>University of California, San Francisco DDS</td>
<td>4 years</td>
<td>$120,000</td>
<td>National written exam and the following sections of the WREB examination: Operative, Endodontic, Comprehensive Treatment Planning, Periodontics, and Prosthodontic.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>University of Pacific DDS</td>
<td>3 years</td>
<td>$360,000</td>
<td></td>
</tr>
</tbody>
</table>

Program cost is total “sticker” price and does not include financial aid, including grants and scholarships. Prices are as of 2020 and may change.
# LOCAL EDUCATION AND TRAINING OPTIONS: DENTISTRY

<table>
<thead>
<tr>
<th>JOB DESCRIPTION</th>
<th>DEGREE OR CERTIFICATE TYPE</th>
<th>DEGREE OR CERTIFICATE PROGRAM</th>
<th>PREREQS</th>
<th>PROGRAM LOCATIONS</th>
<th>PROGRAM LENGTH</th>
<th>PROGRAM COST</th>
<th>EXAMS REQUIRED AT END OF PROGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orthodontist</td>
<td>Bachelor's Degree AND</td>
<td>Orthodontia</td>
<td>See previous page</td>
<td>University of the Pacific</td>
<td>3 years</td>
<td>$360,000</td>
<td>Dental Board of California OAP exam</td>
</tr>
<tr>
<td></td>
<td>Doctoral Degree AND</td>
<td></td>
<td>See previous page</td>
<td>University of California, San Francisco</td>
<td>3 years</td>
<td>$75,000</td>
<td></td>
</tr>
<tr>
<td>Periodontist</td>
<td>Bachelor's degree plus</td>
<td>Periodontics</td>
<td>University of California, San Francisco</td>
<td>3 years</td>
<td>$75,000</td>
<td>American Board of Periodontics (ABP) qualifying exam</td>
<td></td>
</tr>
<tr>
<td>Pediatric Dentist</td>
<td>degree plus doctoral degree</td>
<td>Pediatric Dentistry</td>
<td>University of California, San Francisco</td>
<td>2 years (certificate) or 3 years (MS with certificate)</td>
<td>$40,000 – $60,000</td>
<td>American Board of Pediatric Dentistry (ABPD) qualifying exam</td>
<td></td>
</tr>
</tbody>
</table>

Program cost is total “sticker” price and does not include financial aid, including grants and scholarships. Prices are as of 2020 and may change.
WANT TO LEARN MORE BUT NOT READY YET TO COMMIT?

“TRY ON” THE CAREER

- Conduct informational interviews
- Conduct job shadows
- Volunteer at dental office
- Hands-on experience in community dental clinic

ARE YOU ALL IN? HERE’S HOW TO GET STARTED.

To be successful in any career field, focus on four key areas: social capital, work experience, degree/credential, and technical and professional skills. Here’s how you can begin building those four areas in the dentistry field.

- Conduct informational interviews with dental professionals
- Conduct job shadows
- Complete an internship
- Work as a Sterilization Assistant part-time
- Volunteer at a dental office or community clinic
- Work a summer job at a local dentist’s office
- Volunteer at a dental office
- Volunteer in a community dental clinic
- Research dental training programs or bachelor’s degree programs
- Apply to training or degree programs
- Volunteer at a dental office
- Volunteer in a community dental clinic

TAKE ACTION: DENTISTRY
EDUCATION

Do you like to help others learn and grow? Are you passionate about inspiring others and making a difference in the lives of young people? Want to work in a job that is active, highly collaborative, creative, and utilizes your talents in planning, flexibility, empathy, and accountability? If so, check out the education career field!

INTERESTS
English, science, history, math, psychology, child development, teaching, world language

JOB VALUES
Working with adults, working with kids, physically active jobs, lots of variety in day-to-day, working as part of a team, being creative, making a difference in the world

PURPOSE
Helping others learn and grow

APPLICABLE INDUSTRIES
After school programs, youth camps, K–12 education, high education

COMPANIES YOU COULD WORK AT
Summit Public Schools, local school districts, local charter schools, local private schools, educational nonprofit programs
JOBS MAP: EDUCATION

Use this map to explore jobs in the field of education and decide which might be the best fit for you based on the type of training and resulting salaries.

Yellow boxes indicate a job that is in-demand, stable, with salaries of $65,000+/year (for the Bay Area)

Salaries quoted above are for the San Francisco Bay Area as of 2020 and may change.
GETTING STARTED: EDUCATION

There are many ways to get started in a career field. Use the two possible paths below to plan out what’s best for you based on your time and financial needs.

WORK/LEARN

“Right after high school, I got a part-time job as an afterschool program tutor to help me pay for school and help me get experience working with children. I worked part-time while going to Rivet School for a bachelor’s degree in Education. Rivet is a self-paced online program, so I was able to finish my four-year bachelor’s degree in just three years! I saved a lot of money doing this — even though it wasn’t a traditional college experience.

Right after Rivet, I enrolled in the Summit Learning Teacher Residency, which is a one-year program to get my teaching credential. The residency placed me at a charter school in the East Bay, where I worked in the classroom alongside an experienced teacher for one year while also completing the schoolwork for my credential.

I just took the teacher performance assessment and I passed! I’m starting as a first-year teacher next fall at the same charter school where I did my residency. It really helped to do a residency program because I got to know the school and the people before I applied for a job there — it made the job interview process so much easier.”

SCHOOL FIRST

“Right after high school, I enrolled at San Jose State University to get a bachelor’s degree in English literature. I worked as a nanny part-time while going to school so I could get some experience working with children and to help me pay for school. I really liked a traditional college experience because I was able to build my network of friends, colleagues, and professors.

Right after SJSU, I signed up for CityYear, a one-year service program that trains you on instructional practices while you work in a middle school in San Jose. It’s a good program because I got work experience being in the classroom, I got some training on how to be a teacher, I met teachers and school leaders who might want to hire me later, and at the end of the program, they gave an Educational Award, which is a little bit of money to help pay for school.

I’m using the Educational Award money to pay for my one-year teaching credential program at San Jose State, which I will start in the fall. Next spring I will start applying for jobs as a teacher.”
<table>
<thead>
<tr>
<th>JOB DESCRIPTION</th>
<th>DEGREE OR CERTIFICATE TYPE</th>
<th>DEGREE OR CERTIFICATE PROGRAM</th>
<th>PREREQS</th>
<th>PROGRAM LOCATIONS</th>
<th>PROGRAM LENGTH</th>
<th>PROGRAM COST</th>
<th>EXAMS REQUIRED AT END OF PROGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Childcare Worker/Nanny</td>
<td>Certificate OR ⬇️</td>
<td>Early Childhood Education</td>
<td>High school diploma</td>
<td>UC Santa Cruz — Extension</td>
<td>1 year</td>
<td>$5,200</td>
<td>None</td>
</tr>
<tr>
<td>Minimum wage</td>
<td></td>
<td></td>
<td></td>
<td>Contra Costa College</td>
<td>1 year</td>
<td>$2,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Canada College</td>
<td>1 year</td>
<td>$1,500</td>
<td></td>
</tr>
<tr>
<td>Instructional Aide/Paraprofessional</td>
<td>Associate's degree</td>
<td>Early Childhood Education</td>
<td>High school diploma</td>
<td>San Jose City College, Contra Costa College</td>
<td>2 years</td>
<td>$11,000</td>
<td>None</td>
</tr>
<tr>
<td>$14–$20/hour</td>
<td></td>
<td></td>
<td></td>
<td>Rivet School</td>
<td>2-3 years</td>
<td>$13,000–$16,000</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Any college or university</td>
<td>4 years</td>
<td>$40,000+</td>
<td></td>
</tr>
<tr>
<td>K–12 Teacher</td>
<td>Bachelor's degree AND ⬇️</td>
<td>Education</td>
<td>High school diploma</td>
<td>Summit Learning Teacher Residency</td>
<td>1 year</td>
<td>$14,000</td>
<td>CBEST, CSET</td>
</tr>
<tr>
<td>Starting: $35,000–$70,000/year</td>
<td></td>
<td></td>
<td></td>
<td>Cal State Universities (East Bay, San Jose, San Francisco)</td>
<td>1 year</td>
<td>$18,000</td>
<td></td>
</tr>
<tr>
<td>Average: $63,000–$120,000/year</td>
<td></td>
<td></td>
<td></td>
<td>UC Berkeley</td>
<td>1.25 years</td>
<td>$30,000</td>
<td></td>
</tr>
<tr>
<td>Responsible for preparing lesson plans, tracking progress, and educating students from the kindergarten level up to the 12th grade level.</td>
<td></td>
<td></td>
<td></td>
<td>UC Santa Cruz</td>
<td>1.25 years</td>
<td>$17,000</td>
<td></td>
</tr>
<tr>
<td>Teacher on Special Assignment (Curriculum Writer, Instructional Coach, Grade Level Leader)</td>
<td>Credential OR ⬇️</td>
<td>Teaching</td>
<td>Bachelor's degree</td>
<td>Stanford University</td>
<td>1.25 years</td>
<td>$105,000</td>
<td>CBEST, CSET</td>
</tr>
<tr>
<td>Base teacher pay plus stipend of ~$5,000–$15,000/year</td>
<td></td>
<td></td>
<td></td>
<td>Mills College</td>
<td>1.25 years</td>
<td>$40,000</td>
<td></td>
</tr>
<tr>
<td>Provides support to the principal and teaching staff in the implementation of Common Core Standards, improvements, and strategies to ensure that all children learn at high levels.</td>
<td></td>
<td></td>
<td></td>
<td>Notre Dame de Namur</td>
<td>1.25 years</td>
<td>$30,000</td>
<td></td>
</tr>
</tbody>
</table>

