NOVA | Northern Virginia Community College

Business Engagement and Career Services

Opportunities in Construction & Skilled Trades



Career Resources Guide

Introduction

As students navigate their academic journey, understanding career pathways is essential for making informed decisions about their future. Career planning involves recognizing industry trends, identifying potential employers, and equipping oneself with the necessary skills and qualifications to succeed in their selected field. This guide aims to provide an in-depth exploration of NOVA's six key career fields—Business and Finance, Construction & Skilled Trades, Healthcare, Information Technology, Public Administration, and STEM (Science, Technology, Engineering, and Mathematics)—highlighting top employers, in-demand job titles, resume, cover letter, and interview strategies, as well as programs of study (majors) at Northern Virginia Community College (NOVA) that lead to careers in each field. Beyond this guide, students can learn more information and opportunities in these key fields here.



Top Employers (by Number of Positions)

The following table lists the top employers in the construction & skilled trades industry based on number of positions. These organizations are known for contributing to their industries and offering competitive employment opportunities. The data reflects the organizations identified through the analysis of labor market information provided by the Fairfax County Economic Development Authority (FCEDA) and Arlington Economic Development (AED).

1. Becthel	6. Baker Concrete Construction
2. Clark Construction	7. PCL Construction
3. Turner Construction	8. Fort Myer Construction Corp
4. M.C. Dean	9. Capitol Paving of D.C., Inc.
5. HITT Contracting	10. Balfour Beatty US

Note. This table is illustrative and not exhaustive. For comprehensive and up-to-date information, please refer to the respective organizations' publications.

Sources:
"Top 200 Employers Report 2023," District of Columbia Department of Employment Services
"Top 200 Employers Report 2024," District of Columbia Department of Employment Services
"Key Industries," Arlington Economic Development 2025

Top Job Titles



Understanding the most sought-after job titles in the healthcare industry can help students tailor their career preparation. Below are some key job titles in the DC Metro area, based on the latest data from the U.S. Bureau of Labor Statistics.

1. Maintenance and Repair Workers
2. Construction Laborers
3. Landscaping and Groundskeeping Workers
4. First-Line Supervisors of Construction Trades and Extraction Workers
5. Electricians
6. Automative Service Technicians and Mechanics
7. Carpenters
8. First-Line Supervisors of Mechanics, Installers, and Repairers
9. Plumbers, Pipefitters, Steamfitters
10. Civil Engineers

Note. This list is illustrative and not exhaustive. For comprehensive and up-to-date information, please refer to the respective organizations' publications.

Source:
May 2023 Metropolitan and Nonmetropolitan Area Occupational Employment and Wage Estimates for Washington-Arlington-Alexandria, DC-VA-MD-WV, US Bureau of Labor Statistics

Resume and Cover Letter Tips

Resume and cover letter templates are widely available online, offering various options for different professional levels, including college students entering the workforce. Websites are available to provide resume and cover letter templates. When selecting a template, consider the following tips to ensure it highlights your strengths and aligns with your career goals:

Pick the Right Format:

- **Chronological:** Ideal for those with relevant work experience, as it highlights your job history. This format is popular among employers who value experience.
- **Functional:** Best for those with limited work experience or gaps in their employment history, as it focuses on skills rather than past positions.
- **Combination:** A balanced format that showcases both skills and experience. This is a good choice if you have some experience but also want to emphasize skills.

Know Your Audience: Different industries have different expectations. For example, a creative resume template may be suitable for graphic design roles, while a more professional template is better for industries like law or banking. When in doubt, choose a simple, clean design.

Play to Your Strengths: Choose a template that reflects your professional personality. The template should showcase your skills, interests, and experience in a way that feels authentic to you.

Ask for Feedback: Before finalizing your resume, seek input from the NOVA Career Services team. They can offer valuable perspectives on what works best.