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# LOCAL EDUCATION AND TRAINING OPTIONS: EDUCATION

<table>
<thead>
<tr>
<th>JOB DESCRIPTION</th>
<th>DEGREE OR CERTIFICATE TYPE</th>
<th>DEGREE OR CERTIFICATE PROGRAM</th>
<th>PREREQS</th>
<th>PROGRAM LOCATIONS</th>
<th>PROGRAM LENGTH</th>
<th>PROGRAM COST</th>
<th>EXAMS REQUIRED AT END OF PROGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dean of Students</strong></td>
<td>Bachelor's Degree AND ⬇</td>
<td>See previous page</td>
<td></td>
<td>CA State Universities (East Bay, San Jose, San Francisco)</td>
<td>1 year</td>
<td>$9,000–$12,000</td>
<td>None</td>
</tr>
<tr>
<td>$68,000–$138,000/year</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Responsible for the coordination of student-related programs at a university or college. Helps respond to students' needs, direct admissions, collaborate with different departments, and plan social programs for students.</td>
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<td></td>
</tr>
<tr>
<td><strong>Assistant Principal</strong></td>
<td>Credential AND ⬇</td>
<td>Teaching</td>
<td>See previous page</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>$83,000–$145,000/year</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Education administrator responsible for assisting the principal in facilitating the day-to-day requirements of their school. Ensures the safety of students as well as the fulfillment of federal and state student and teacher performance guidelines.</td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>Principal/Executive Director</strong></td>
<td>Credential</td>
<td>Administrative Services</td>
<td>5 years teaching experience</td>
<td>UC Berkeley Principal Leadership Institute</td>
<td>1 year</td>
<td>$30,000</td>
<td>Unknown</td>
</tr>
<tr>
<td>$105,000–$145,000/year</td>
<td></td>
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</tr>
<tr>
<td>Forms the head of the administrative team within a school and is responsible for overseeing the daily operations of the institution by coordinating staff schedules, overseeing the development of curriculum, and enforcing school policies.</td>
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</tr>
<tr>
<td><strong>Superintendent</strong></td>
<td>Master's Degree AND ⬇</td>
<td>See previous page</td>
<td></td>
<td>Local County Offices of Education (San Mateo, Santa Clara, Contra Costa)</td>
<td>1 year</td>
<td>$6,000–$10,000</td>
<td>None</td>
</tr>
<tr>
<td>$136,000–$250,000/year</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Oversees the daily operations and the long-range planning of a school district by serving as the point person for all district matters, supervising school principals and district staff, working with school board members, and managing fiscal operations.</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

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WANT TO LEARN MORE BUT NOT READY YET TO COMMIT?

“TRY ON” THE CAREER

- Volunteer in a classroom
- Informational interviews with a teacher
- Ask your current teachers if you can plan and lead a lesson
- Babysit to gain experience working with kids younger than you
- Work a summer job with kids, such as at a summer camp

ARE YOU ALL IN? **HERE’S HOW TO GET STARTED.**

To be successful in any career field, focus on four key areas: social capital, work experience, degree/credential, and technical and professional skills. Here’s how you can begin building those four areas in the education field.

- **SOCIAL CAPITAL**
  - Conduct informational interviews with teachers and school leaders
  - Conduct job shadows

- **WORK EXPERIENCE**
  - Do a year of paid on-the-job training through City Year San Jose
  - Work for an afterschool program or youth camp

- **DEGREE/ CREDENTIAL**
  - Research bachelor’s degree programs and teacher credential programs
  - Apply to bachelor’s degree programs
  - Volunteer at a local school
  - Work as a childcare worker/nanny

- **SKILLS (TECHNICAL/ PROFESSIONAL)**
  - Volunteer with or work for a local afterschool or youth program
ELECTRONICS TECHNOLOGY

Do you like to fix, repair, and build things? Are you looking for a hands-on job? Want to work in a variety of industries, including electric cars, semiconductors, aerospace and more? If so, check out the Electronics Technology career field!

INTERESTS
Electronics, tools and technology, cars, robots, transportation, computers, math, science

JOB VALUES
Physically active, hands-on

PURPOSE
Build / fix / repairs things, create new things

APPLICABLE INDUSTRIES
Transportation, aerospace systems, food processing, pharmaceuticals and biotechnology, semiconductor manufacturing, utilities

COMPANIES YOU COULD WORK AT
Tesla, PG&E, BART, Jabil, Samsung, Genentech, Google
JOBS MAP: ELECTRONICS TECHNOLOGY

Use this map to explore jobs in the field of electronics technology and decide which might be the best fit for you based on the type of training and resulting salaries.

Salaries quoted above are for the San Francisco Bay Area as of 2020 and may change.

Yellow boxes indicate a job that is in-demand, stable, with salaries of $65,000+/year (for the Bay Area)

Symbols:

- Bootcamp, certificate, or credential
- Apprenticeship or residency
- Associate’s degree (2 years)
- Bachelor’s degree (4 years)
- Master’s degree or above (2–3 years)

$ = minimum wage
$$ = $25,000 to $50,000 per year
$$$ = $50,001 to $100,000 per year
$$$$ = $100,001+ per year
GETTING STARTED: ELECTRONICS TECHNOLOGY

There are many ways to get started in a career field. Use the two possible paths below to plan out what’s best for you based on your time and financial needs.

**WORK/LEARN**

“Right after high school, I started working at Fry’s full-time to build my customer service skills and to get exposed to a variety of electronics. While I worked full-time, I went to school at the College of San Mateo (CSM) for a Certificate in Electrical Power Systems. CSM has the most advanced program in electronics technology in the Bay Area, so I chose CSM, even though I had to drive from Fremont to get to class.

The certificate program is about two years long, but I graduated debt-free because I was working full-time. I’m really interested in biotech, so I networked a lot during the program with different biotech companies. Through my networking, I was able to get a job as an instrumentation technician at a pharma company. I’ve worked there for two years now.

I’d like to go work for Genentech next, and advance to an senior instrumentation technician, so I am looking at going back to school for my associate’s in electronics technology, or even possibly a bachelor’s degree in electrical engineering next.”

**SCHOOL FIRST**

“The fall after I graduated high school, I enrolled in the Electronics Technology program at the College of San Mateo (CSM). The program is about two years long, so I worked at Best Buy part-time to help me pay for school and to help me get work experience. You can do either a certificate or an associate’s degree at CSM and I chose to do an associate’s because I think it will help me advance faster in my field.

The program is really hands-on and it’s really aligned to where the field is right now, but I knew that I would have to network in order to get my first job - just the degree wouldn’t be enough. So each month, I did informational interviews with at least two people who were already working in the field. Those informational interviews really helped, because the people I met were able to let me know where there were job openings coming up. One of the people I interviewed with also offered to be a reference for me, which I really appreciated.

I just graduated from CSM and started working at Tesla as a Manufacturing Technician. I want to advance to a Senior Manufacturing Technician, so I am continuing to network both within Tesla and outside of Tesla, as well as looking for projects that can give me more advanced work experience.”
LOCAL EDUCATION AND TRAINING OPTIONS: ELECTRONICS TECHNOLOGY

<table>
<thead>
<tr>
<th>Job Description</th>
<th>Degree or Certificate Type</th>
<th>Degree or Certificate Program</th>
<th>Prereqs</th>
<th>Program Locations</th>
<th>Program Length</th>
<th>Program Cost</th>
<th>Exams Required at End of Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrumentation Technician $45,000-$75,000/year</td>
<td>Certificate OR Certificate</td>
<td>Electrical Power Systems</td>
<td>None</td>
<td>College of San Mateo</td>
<td>2 years</td>
<td>~$3,000</td>
<td>None</td>
</tr>
<tr>
<td>Manufacturing Technician $35,000-$60,000/year</td>
<td>Associate's degree</td>
<td>Industrial Electronics Technology</td>
<td>None</td>
<td>College of San Mateo, City College of San Francisco, Los Medanos College, Laney College, Diablo Valley College, Chabot College</td>
<td>2 years</td>
<td>~$5,000</td>
<td>None</td>
</tr>
<tr>
<td>Instrumentation &amp; Calibration Technician $50,000-$75,000/year</td>
<td>Associate's degree</td>
<td>Instrumentation &amp; Calibration Technology</td>
<td>None</td>
<td>College of San Mateo</td>
<td>2 years</td>
<td>~$8,000</td>
<td>None</td>
</tr>
<tr>
<td>Senior Instrumentation Technician $65,000-$100,000/year</td>
<td>Associate's degree</td>
<td>Senior Instrumentation &amp; Calibration Technology</td>
<td>See above</td>
<td>College of San Mateo</td>
<td>2 years</td>
<td>~$12,000</td>
<td>None</td>
</tr>
<tr>
<td>Senior Manufacturing Technician $60,000-$90,000/year</td>
<td>Associate's degree</td>
<td>Senior Manufacturing Technology</td>
<td>See above</td>
<td>College of San Mateo</td>
<td>2 years</td>
<td>~$15,000</td>
<td>None</td>
</tr>
<tr>
<td>Senior Instrumentation &amp; Calibration Technician $70,000-$95,000/year</td>
<td>Associate's degree</td>
<td>Senior Instrumentation &amp; Calibration Technology</td>
<td>See above</td>
<td>College of San Mateo</td>
<td>2 years</td>
<td>~$20,000</td>
<td>None</td>
</tr>
</tbody>
</table>

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ARE YOU ALL IN? HERE’S HOW TO GET STARTED.

To be successful in any career field, focus on four key areas: social capital, work experience, degree/credential, and technical and professional skills. Here’s how you can begin building those four areas in the electronics technology field.

**WANT TO LEARN MORE BUT NOT READY YET TO COMMIT?**

**“TRY ON” THE CAREER**

- Conduct informational interviews
- Conduct job shadows
- Observe classes at the College of San Mateo

**SOCIAL CAPITAL**

Conduct informational interviews
Conduct job shadows

**WORK EXPERIENCE**

Work an entry-level job at Best Buy or Fry’s to build your customer service experience and get to know the current electronics

**DEGREE/ CREDENTIAL**

Research training, and degree programs
Apply to training or degree programs

**SKILLS (TECHNICAL/ PROFESSIONAL)**

Take Intro to Robotics, Computer Programming classes in Expeditions
FACILITIES MANAGEMENT

Do you like to help people? Do you want a job with lots of variety? Are you interested in psychology, the environment, building design, solving problems, and how people interact with the spaces where they live, work, and study? If so, check out the facilities management career field!

INTERESTS
Psychology, architecture, building design, environmental sciences, finance/accounting/business, project management

VALUES
Active job, lots of variety, problem solving, working on a team, flexible schedule, opportunity to travel

PURPOSE
Helping others, build/fix/repair, helping the environment

APPLICABLE INDUSTRIES
Technology, healthcare/hospitals, hospitality/hotels, schools

COMPANIES YOU COULD WORK AT
Cushman & Wakefield, CBRE, Google, Facebook, Oracle, power plants, apartment buildings, college campuses
JOBS MAP: FACILITIES MANAGEMENT

Use this map to explore jobs in the field of facilities management and decide which might be the best fit for you based on the type of training and resulting salaries.

Yellow boxes indicate a job that is in-demand, stable, with salaries of $65,000+/year (for the Bay Area)

Salaries quoted above are for the San Francisco Bay Area as of 2020 and may change.
GETTING STARTED: FACILITIES MANAGEMENT

There are many ways to get started in a career field. Use the two possible paths below to plan out what’s best for you based on your time and financial needs.

**WORK/LEARN**

“Right after high school, I got a part-time job as a custodial assistant at a local apartment complex to help me pay for school, help me get work experience, and to build a professional network of people who work in facilities management.

I also enrolled at College of San Mateo’s one year Facilities Management program. The program went by super fast, and at the end, thanks to my work experience plus networking I did through school, I was able to land a job as a Facilities Coordinator at Cushman & Wakefield, a commercial real estate company. Being a Facilities Coordinator is sort of like being an apprentice for the Director of Facilities, the role I eventually want to have, so I am getting good work experience and building my professional network.

I’ve been a Facilities Coordinator for about a year now, and it is helping me pay for the advanced training I need — I just finished one online advanced course through IFMA and I am starting an online bachelor’s degree program through Rivet School next month.”

**SCHOOL FIRST**

“Right after high school, I enrolled in Environmental Science at San Francisco State University, a four-year bachelor’s degree program. During the summers, I took two internships in operations — one at a local hotel and another at the convention center — so that I could build relevant work experience and start to build a professional network of people who work in facilities management.

When I finished my degree, I was hired on as a Facilities Coordinator at Pandora (yes, the music company!) in Oakland. I work full-time there, while I attend online classes through De Anza College for a certificate in Facilities & Sustainable Building Management. My goal is to get the training, work experience, and professional network I need to eventually become a Director of Facilities.

Going for my bachelor’s degree first is a longer path into this career field, but I really wanted the college experience plus it gives me flexibility — if I don’t like Facility Management, then I can pivot to another career with my degree.”
## LOCAL EDUCATION AND TRAINING OPTIONS: FACILITIES MANAGEMENT

<table>
<thead>
<tr>
<th>JOB DESCRIPTION</th>
<th>DEGREE OR CERTIFICATE TYPE</th>
<th>DEGREE OR CERTIFICATE PROGRAM</th>
<th>PREREQS</th>
<th>PROGRAM LOCATIONS</th>
<th>PROGRAM LENGTH</th>
<th>PROGRAM COST</th>
<th>EXAMS REQUIRED AT END OF PROGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance Assistant</td>
<td>Minimum wage</td>
<td></td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Cleaning, emptying garbage cans and making minor repairs in areas of plumbing, lighting and carpentry.</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operations Assistant</td>
<td>Minimum wage</td>
<td></td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Work in a variety of industries, providing administrative support along with clerical tasks that aid the daily business operations of an organization.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Custodial Assistant</td>
<td>Minimum wage</td>
<td></td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Under general supervision, assists with janitorial duties, including cleaning, restocking, and minor repairs.</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facilities Coordinator/Facilities Assistant</td>
<td>$50,000–$75,000/year</td>
<td>Facilities Mgmt</td>
<td>None</td>
<td>College of San Mateo</td>
<td>12 months</td>
<td>Less than $2,000</td>
<td>None</td>
</tr>
<tr>
<td>Helps manage the operations of a building or facility by handling repairs, maintenance requests and maintaining inventories.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sustainable Building Specialist</td>
<td>$60,000–$130,000/year</td>
<td>Facilities and Sustainable Business Mgmt or Facilities Mgmt</td>
<td>None</td>
<td>De Anza College</td>
<td>9–18 months</td>
<td>Less than $2,000</td>
<td>None</td>
</tr>
<tr>
<td>Addresses organizational sustainability issues, such as waste stream management, green building practices, and green procurement plans.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property Manager</td>
<td>$45,000–$110,000/year</td>
<td>Facilities Mgmt</td>
<td>None</td>
<td>UC Berkeley Extension</td>
<td>12–18 months</td>
<td>$4,500-$5,400</td>
<td>None</td>
</tr>
<tr>
<td>Ensures that the properties under their care operate smoothly, maintain their appearance, and either preserve or increase in value. They also show properties to prospective tenants or buyers, explain occupancy terms and collect monthly rents; and pay taxes and other maintenance fees.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy Auditor</td>
<td>$40,000–$100,000/year</td>
<td>Facilities and Sustainable Building Management</td>
<td>None</td>
<td>De Anza College</td>
<td>12–15 months</td>
<td>$1,500–$2,000</td>
<td>None</td>
</tr>
<tr>
<td>Identifies opportunities to improve the operation, maintenance, or energy efficiency of building or process systems. In addition to degree options at right, requires electronics tech background (refrigeration /lighting) or engineering.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy Management and Building Science</td>
<td>Associate’s degree</td>
<td>None</td>
<td>None</td>
<td>De Anza College</td>
<td>12–15 months</td>
<td>$1,500–$2,000</td>
<td>None</td>
</tr>
<tr>
<td>See above</td>
<td>Associate’s degree</td>
<td>See above</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Program cost is total “sticker” price and does not include financial aid, including grants and scholarships. Prices are as of 2020 and may change. CONTINUED ON FOLLOWING PAGE.
## LOCAL EDUCATION AND TRAINING OPTIONS: FACILITIES MANAGEMENT