Source:
Resume Templates, Hloom

Tailoring Your Resume and Cover Letter



Resume Tips

Resumes for skilled trade workers should emphasize technical proficiency, relevant skills, and trade-related knowledge. The resume should start with the most recent position and work backward, using concise language to describe responsibilities and focusing on key achievements. Any relevant qualifications, certifications, or licenses earned, along with the institutions should be listed. Technical skills should be clearly articulated to showcase expertise in the trade, while tailoring the skills section to align with the specific job description. Education history, including degrees, trade certificates, and relevant training programs should be detailed.

Cover Letter Tips

A cover letter should address the hiring manager by name, referencing the company and the role. Briefly describe why skills and experience fit with the company's needs, and share your work ethic with anecdotes or examples demonstrating commitment to quality and teamwork. Including soft skills and ending with enthusiasm will strengthen the cover letter.

Sample Resume & Cover Letter

Your Full Name

Your City, State, ZIP
Your Email Address | Your Phone Number | LinkedIn Profile

Professional Summary

Hardworking and technically skilled trades worker with an Associate Degree and hands-on experience in the field. Dedicated to delivering high-quality results, following safety standards, and continually developing trade-related expertise. Seeking an entry-level skilled trades position in the DMV or Northern Virginia area.

Emphasizes relevant skills, trade knowledge, & technical proficiency

Technical Skills

- Electrical wiring and installation
- Plumbing and pipefitting
- HVAC systems maintenance
- Blueprint reading
- Safety compliance (OSHA)
- Power tools and machinery operation

Skills tailored for job description

Professional Experience

Trades Assistant
XYZ Construction Services, Arlington, VA
June 2023 – March 2024 | 30 hrs/week

- Assisted in installing and maintaining residential electrical systems
- Supported HVAC technicians in system installations, improving team efficiency by 15%
- Maintained a safe and organized worksite in compliance with OSHA standards
- Operated a variety of power tools and machinery with high precision

Maintenance Intern
Northern Virginia Community College Facilities Department, Alexandria, VA
January 2023 – May 2023 | 20 hrs/week

- Conducted preventative maintenance on plumbing and HVAC systems
- Supported teams in basic electrical troubleshooting
- Contributed to on-campus repair projects, reducing backlog by 30%

Education

Associate of Applied Science in Construction Management Technology
Northern Virginia Community College, Alexandria, VA
Graduated: May 2023

Includes relevant education & qualifications

Certifications & Licenses

- OSHA 10-Hour Construction Safety and Health
- EPA Section 608 Certification (Type I and II)
- CPR and First Aid – American Red Cross

Your Full Name
Your City, State, ZIP
Your Email Address | Your Phone Number

Date: [Insert Date]

[Recipient's Name]
[Recipient's Title]
[Agency/Organization Name]
[Address]
City, State, ZIP

Dear [Recipient's Name],

I am writing to apply for the [Job Title] position at [Company Name] in the DMV/Northern Virginia area. With a recent Associate of Applied Science in Construction Management Technology from Northern Virginia Community College and practical experience in electrical, HVAC, and plumbing systems, I am confident in my ability to support your team in delivering high-quality work.

Highlights skills and past experiences

In my role as a Trades Assistant at XYZ Construction Services, I supported licensed professionals in residential electrical installations, worked on HVAC system setups, and ensured that job sites remained safe and efficient. My internship with the college facilities team gave me direct experience with preventative maintenance and troubleshooting. These roles have strengthened my problem-solving skills and reinforced my commitment to teamwork.

Use anecdotes to showcase wide range of skills and experiences

I take pride in being dependable and safety-conscious. Whether operating tools or learning new techniques, I am committed to doing the job right the first time. My training and certifications, including OSHA and EPA Section 608, reflect my dedication to the trade and to delivering work that meets industry standards.

Thank you for considering my application. I am eager to bring my hands-on experience and strong work ethic to your company. I would appreciate the opportunity to discuss how I can contribute to your team.

Displays enthusiasm for the role and the field

Sincerely,

Your Full Name

Interview Tips

When interviewing for skilled trades positions, it is important to reflect on past projects, achievements, and challenges overcome. Be ready to discuss specific examples that highlight problem-solving abilities, technical skills, and work ethic. You should always have questions about the workplace or site, including salary and health benefits, and get all the information needed to evaluate the offer. When answering, focus on relevant skills, experience, and work ethic, highlighting passion for construction. It is important to be prepared to give examples of the skills you have and thoroughly explain your background.