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<th>PROGRAM LENGTH</th>
<th>PROGRAM COST</th>
<th>EXAMS REQUIRED AT END OF PROGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Operations Manager</td>
<td>Associate's degree AND</td>
<td>Facilities Management Professional (FMP)</td>
<td>None</td>
<td>International Facilities Management Association</td>
<td>1–2 years</td>
<td>~$2,000</td>
<td>Facility Management Professional (FMP) exam for certification</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Certified Facilities Manager (CFM)</td>
<td>None</td>
<td>International Facilities Management Association</td>
<td>1–2 years</td>
<td>~$2,000</td>
<td>CFM exam</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sustainability Facilities Professional (SFP)</td>
<td>None</td>
<td>International Facilities Management Association</td>
<td>1–2 years</td>
<td>~$2,000</td>
<td>Sustainable Facility Professional (SFP) exam for certification.</td>
</tr>
<tr>
<td>Director of Facilities</td>
<td>Associate's degree and/or Certificate AND</td>
<td>Environmental Science, Real Estate, Business Administration</td>
<td>None</td>
<td>CSUs, UCs, private schools</td>
<td>4 years</td>
<td>Averages: $30,000 (CSU), $45,000 (UC), $130,000 (private college)</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Certificate AND</td>
<td>See previous page</td>
<td>See above</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Director of Real Estate</td>
<td>Bachelor's degree AND</td>
<td>facilities Management of buildings and work assignments to all building operations personnel, which includes, the building operations help desk, the facilities coordinator, and custodial services.</td>
<td>None</td>
<td>CSUs, UCs, private schools</td>
<td>4 years</td>
<td>Averages: $30,000 (CSU), $45,000 (UC), $130,000 (private college)</td>
<td>None</td>
</tr>
<tr>
<td>VP, Facilities Management</td>
<td>Certificate AND</td>
<td>Environmental Science, Real Estate, Business Administration</td>
<td>None</td>
<td>CSUs, UCs, private schools</td>
<td>4 years</td>
<td>Averages: $30,000 (CSU), $45,000 (UC), $130,000 (private college)</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Advanced Certificate(s) or Credential(s)</td>
<td>See previous page</td>
<td>See above</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Program cost is total “sticker” price and does not include financial aid, including grants and scholarships. Prices are as of 2020 and may change.
WANT TO LEARN MORE BUT NOT READY YET TO COMMIT?

“TRY ON” THE CAREER

- Conduct informational interviews
- Go on building tours
- Take the Intro to Facilities Management course at De Anza, College of San Mateo, or online at the International Facilities Management Association (IFMA)
- Check out the “What is Facilities Management” website

ARE YOU ALL IN? HERE’S HOW TO GET STARTED.

To be successful in any career field, focus on four key areas: social capital, work experience, degree/credential, and technical and professional skills. Here’s how you can begin building those four areas in the facilities management field.

- **Conduct informational interviews** with facilities managers
- **Join and participate in LinkedIn groups for facilities managers**
- **Conduct job shadows**

**SOCIAL CAPITAL**

- **Work at any entry-level job / min wage at a large company to get to know the company and network with the current Facilities Management professionals**
- **Work as an entry-level operations, custodial, or maintenance assistant to learn about building systems**
- **Work as an entry-level office assistant to gain project management skills**

**WORK EXPERIENCE**

- **Research facilities management degree and certificate programs**
- **Apply to either the degree or certificate programs**

**DEGREE/ CREDENTIAL**

- **Conduct informational interviews with facilities managers**
- **Join and participate in LinkedIn groups for facilities managers**
- **Conduct job shadows**

**SKILLS (TECHNICAL/ PROFESSIONAL)**
NURSING

Do you love helping others? Are you excited about human anatomy and health? Would you like to work in a job that allows you to serve patients directly? If yes, check out the nursing career field!

INTERESTS
Biology, Human Anatomy, Human Health, Psychology

JOB VALUES
Direct patient care, physically active job, flexible schedule, ability to travel

PURPOSE
Helping others

APPLICABLE INDUSTRIES
Healthcare, Biotech

COMPANIES YOU COULD WORK AT
Kaiser Permanente, Dignity Health, Sutter Health, One Medical, Genentech

Pro tip: Beware of non-accredited nursing programs! These schools will give you a degree in nursing but because they are non-accredited, you won’t be eligible for a job. Make sure the nursing schools you attend are accredited and approved in California. You can see a list of approved schools here.
JOBS MAP: NURSING

Use this map to explore jobs in the nursing field and decide which might be the best fit for you based on the type of training and resulting salaries.

Salaries quoted above are for the San Francisco Bay Area as of 2020 and may change.

Yellow boxes indicate a job that is in-demand, stable, with salaries of $65,000+/year (for the Bay Area)

- **CERTIFIED NURSING ASSISTANT (CNA) / HOME HEALTH AIDE**
  - $
  - ▶ = Bootcamp, certificate, or credential

- **MEDICAL ASSISTANT (MA)**
  - $ - $$$
  - ▶ or △

- **REGISTERED NURSE (RN)**
  - $$$
  - ◼ or ▬

- **NURSE PRACTITIONER (NP)**
  - $$$$ 
  - ▬

- **PHYSICIAN’S ASSISTANT**
  - $$$-$$$$
  - ◼

= Apprenticeship or residency
■ = Associate’s degree (2 years)
◼ = Bachelor’s degree (4 years)
⬤ = Master’s degree or above (2–3 years)

$ = minimum wage
$$ = $25,000 to $50,000 per year
$$ = $50,001 to $100,000 per year
$$ = $100,001+ per year
GETTING STARTED: NURSING

There are many ways to get started in a career field. Use the two possible paths below to plan out what’s best for you based on your time and financial needs.

**WORK/LEARN**

“Right after high school, I enrolled in the Medical Assisting program at JobTrain. It’s a no-charge program, so I was able to attend for free. It’s an evening program, about 7 months long, so I also worked at skilled nursing facility as a front desk person, while I went to school. After I finished the program, I had to sit for the national exam - which was hard but I was so relieved when I passed it!

I then was able to get a job at Kaiser as a Medical Assistant (MA). That job is great because I was working with the registered nurses and doctors every day in the hospital setting so I could build my network. It also helped me decide if I wanted to pursue registered nursing or physician assistant as my next goal. Plus, I’m making a good salary, so I am able help my family with expenses.

I decided I want to be a registered nurse. So I am working full time as an MA still and I’m going to school at San Francisco State. Nursing school is really impacted but I think I was able to get in because I already had a relevant background as a medical assistant. It’s hard to do both working and school, but my job as a MA makes it possible for me to pay for school, so it’s worth it.”

**SCHOOL FIRST**

“Right after high school, I enrolled at San Jose State as undeclared and started taking the prerequisite courses to be eligible for nursing school - whether at San Jose State or elsewhere. During school, I volunteered at the American Red Cross to help build up my resume for my application to nursing school. I worked in the summer at a skilled nursing facility as a front desk person, so I could start to see what it is like to be a nurse. I also did a lot of informational interviews with nurses, so I could find a mentor.

After two years, I had finished the prerequisites and had applied to a number of different nursing schools, both San Jose State and others. Because nursing schools are so impacted, there can be long wait lists to get in. Having a mentor was really helpful here because my mentor helped me understand which were good schools and which ones might be less impacted. I got into San Jose State’s nursing program, which was two more years of school. Once you are done with school you take the BRN exam to become a registered nurse. I was so happy when I found out I had passed the exam!

After two years, I had finished the prerequisites and had applied to a number of different nursing schools, both San Jose State and others. Because nursing schools are so impacted, there can be long wait lists to get in. Having a mentor was really helpful here because my mentor helped me understand which were good schools and which ones might be less impacted. I got into San Jose State’s nursing program, which was two more years of school. Once you are done with school you take the BRN exam to become a registered nurse. I was so happy when I found out I had passed the exam!

After I graduated, I got a nursing job in the ICU at Good Samaritan Hospital. It’s the night shift, so I’m focused on adjusting to my new schedule and my new job. I’m also working with mentor to help me identify my next steps - there are a lot of things you can do as a nurse like nurse practitioner or nurse anesthesiologist for example. These all require more school, so I want to make sure I choose the right one for me before I go back to school.”
## LOCAL EDUCATION AND TRAINING OPTIONS: NURSING

<table>
<thead>
<tr>
<th>JOB DESCRIPTION</th>
<th>DEGREE OR CERTIFICATE TYPE</th>
<th>DEGREE OR CERTIFICATE PROGRAM</th>
<th>PREREQS</th>
<th>PROGRAM LOCATIONS</th>
<th>PROGRAM LENGTH</th>
<th>PROGRAM COST</th>
<th>EXAMS REQUIRED AT END OF PROGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certified Nursing Assistant (CNA) / Home Health Aide</td>
<td>Certification</td>
<td>Home Health Aide</td>
<td>Check school requirements</td>
<td>Many, see approved list</td>
<td>One semester</td>
<td>Less than $500</td>
<td>State certification for Home Health Aide / Nursing Assistant</td>
</tr>
<tr>
<td>Minimum wage</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provides housekeeping and personal hygiene services, shops for food and other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>household requirements, prepares and serves meals and snacks, and runs</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>errands.</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Medical Assistant</td>
<td>Certificate</td>
<td>Medical Assisting</td>
<td>None</td>
<td>JobTrain</td>
<td>7 months</td>
<td>No cost to students</td>
<td>National Certified Medical Assistant (NCMA)</td>
</tr>
<tr>
<td>$42,000 - $61,000/year</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Provides patient care by performing preliminary physical tests; taking blood</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>pressure, weight, and temperature; and reporting patient history summary.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registered Nurse (RN)</td>
<td>Associate’s degree</td>
<td>Nursing</td>
<td>HESI Exam, plus 2 years of prereq courses</td>
<td>Most local</td>
<td>2 years</td>
<td>~$10,000</td>
<td>National Council Licensing Exam (NCLEX), California Board of Registered Nursing (BRN) Exam</td>
</tr>
<tr>
<td>$65,000-$95,000/year</td>
<td></td>
<td></td>
<td></td>
<td>community colleges, check approved list of</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registered Nurses assist Physicians with providing patient care by performing</td>
<td>Bachelor’s degree</td>
<td>Nursing</td>
<td>HESI Exam, plus check school requirements</td>
<td>Many, see approved</td>
<td>4 years</td>
<td>Cost varies; Averages: $30,000 (CSU), $45,000 (UC), $130,000 (private college)</td>
<td></td>
</tr>
<tr>
<td>examinations and tests, administering medication, treating wounds and a myriad</td>
<td></td>
<td></td>
<td></td>
<td>list of schools</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of other duties.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse Practitioner</td>
<td>Bachelor’s degree</td>
<td>Nursing</td>
<td>See above</td>
<td></td>
<td></td>
<td></td>
<td>California Board of Registered Nurses, Nurse Practitioner Exam</td>
</tr>
<tr>
<td>$115,000-$160,000/year</td>
<td>Doctoral degree</td>
<td>Nurse Practitioner</td>
<td>Bachelor’s degree, RN license, Master’s</td>
<td>University of</td>
<td>2 years</td>
<td>~70,000</td>
<td></td>
</tr>
<tr>
<td>A nurse practitioner is an advanced practice nurse that helps with all aspects</td>
<td></td>
<td></td>
<td>degree</td>
<td>California, San</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of patient care, including diagnosis, treatments and consultations.</td>
<td></td>
<td></td>
<td></td>
<td>Francisco</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physician Assistant</td>
<td>Bachelor’s degree</td>
<td>Any</td>
<td>High school diploma</td>
<td>CSUs, UCs, or</td>
<td>4 years</td>
<td>Cost varies; Averages: $30,000 (CSU), $45,000 (UC), $130,000 (private college)</td>
<td></td>
</tr>
<tr>
<td>$96,000 - $150,000/year</td>
<td>Doctoral degree</td>
<td>Physician Assistant</td>
<td>Bachelor’s degree</td>
<td>UC Davis</td>
<td></td>
<td>~$150,000</td>
<td>Physician’s Assistant National Certifying Exam (PA-C), California’s Physician Assistant Board Exam</td>
</tr>
<tr>
<td>Provide healthcare services typically performed by a physician, under the</td>
<td>Master’s degree</td>
<td>Physician Assistant</td>
<td>Bachelor’s degree</td>
<td>Dominican</td>
<td>2.5 years</td>
<td>~$115,000</td>
<td></td>
</tr>
<tr>
<td>supervision of a physician. Conduct complete physicals, provide treatment, and</td>
<td>Master’s degree</td>
<td>Physician Assistant</td>
<td>Bachelor’s degree</td>
<td>University</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>counsel patients. May, in some cases, prescribe medication.</td>
<td>Master’s degree</td>
<td>Physician Assistant</td>
<td>Bachelor’s degree</td>
<td>CSU - Monterey</td>
<td>3 years</td>
<td>~$90,000</td>
<td></td>
</tr>
<tr>
<td>Master’s degree</td>
<td></td>
<td></td>
<td></td>
<td>Bay</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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ARE YOU ALL IN? HERE’S HOW TO GET STARTED.

To be successful in any career field, focus on four key areas: social capital, work experience, degree/credential, and technical and professional skills. Here’s how you can begin building those four areas in the nursing field.

**WANT TO LEARN MORE BUT NOT READY YET TO COMMIT?**

“TRY ON” THE CAREER

- Conduct informational interviews
- Conduct job shadows
- Go on clinical rotations
- Explore the nursing career via the Discover Nursing website
- Talk to the college/career counselor at the colleges you are considering attending

**TAKE ACTION: NURSING**

**SOCIAL CAPITAL**
- Conduct informational interviews
- Conduct job shadows
- Go on clinical rotations
- Find a mentor

**WORK EXPERIENCE**
- Take a summer job in a skilled nursing facility, at the American Red Cross, or anything related to healthcare or civic service
- Volunteer at civic events to build your resume for school

**DEGREE/ CREDENTIAL**
- Research training, and degree programs
- Apply to training or degree programs
- Sit for your HESI exams

**SKILLS (TECHNICAL/ PROFESSIONAL)**
- Take the most advanced science classes you can
- Complete CPR and First Aid classes
SALES

Do you like to build relationships with lots of people? Are you looking for a job where you can help others find solutions to the problems they face? Want to work in a variety of industries, including tech, biomedical, business and more? If so, check out the sales career field!

INTERESTS
Building relationships, business, psychology

JOB VALUES
Active job, flexible schedule, working with adults

PURPOSE
Solving problems, helping others

APPLICABLE INDUSTRIES
Tech, biomedical, financial, services

COMPANIES YOU COULD WORK AT
Salesforce, Okta, Udemy, Lever
Use this map to explore jobs in the sales field and decide which might be the best fit for you based on the type of training and resulting salaries.

**SALES REPRESENTATIVE/Sales Development Manager**

- $\sim$ $$
  - or

**ACCOUNT REPRESENTATIVE/Account Manager**

- $\sim$ $$
  - or

**ACCOUNT EXECUTIVE**

- $$--$$

**SALES DIRECTOR**

- $$$
  - and often

**BUSINESS DEVELOPMENT/Director**

- $$$
  - and often

**SENIOR SALES MANAGER**

- $$\sim$$ $$$
  - and often

**MARKETING AND BUSINESS DEVELOPMENT MANAGER**

- $$$
  - and often

**VP SALES, MARKETING, AND/OR BUSINESS DEVELOPMENT**

- $$$

Yellow boxes indicate a job that is in-demand, stable, with salaries of $65,000+/year (for the Bay Area).

$ = minimum wage

$$ = $25,000 to $50,000 per year

$$$ = $50,001 to $100,000 per year

$$$$ = $100,001+ per year

= Bootcamp, certificate, or credential

= Apprenticeship or residency

= Associate’s degree (2 years)

= Bachelor’s degree (4 years)

= Master’s degree or above (2–3 years)

Salaries quoted above are for the San Francisco Bay Area as of 2020 and may change.
GETTING STARTED: SALES

There are many ways to get started in a career field. Use the two possible paths below to plan out what’s best for you based on your time and financial needs.

WORK/LEARN

“Right after high school, I started working full-time as an entry-level sales representative at a local cell phone store so I could start to get some experience. That fall, I enrolled in the YearUp program, which gives you tech sales training and then places you in an internship for six months. This was a good experience for me because YearUp pays you to be a part of the program — I didn’t have to pay. By the end of the one-year YearUp program, I had gotten sales training, plus tech sales work experience at Facebook, and I had met a lot of professionals who were doing sales.

Right after YearUp, one of the sales professionals I had met and worked with offered me a full-time job in tech sales, which I’m doing now. I’m learning so much in this role! There is always something new to learn about sales. I want to advance to a sales director next - which often requires a bachelor’s degree - so I am currently enrolled at Rivet School for a bachelor’s degree in Business. Rivet is a self-paced online program, so I am able to do the program while I am working full-time. I am saving a lot of money doing this - even though it isn’t a traditional college experience. I’m also doing a lot of networking so that I can continue to build my professional network.”

SCHOOL FIRST

“Right after high school, I went to CSU East Bay for a bachelor’s degree in marketing. I knew I would also need some work experience, so in the summers I was a marketing intern and also a lead generation intern for two tech companies. These experiences helped me build a professional network and helped me “try on” sales and marketing so I could be sure that I like the career.

After college, I enrolled in SV Academy — a one-month tech sales bootcamp that places you in your first sales job after you complete the program. The program was really good and helped me learn all the basics of sales that I didn’t learn in college. I was hired on as an entry-level sales development rep at Inside View right after I graduated SV Academy. I’m in that role now, learning a lot!