Sample questions for Construction/Skilled Trades Interviews:

1. Why do you want to work in construction?

2. Describe a time you faced a challenge on a job site and how you overcame it.

3. How do you prioritize safety on the job? Provide specific examples.

4. Walk me through a typical troubleshooting process for your trade.

5. Do you have any experience working with [specific building materials or techniques]?

6. How do you handle working in adverse weather conditions (heat, cold, rain)?

7. Describe a time you had to work under a tight deadline. How did you manage your time and ensure the project was completed successfully?

Source:
"Ace Your Job Interview: Common Interview Questions and Expert Tips in Trade Jobs (Or Any Job, Really)" Project Diakonia, 2024

NOVA Programs of Study

Northern Virginia Community College (NOVA) offers specialized programs that align with workforce needs. These programs prepare students for entry-level positions and further academic advancement. The following information highlights the NOVA's programs of study that lead to the six career fields (NOVA, n.d.):

Business and Finance:

- Business Administration, A.S.
- Business Management, A.A.S.
- Business Management: Entrepreneurship, C.S.C.
- Business Management: Leadership Development, C.S.C.
- Contract Management, A.A.S.

Construction & Skilled Trades:

- Air Conditioning and Refrigeration, A.A.S.
- Air Conditioning and Refrigeration, Certificate
- Air Conditioning and Refrigeration: HVAC-R and Facilities Services Technology, C.S.C.
- Automotive Technology, A.A.S.
- Automotive Technology: Automotive Diagnosis and Repair, C.S.C.
- Automotive Technology: Collision Repair Technology, C.S.C.
- Automotive Technology: Diesel Basic Repair, C.S.C.
- Automotive Technology: Diesel Preventative Maintenance, C.S.C.
- Automotive Technology: Electric, Hybrid, and Autonomous Vehicles, C.S.C.
- Automotive Technology: Maintenance and Light Repair, C.S.C.
- Architecture Technology, A.A.S.
- Architecture Technology: Architecture, C.S.C.
- Architecture Technology: Computer Aided Drafting and Design, C.S.C.
- Construction Management Technology, A.A.S.
- Construction Management Technology: Construction Supervision, C.S.C.
- Construction Management Technology: Site Development, C.S.C.
- Welding: Basic Techniques, C.S.C.

Healthcare:

- Medical Laboratory Technology, A.A.S.

Information Technology:

- Engineering Technology: Data Center Operations Specialization, A.A.S.
- Engineering Technology: Data Center Operations, C.S.C.
- Engineering Technology: Engineering Technology Technician, C.S.C.
- Information Systems Technology, A.A.S.
- Information Systems Technology: Fiber and Network Technician, C.S.C.
- Information Systems Technology: Network Engineering (Specialist), C.S.C.
- Information Technology, A.S.

Public Administration:

- n/a

STEM (Science, Technology, Engineering, Mathematics):

- Computer Science, A.S.
- Engineering, A.S.
- Engineering Technology, A.A.S.
- Horticulture Technology, A.A.S.
- Horticulture Technology: Landscape Design Specialization, A.A.S.
- Science: Mathematics Specialization, A.S.

Source:
Programs of Study, Northern Virginia Community College

NOVA Programs of Study Leading to Specific Careers in the Construction & Skilled Trades Field