I want to become a sales director next, so I am doing a lot of networking with sales directors at other tech companies in order to build my professional network.”
## LOCAL EDUCATION AND TRAINING OPTIONS: SALES

<table>
<thead>
<tr>
<th>JOB DESCRIPTION</th>
<th>DEGREE OR CERTIFICATE TYPE</th>
<th>DEGREE OR CERTIFICATE PROGRAM</th>
<th>PREREQS</th>
<th>PROGRAM LOCATIONS</th>
<th>PROGRAM LENGTH</th>
<th>PROGRAM COST</th>
<th>EXAMS REQUIRED AT END OF PROGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sales Representative/Sales Development Manager</strong></td>
<td>Certificate</td>
<td>“Bootcamp” program</td>
<td>High school diploma</td>
<td><strong>YearUp - Sales</strong></td>
<td>1 year (6 months training, 6 months internship at a company)</td>
<td>No charge; you earn a weekly stipend through the length of the program, paid for by the employer</td>
<td>None</td>
</tr>
<tr>
<td>$40,000–$100,000/year depending on commissions</td>
<td></td>
<td></td>
<td></td>
<td><strong>Vendition — Tech Sales</strong></td>
<td>3 month apprenticeship program</td>
<td>No charge; you earn $7,500 as an apprentice, paid for by the employer</td>
<td>None</td>
</tr>
<tr>
<td>Responsible for selling a company’s products by identifying leads, educating prospects on products through calls, trainings, and presentations, and providing existing customers with exceptional support.</td>
<td>Some sales work experience</td>
<td></td>
<td></td>
<td><strong>Sales Bootcamp</strong></td>
<td>1 week bootcamps then 3 months at a tech company as an apprentice where you earn $7500. Based in SF</td>
<td>No cost, no deposit, no fees</td>
<td>None</td>
</tr>
<tr>
<td><strong>Account Representative/Account Manager</strong></td>
<td>Certificate</td>
<td></td>
<td></td>
<td><strong>Always Hired</strong></td>
<td>Varies with program, 100 hours, 12 weeks, 1 year</td>
<td>$2,500–$4,000</td>
<td>None</td>
</tr>
<tr>
<td>$50,000–$100,000/year depending on commissions</td>
<td></td>
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<td></td>
<td><strong>Sales Bootcamp</strong></td>
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<tr>
<td>Closes sales, build relationships with new clients and sustain long-term relationships with existing clients by encouraging repeat business and ensuring that clients are satisfied with company products and services.</td>
<td>Some sales work experience</td>
<td></td>
<td></td>
<td><strong>Apprenti — Tech Sales</strong></td>
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<td></td>
</tr>
<tr>
<td><strong>Account Executive</strong></td>
<td>Certificate</td>
<td>Registered Apprenticeship program</td>
<td>High score on Apprentice's in-house assessment</td>
<td><strong>Apprenti — Tech Sales</strong></td>
<td>10–20 weeks classroom training, 1 year on-the-job training</td>
<td>No charge; you earn a stipend during training and then wages during the on-the-job training - paid for via a public-private partnership between the U.S. Dept of Labor, the State of California, and the employer</td>
<td>None</td>
</tr>
<tr>
<td>$60,000–$120,000/year depending on commissions</td>
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<td></td>
<td><strong>Apprenti — Tech Sales</strong></td>
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</tr>
<tr>
<td>Serves as the main contact person between the vendor and the customer. Pitches the deal and negotiates the contract, and are thereafter exclusively responsible for fulfilling the contract terms and keeping the client happy.</td>
<td>None</td>
<td></td>
<td></td>
<td><strong>Always Hired</strong></td>
<td></td>
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</tr>
</tbody>
</table>

Program cost is total “sticker” price and does not include financial aid, including grants and scholarships. Prices are as of 2020 and may change.
# LOCAL EDUCATION AND TRAINING OPTIONS: SALES

<table>
<thead>
<tr>
<th>JOB DESCRIPTION</th>
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<th>PROGRAM LENGTH</th>
<th>PROGRAM COST</th>
<th>EXAMS REQUIRED AT END OF PROGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sales Director</strong></td>
<td>Bachelor’s degree AND OFTEN</td>
<td>Business, Marketing, Psychology</td>
<td>None</td>
<td>CSUs, UCs, private schools</td>
<td>4 years</td>
<td>Cost varies; Averages: $30,000 (CSU), $45,000 (UC), $130,000 (private college)</td>
<td>None</td>
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<tr>
<td>$130,000–$245,000/ year</td>
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<tr>
<td>Responsible for managing all sales operations for an organization or business.</td>
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<tr>
<td>Duties include drafting sales reports, meeting sales targets, and estimating sales profit for products.</td>
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<tr>
<td><strong>Business Development/Sales Director</strong></td>
<td>Certificate</td>
<td>“Bootcamp” Program</td>
<td>Bachelor’s degree</td>
<td>SV Academy</td>
<td>4 week virtual training program fellowship</td>
<td>No cost. You will receive a fellowship if accepted. SV Academy’s employment partners take on 100% of the cost of your training assuming that you will be placed with one of them after you are trained.</td>
<td>None</td>
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<tr>
<td>$68,000–$138,000/ year</td>
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<tr>
<td>Duties include identifying business opportunities, building and maintaining successful relationships with prospects and existing clients, collaborating with executives on business strategy to determine objectives, evaluating current business performance and maximizing business reach and potential.</td>
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<tr>
<td><strong>Senior Sales Manager</strong></td>
<td>Certificate</td>
<td>“Bootcamp” Program</td>
<td>Bachelor’s degree</td>
<td>SV Academy</td>
<td>4 week virtual training program fellowship</td>
<td>No cost. You will receive a fellowship if accepted. SV Academy’s employment partners take on 100% of the cost of your training assuming that you will be placed with one of them after you are trained.</td>
<td>None</td>
</tr>
<tr>
<td>$85,000–$135,000/ year</td>
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<tr>
<td>The most experienced members of a sales team—they are responsible for guiding Sales Representatives and ensuring that sales targets are met, generating leads, managing key accounts, and monitoring competitors’ sales activities.</td>
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<tr>
<td><strong>Marketing &amp; Business Development Manager</strong></td>
<td>Certificate</td>
<td>“Bootcamp” Program</td>
<td>Bachelor’s degree</td>
<td>SV Academy</td>
<td>4 week virtual training program fellowship</td>
<td>No cost. You will receive a fellowship if accepted. SV Academy’s employment partners take on 100% of the cost of your training assuming that you will be placed with one of them after you are trained.</td>
<td>None</td>
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<tr>
<td>$100,000–$175,000/ year</td>
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<tr>
<td>Marketing and business development managers are in charge of market research and advertising for their company—main responsibilities are to oversee teams working on projects such as marketing, advertising, and business development decisions</td>
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</tr>
<tr>
<td><strong>VP of Sales, Marketing, and/or Business Development</strong></td>
<td>Certificate</td>
<td>“Bootcamp” Program</td>
<td>Bachelor’s degree</td>
<td>SV Academy</td>
<td>4 week virtual training program fellowship</td>
<td>No cost. You will receive a fellowship if accepted. SV Academy’s employment partners take on 100% of the cost of your training assuming that you will be placed with one of them after you are trained.</td>
<td>None</td>
</tr>
<tr>
<td>$230,000–$450,000/ year</td>
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<tr>
<td>Major responsibilities include developing and executing company sales and marketing plans, including implementing new ideas and tools for the company—they provide direction and planning for the company and oversee the workings of the company and must work closely with a team of salespeople, management and lower-level employees.</td>
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</tr>
</tbody>
</table>

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To be successful in any career field, focus on four key areas: social capital, work experience, degree/credential, and technical and professional skills. Here’s how you can begin building those four areas in the sales field.

**WANT TO LEARN MORE BUT NOT READY YET TO COMMIT?**

**“TRY ON” THE CAREER**

- Conduct informational interviews
- Conduct job shadows
- Volunteer to help with sales or fundraisers (e.g., bake sales, raffle fundraisers, etc.)

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**ARE YOU ALL IN? HERE’S HOW TO GET STARTED.**

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**Social Capital**
- Conduct informational interviews with sales professionals
- Conduct job shadows

**Work Experience**
- Work an entry-level sales job in retail or personal services (e.g., selling cell phones)

**Degree/Credential**
- Research sales training and degree programs
- Apply to training or degree programs

**Skills (Technical/Professional)**
- Complete internships in lead generation, marketing
- Complete the Vendition Sales Bootcamp Free Online Training Classes
SOFTWARE ENGINEERING

Do you love to solve problems? Are you excited about taking an idea and bringing it to life by translating it into a mathematical equation? Would you like to work in a variety of industries, such as tech, healthcare, retail, and business? If yes, check out the software engineering career field!

INTERESTS
Technology, electronics, robots, math, science

JOB VALUES
Working with adults, problem solving, creative, flexible schedule, ability to travel, ability to make a very high income (over $100,000)

PURPOSE
Creating something new, build/fix/repair things

APPLICABLE INDUSTRIES
Tech, healthcare, retail, business, research, government

COMPANIES YOU COULD WORK AT
Twitter, Snapchat, Instagram, Pinterest, Amazon, Apple, Facebook, Google

Pro tip: In Silicon Valley, software engineering is both a high-demand and a competitive field. If you want to work for a big name tech company like Google or Apple as an engineer, you'll need to get into a very selective bachelor's degree program, such as those at UC Berkeley, University of Waterloo, or Stanford, and you'll need a lot of internship experience and a big network of professional contacts to land your first job. If you're in a less selective bachelor's degree program or alternative pathway, you can still work your way into Google and Apple eventually, you will likely just need to start your career at a less-competitive tech company first and work hard to build a big network of professional contacts at Google, Apple, etc. There are amazing engineering jobs at less-competitive tech companies throughout the Bay Area that are fun to work for, so explore your options!
Use this map to explore jobs in the field of software engineering and decide which might be the best fit for you based on the type of training and resulting salaries.

Salaries quoted above are for the San Francisco Bay Area as of 2020 and may change.

Yellow boxes indicate a job that is in-demand, stable, with salaries of $65,000+/year (for the Bay Area)
GETTING STARTED: SOFTWARE ENGINEERING

There are many ways to get started in a career field. Use the two possible paths below to plan out what’s best for you based on your time and financial needs.

**WORK/LEARN**

"The fall after I graduated high school, I was accepted into the YearUp program for software developers and quality assurance. It's a year-long training and internship program, so they trained me for a few months and then I interned at Salesforce doing quality assurance. I liked the YearUp experience because it was no charge to me, in fact they paid me a small stipend during training and I was also paid during the internship. The experience also helped me really “try on” the career so I could be sure I liked it.

After I finished YearUp, I was hired full-time as a QA Analyst at Salesforce. While I was working in that job, I did lots of informational interviews with people at Salesforce, Microsoft, and other companies to figure out if I wanted to go into software engineering, development, or architecture. I decided I really wanted to be a developer, so I talked to my boss about taking on new projects at work so I could build out a portfolio of developer projects. I also enrolled part-time at San Jose State to get a bachelor’s in computer science. To build out my portfolio even more, I took on volunteer projects creating apps.

Because I was going to school part-time, it took me a really long-time to finish my bachelor’s, about six years. But I was able to graduate with less than $10,000 in debt because I was working full-time. I’m now working as a software developer at a tech start-up in SF. It’s fun and really fast-paced."

**SCHOOL FIRST**

"Right after high school, I went to school at UC Merced to study Computer Science and Engineering. UC Merced isn’t a top computer science program, so I knew I had to spend my time at college really building up my software engineer portfolio of projects to show potential employers what I could do. I took an internship every summer to build work experience and add projects to my portfolio. I also did so many informational interviews, trying to build a professional network of contacts and also to get leads on small projects that I could help on to build my portfolio.

Thanks to all my work building a portfolio and networking, when I graduated from UC Merced, I was hired on as an entry-level software engineer at Adobe. It still took a ton of applications and interviews to get this first job, but I know I got it because I had so many projects in my portfolio and I got a referral to the job by someone I had done an informational interview with. I’ve been at Adobe for two years now.

I’m actually really interested in managing a team of engineers, so I have been working with my boss to get assigned to small projects being a project manager and I’m going to supervise a summer intern this summer. I’m also thinking about going back to school for an MBA, so I can learn leadership and managerial skills."
## LOCAL EDUCATION AND TRAINING OPTIONS: SOFTWARE ENGINEERING

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<th>PROGRAM COST</th>
<th>EXAMS REQUIRED AT END OF PROGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tech Support/Tech Aide</strong>&lt;br&gt;Minimum wage&lt;br&gt;Ensures proper computer operations so that end users can accomplish organizational tasks—This includes receiving, prioritizing, documenting and actively resolving end user help requests.</td>
<td>Certificate</td>
<td>“Bootcamp” program</td>
<td>High school graduate</td>
<td>JobTrain — IT Service and Support Training Program</td>
<td>11 weeks</td>
<td>No charge</td>
<td>None</td>
</tr>
<tr>
<td><strong>Quality Assurance</strong>&lt;br&gt;$45,000–$60,000/year&lt;br&gt;Runs various tests on new software products to ensure that programs satisfy all specifications and requirements.</td>
<td>Certificate</td>
<td>“Bootcamp” program</td>
<td>High school graduate</td>
<td>YearUp Bay Area — Software Developer/Quality Assurance</td>
<td>1 year (6 months training, 6 months internship at a company)</td>
<td>No charge; you earn a weekly stipend through the length of the program</td>
<td>None</td>
</tr>
<tr>
<td><strong>Registered Apprenticeship Program OR ⬇</strong>&lt;br&gt;U.S. Department of Labor</td>
<td>U.S. Department of Labor</td>
<td>High score on Apprenti’s in-house assessment</td>
<td>Apprenti — Software Development Apprenticeship Program</td>
<td>10–20 weeks classroom training + 1 year on the job training</td>
<td>No charge; you earn a stipend during training and then wages during the on-the-job training</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td><strong>Software Engineer</strong>&lt;br&gt;$70,000–$100,000/year&lt;br&gt;Apply principles and techniques of engineering, mathematics, and computer science to the design, development, and testing of software applications for computers.</td>
<td>Certificate OR ⬇</td>
<td>“Bootcamp” program</td>
<td>Should have a little coding experience</td>
<td>Hack Reactor — SF</td>
<td>12 weeks full time</td>
<td>$18,000 — financing and deferred payment until employment available</td>
<td>None</td>
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<tr>
<td></td>
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<td></td>
<td>High school graduate</td>
<td>App Academy — SF</td>
<td>16 weeks</td>
<td>$17,000 if payment is up front. Or slightly more if payment is deferral until hired</td>
<td>None</td>
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<tr>
<td></td>
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<td>Woman-identifying students only. Must have 40 hours coding experience from any source.</td>
<td>Hackbright Academy</td>
<td>3 months full time, 6 months part time</td>
<td>$7,000 — financing and deferred payment until employment available</td>
<td>None</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>High school diploma</td>
<td>Berkeley Bootcamp (through UC Berkeley)</td>
<td>3 months full time, 6 months part time</td>
<td>$12,000</td>
<td>None</td>
</tr>
<tr>
<td><strong>Bachelor's degree</strong></td>
<td>Software Engineering, Computer Engineering, or Computer Science</td>
<td>Check school requirements</td>
<td>CSUs, UCs, or private colleges</td>
<td></td>
<td>4 years</td>
<td>Cost varies; Averages: $30,000 (CSU), $45,000 (UC), $130,000 (private college)</td>
<td>None</td>
</tr>
</tbody>
</table>

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# LOCAL EDUCATION AND TRAINING OPTIONS: SOFTWARE ENGINEERING

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<tr>
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<th>PROGRAM COST</th>
<th>EXAMS REQUIRED AT END OF PROGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering path: Lead Software Engineer</td>
<td>Bachelor's degree</td>
<td>See previous page</td>
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<tr>
<td>$120,000–$190,000/year</td>
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<tr>
<td>Implements high quality code in an agile, test-driven development environment; creates detailed software development plans and assigns tasks to team members.</td>
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<tr>
<td>Engineering path (management): Software Engineering Manager</td>
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<tr>
<td>$140,000–$190,000/year</td>
<td>Master's degree AND OFTEN</td>
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<tr>
<td>Manages and oversees the design and development of software applications. Directs the work of engineers to ensure the best practices around software development.</td>
<td>Master's degree AND OFTEN</td>
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<tr>
<td>Development path: Software Developer</td>
<td>Bachelor's degree</td>
<td>See previous page</td>
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<tr>
<td>$60,000–$100,000/year</td>
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<tr>
<td>Builds software that runs across various types of computers; writes code from scratch.</td>
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<tr>
<td>Development path (management): Software Development Manager</td>
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<tr>
<td>$140,000–$190,000/year</td>
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<tr>
<td>Leads teams of software developers. In addition to designing software, web applications, and web services, also hires, trains, and manages staff, creates and oversees budgets, and makes progress reports to senior management.</td>
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<tr>
<td>Architecture path: Software Architect</td>
<td>Bachelor's degree</td>
<td>See previous page</td>
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<td></td>
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<tr>
<td>$135,000–$185,000/year</td>
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<tr>
<td>Designs and develops software systems and applications. Acts as high-level decision makers in the process, determining everything from design choices to technical standards, such as platforms and coding standards.</td>
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</tr>
<tr>
<td>Architecture path: Application Architect</td>
<td>Bachelor's degree</td>
<td>See previous page</td>
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<td></td>
</tr>
<tr>
<td>$100,000–$150,000/year</td>
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<tr>
<td>Plays an important role in the design and analysis of software projects by creating new applications or improving existing applications, running tests, developing product prototypes and creating technical documents and manuals relating to application development.</td>
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<tr>
<td>Engineering path: Principal Software Engineer</td>
<td>Bachelor's degree</td>
<td>See previous page</td>
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<tr>
<td>$175,000–$230,000/year</td>
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<tr>
<td>Develops, documents, and test software to ensure that the software meets the needs of end users and achieves business goals as well as providing technical guidance to development teams and overseeing the technical aspects of all projects.</td>
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<td>Engineering path (management): Software Engineering Director</td>
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<tr>
<td>$200,000–$260,000/year</td>
<td>Master's degree AND OFTEN</td>
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<tr>
<td>Directs and oversees the software engineering function in developing, releasing, and maintaining software applications/operating systems according to business needs.</td>
<td>Master's degree AND OFTEN</td>
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<tr>
<td>Development path (management): Director of Software Development</td>
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<tr>
<td>$130,000–$210,000/year</td>
<td>Master's degree</td>
<td>Software Engineering or Computer Science</td>
<td>Master's degree</td>
<td>CSUs, UCs, or private colleges</td>
<td>2 years</td>
<td>Cost varies; typically $20,000 - $60,000+</td>
<td>None</td>
</tr>
<tr>
<td>Director of Software Development directs strategic development, management and deployment of QA resources and software development, and ensures application design to manage and maintain data security and integrity.</td>
<td>Master's degree</td>
<td>Software Engineering or Computer Science</td>
<td>Master's degree</td>
<td>CSUs, UCs, or private colleges</td>
<td>2 years</td>
<td>Cost varies; typically $20,000 - $60,000+</td>
<td>None</td>
</tr>
<tr>
<td>Solutions Architect</td>
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<tr>
<td>$100,000–$180,000/year</td>
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<tr>
<td>A solution architect is responsible for the design of one or more applications or services within an organization, and is typically part of a solution development team.</td>
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</tr>
</tbody>
</table>