Opportunities	Non-Transfer Tracks	Transfer Tracks
Programs of study to support entry into these employment opportunities are currently offered at NOVA	*These career paths allow you to enter the workforce immediately after graduation from NOVA.*	*These career paths require transfer for additional education beyond NOVA.*
Maintenance and Repair Workers	Air Conditioning and Refrigeration, A.A.S. | Air Conditioning and Refrigeration, Certificate | Automotive Technology: Maintenance and Light Repair, C.S.C.	N/A
Construction Laborers	Construction Management Technology, A.A.S. | Construction Management Technology: Site Development, C.S.C. | Welding: Basic Techniques, C.S.C.	N/A
Landscaping and Groundskeeping Workers	No direct match, but HVAC-R and Facilities Services Technology, C.S.C. could provide relevant skills for facility maintenance roles.	N/A
First-Line Supervisors of Construction Trades and Extraction Workers	Construction Management Technology, A.A.S. | Construction Management Technology: Construction Supervision, C.S.C.	N/A
Electricians	Air Conditioning and Refrigeration: HVAC-R and Facilities Services Technology, C.S.C. (some electrical work overlaps in HVAC systems)	N/A
Automotive Service Technicians and Mechanics	Automotive Technology, A.A.S. | Automotive Technology: Automotive Diagnosis and Repair, C.S.C. | Automotive Technology: Maintenance and Light Repair, C.S.C.	N/A
Carpenters	Construction Management Technology, A.A.S. | Construction Management Technology: Site Development, C.S.C.	N/A
First-Line Supervisors of Mechanics, Installers, and Repairers	Construction Management Technology, A.A.S. | Construction Management Technology: Site Development, C.S.C. | Welding: Basic Techniques, C.S.C.	N/A
Plumbers, Pipefitters, and Steamfitters	Air Conditioning and Refrigeration, A.A.S. | Air Conditioning and Refrigeration: HVAC-R and Facilities Services Technology, C.S.C. (some overlap with pipefitting in HVAC systems)	N/A
Civil Engineers	Engineering Technology, A.A.S.	Engineering, A.S.
Architect	Architecture Technology, A.A.S. | Architecture, C.S.C | Computer Aided Drafting and Design, C.S.C.	N/A

Conclusion

Navigating career pathways requires careful planning, industry awareness, and continuous skill development. As community college students explore potential careers, leveraging available resources—such as NOVA's career services and industry connections—can significantly enhance employability. By understanding industry trends, aligning academic pursuits with workforce demands, and crafting effective job application materials, students can position themselves for long-term career success.



NOVA Career Resources



Career Development:

https://www.nvcc.edu/student-resources/career-services/career-development.html

Understand four key stages: understanding self, exploring careers & majors, decide & plan, and employment preparation. Students can use tools such as free career aptitude and assessment tests, Career Coach, Occupational Outlook Handbook, and Workforce - Labor Market Research to explore career options, set goals, and prepare for employment.

Career Planning System- Focus 2:

https://www.nvcc.edu/student-resources/career-services/focus2.html

FOCUS 2 is an online, interactive, self-guided career and education planning system that can help you select a program/major based on your interests and aspirations, discover occupations matching your personal preferences and attributes, map out your career plans, and make informed career decisions.

Handshake:

https://nvcc.joinhandshake.com/login

Sign in to Career Connection to search and apply to jobs and Internship, view and participate in career development workshops, career fairs, employer information sessions, and access resources such as the Resume Builder and Mock Interview practice tool.

Career Counseling:

https://www.nvcc.edu/student-resources/career-services/contact.html

Students can request an appointment with a Career Counselor by logging into Handshake, navigating to the Career Center page, and selecting “Appointments.”

NOVA Career Resources

Career Opportunities:

https://www.nvcc.edu/student-resources/career-services/career-opportunities.html

The Employer and Career Services Team is pleased to offer Career Opportunities for NOVA students and alumni! Review these opportunities and don't forget to log into Handshake to view more.

Coordinated Internships & Cooperative Education (Co-op):

https://www.nvcc.edu/student-resources/career-services/co-op/index.html

Coordinated Internships are an extension of Academic Services that provides work-based experiential learning opportunities through collaboration between academic departments and community employers. Students may enroll in Coordinated Internship course.

Career Events:

https://www.nvcc.edu/student-resources/career-services/career-events.html

View the Handshake Events Calendar for career development workshops, career fairs, employer information sessions, community hiring events (external) and more!

Additional Career Resources:

https://www.nvcc.edu/student-resources/career-services/career-resources.html

Contact Information

Questions? Feel free to contact novacareerservices@nvcc.edu.