Program cost is total “sticker” price and does not include financial aid, including grants and scholarships. Prices are as of 2020 and may change.
ARE YOU ALL IN? **HERE’S HOW TO GET STARTED.**

To be successful in any career field, focus on four key areas: social capital, work experience, degree/credential, and technical and professional skills. Here’s how you can begin building those four areas in the software engineering field.

**WANT TO LEARN MORE BUT NOT READY YET TO COMMIT?**

**“TRY ON” THE CAREER**

- Conduct informational interviews
- Conduct job shadows
- Visit Github and volunteer to help others debug their code

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**TAKE ACTION: SOFTWARE ENGINEERING**

**SOCIAL CAPITAL**

- Conduct informational interviews
- Conduct job shadows
- Participate in programs such as ChickTech or Berkeley Girls in Engineering Camp

**WORK EXPERIENCE**

- Complete the Stanford RISE program (paid summer internship)
- Work entry-level tech support jobs (part-time or full-time)

**DEGREE/ CREDENTIAL**

- Research software development apprentice, training, and degree programs
- Apply to apprenticeship, training or degree programs

**SKILLS (TECHNICAL/ PROFESSIONAL)**

- Complete coding, programming, and computer science classes through Code Academy, Harvard EdX online, Hack the Hood, Hidden Genius Project, Daniel E Glover Tech Center
About Marshall Street Initiatives

Marshall Street Initiatives is a coalition of educators working to systematically improve opportunities for students across the country. Drawing from 15+ years of institutional knowledge at Summit Public Schools, Marshall targets locally felt, globally evident problems to deliver on the original promise of charter schools: to bring equitable solutions to all public schools.

Marshall Street Initiatives
780 Broadway
Redwood City, CA 94063
www.marshall.org
Blank Template

Build your own map with this blank template
[NAME OF CAREER FIELD]

Short description: Do you love to [XXX]? Are you excited about [XXX]? Would you like to work in a [XXX]? If yes, check out the [name of career field] career field!

INTERESTS
[List interest areas related to this career here]

JOB VALUES
[List features of the jobs in this career field here]

PURPOSE
[List what people find most meaningful about this career field here]

APPLICABLE INDUSTRIES
[List applicable industries here]

COMPANIES YOU COULD WORK AT
[List names of companies related to this career field here]
JOBS MAP: [NAME OF CAREER FIELD]

Use this map to explore jobs in the field of [CAREER NAME] and decide which might be the best fit for you based on the type of training and resulting salaries.

Salaries quoted above are for the San Francisco Bay Area as of 2020 and may change.

Yellow boxes indicate a job that is in-demand, stable, with salaries of $65,000+/year (for the Bay Area)

$ = minimum wage
$$ = $25,000 to $50,000 per year
$$ = $50,001 to $100,000 per year
$$ = $100,001+ per year

= Bootcamp, certificate, or credential
= Apprenticeship or residency
= Associate’s degree (2 years)
= Bachelor’s degree (4 years)
= Master’s degree or above (2–3 years)
GETTING STARTED: [NAME OF CAREER FIELD]

There are many ways to get started in a career field. Use the two possible paths below to plan out what’s best for you based on your time and financial needs.

[ADD IMAGE OF PEOPLE WORKING IN THIS CAREER FIELD HERE]
# LOCAL EDUCATION AND TRAINING OPTIONS: [NAME OF CAREER FIELD]

<table>
<thead>
<tr>
<th>JOB DESCRIPTION</th>
<th>DEGREE OR CERTIFICATE TYPE</th>
<th>DEGREE OR CERTIFICATE PROGRAM</th>
<th>PREREQS</th>
<th>PROGRAM LOCATIONS</th>
<th>PROGRAM LENGTH</th>
<th>PROGRAM COST</th>
<th>EXAMS REQUIRED AT END OF PROGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Title #1</td>
<td>Salary</td>
<td>Short job description</td>
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<tr>
<td>Job Title #2</td>
<td>Salary</td>
<td>Short job description</td>
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<tr>
<td>Job Title #3</td>
<td>Salary</td>
<td>Short job description</td>
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<tr>
<td>Job Title #4</td>
<td>Salary</td>
<td>Short job description</td>
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</tbody>
</table>

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ARE YOU ALL IN? **HERE’S HOW TO GET STARTED.**

To be successful in any career field, focus on four key areas: social capital, work experience, degree/credential, and technical and professional skills. Here’s how you can begin building those four areas in the [name of career] field.

**WANT TO LEARN MORE BUT NOT READY YET TO COMMIT?**

**“TRY ON” THE CAREER**

- Conduct informational interviews
- Conduct job shadows
- [add more here]

**TAKE ACTION:** [NAME OF CAREER FIELD]
## SAMPLE INTERVIEW QUESTIONS

When researching a new career field, you’ll want to interview multiple people who work and train in the field. Below are sample interview questions.

<table>
<thead>
<tr>
<th>Questions to ask Professionals (i.e. people who work in the field)</th>
<th>Questions to ask Training Providers (i.e. Professors or Program Directors)</th>
</tr>
</thead>
<tbody>
<tr>
<td>● How did you get started in [career field]?</td>
<td>● How did you get started in this field?</td>
</tr>
<tr>
<td>● What type of person (skills, characteristics, interests, etc) is best suited to work in [career field]?</td>
<td>● First, how has your program been impacted due to COVID19? Are you still operating? In what ways?</td>
</tr>
<tr>
<td>● What is most meaningful about working in [career field]?</td>
<td>● Could you share the details of your program?</td>
</tr>
<tr>
<td>● If you were a high school student who wanted to “try on” a [career field] career, what sort of experiences would you recommend?</td>
<td>○ Cost (total - not per year or per term, etc)</td>
</tr>
<tr>
<td>● Can you walk me through the career pathway as if you were starting from day one after graduating high school?</td>
<td>○ Length of time to complete</td>
</tr>
<tr>
<td>○ Probing questions:</td>
<td>○ Virtual vs in-person? (especially now that it is COVID-19?)</td>
</tr>
<tr>
<td>■ If you were starting out in [career field] in today’s environment, how would you piece together an efficient and affordable (i.e. can get paid while being trained) pathway into [career field]?</td>
<td>○ How many people graduate from your program each year / how many training slots do you have each year?</td>
</tr>
<tr>
<td>■ In particular, what is the day one job you would take to get started, without any prior [career field] experience?</td>
<td>○ What are the graduation outcomes? % of participants who graduate?</td>
</tr>
<tr>
<td>● What skills/training would you recommend young people gain in order to be good at [career field]?</td>
<td>○ What are the employment outcomes? % of participants who get a job immediately out of the training program?</td>
</tr>
<tr>
<td>● Where are the really good [career field] training programs in the peninsula, south bay, and east bay/richmond?</td>
<td>● What does it take to get accepted to the program? What is the likelihood that a student who has just graduated from high school would be accepted?</td>
</tr>
<tr>
<td>● Who are the employers in mid-peninsula who are experiencing a hiring shortage in entry-level [career field] role?</td>
<td>● In what ways is [career field] impacted by COVID-19? Does it still make sense to funnel our students into this career pathway?</td>
</tr>
<tr>
<td>● How is COVID-19 impacting the [career field] field?</td>
<td>● What type of person (skills, characteristics, interests, etc) is best suited to work in [career field]?</td>
</tr>
<tr>
<td></td>
<td>● What is most meaningful about working in [career field]?</td>
</tr>
<tr>
<td></td>
<td>● If you were a high school student who wanted to “try on” a [career field] career, what sort of experiences would you recommend?</td>
</tr>
<tr>
<td></td>
<td>● Can you walk me through how a young adult who needs to work while going to school, could piece together a work-learn pathway through this field? From Day 1 of graduating high school.</td>
</tr>
</tbody>
</table>