

Graduate Student Cover Letter Guide

A cover letter is a one-page introduction of the relevant qualifications that you possess that support your candidacy for a specific position. In some instances, a cover letter will be a job application requirement, while in others, it will be optional or not needed. This guide includes: information on developing cover letter content, direction on formatting a cover letter, sample cover letters to assist you in writing a cover letter and a self-review checklist.

Focus your Cover Letter on:

1. Connecting your past, present, and future:

Your cover letter should show how your past experiences (education, internships, research, etc.) make you a unique candidate in the present, and how the qualifications gained from these experiences will be an asset when you apply them to projects/work at your target company in the future. You should explain the advantages of your experiences: the qualifications that your CMU degree and/or your research has equipped you with and the qualifications you have gained from additional experiences such as internships, leadership, work experience, etc.

2. Highlighting the qualifications that your experience gave you – not the experience itself:

Your cover letter should NOT restate your resume but should elaborate on the qualifications that your abilities, accomplishments, and experiences gave you as they relate to the specific position and company to which you are applying. You should carefully review the job description and ensure the skills and qualifications that you have included in your cover letter align to the position and company.

For Example:

BEFORE: I am a final semester master's student in Computational Data Science from CMU. This past year, I was a research assistant for Dr. XXX and I completed a significant technical project.

What's wrong with this? It doesn't state what the applicant gained from the experience.

AFTER: My research in the Language Technologies Institute at Carnegie Mellon University has been focused on Visual Question Answering (VQA), a subdomain of Natural Language Processing and Computer Vision. As a research assistant for Dr. XXX, I developed a specialized Question Answering System to extract information from images based on questions presented in natural human language. Through my research assistantship I have gained expertise in natural language processing and computer vision which I am eager to apply to complex problems at XYZ.

Why is this better? It states the qualifications gained from experiences AND links those qualifications to the future/position.

For Example:

BEFORE: I am a master's student in Chemical Engineering from Carnegie Mellon University. I have completed a research project under the direction of Dr. XXX and I worked alongside chemical engineers in industry to complete this project. I have the skills needed for this position.

What's wrong with this? It doesn't state what the applicant gained from the experience.

AFTER: My research in the Chemical Engineering Department at Carnegie Mellon University has been focused on migration of electrolytic components through separator membranes. Throughout master's research project, I worked towards the device implementation of semiconducting conjugated polymers and acquired integrated technical judgment and a background in modeling from first principles. I completed this work in collaboration with three engineers from Company ABC. This experience has prepared me to provide materials expertise to Company XYZ.

Why is this better? Again, it states the qualifications gained from experiences AND links those qualifications to the future/position.

Tailor your information:

1. Be as specific as possible when introducing your abilities and qualifications; explain why:

You do not want the ideas in your cover letter to be general or vague. Try to eliminate sentences that could be written by anybody with a graduate degree in your field. Specific details make you look qualified, interested, and well-informed.

2. Unify each body paragraph of your cover letter around one or two key qualification(s), including the experiences that have given you this qualification:

In particular, the first or second sentence of the paragraph should emphasize one or two specific qualifications afforded by the unique training of your degree and/or work and internship experience. The rest of the paragraph should provide specific details that support this main idea. These details should distinguish you from other applicants who also have a master's degree in your field.

A Note on AI:

Cover letters are less frequently needed in the job search process; however, for some applications you may be required to submit a cover letter or you may choose to do so for positions of particular interest. When using an AI tool to assist in developing and writing a cover letter it is important to remember that suggested language provided by AI tools draws upon source material, including publicly available content on the Internet. This carries a risk of plagiarism.

Generative AI platforms can be used for idea generation of these documents, helping to suggest keywords or relevant skills that are found in job descriptions. Examples of prompt topics that may assist with this include:

- Asking about how to highlight a specific skill on a cover letter based on prior experiences
- Asking what skills or qualifications to highlight on a cover letter for a specific position
- Asking to revise specific bullet points for clarity and/or to tailor to specific job postings

Note: After prompting a generative AI platform to create or edit content on a cover letter, it is critical for student job seekers to tailor this information and make edits to ensure that the final product reflects your unique 'voice' and shares details and experiences specific to yourself.

When using AI resources to develop application materials it is still important to reference guidelines provided by Carnegie Mellon and/or any specific guidelines provided by an individual company. We recommend following up with a CPDC Career Consultant to have a cover letter reviewed before submitting documents as part of an application.

BASIC TEMPLATE

**Note: The design /
template of your cover
letter can be
customized**

Name

Phone Number

Email Address

Optional: LinkedIn Profile URL / portfolio address / personal website address

Date

Company Name

Company Address

Salutation, *(such as: Dear Recruitment Team)*

Introductory Paragraph:

- Introduce who you are and the position to which you are applying.
- Introduce how you heard of the position, *if* through networking, a faculty/alumni contact, or a job fair.
- State your degree, major/concentration (if applicable) college affiliation and graduation date.
- In the closing sentence, make a strong claim about your candidacy that states 2-3 qualifications you will discuss and provide evidence of in the body paragraphs of your letter- Ensure the qualifications listed directly correlate to the job description for the position to which you have written the letter.

Body Paragraphs:

- Write two to three body paragraphs. Each paragraph should focus on one or two specific qualification(s) mentioned in the closing sentence of your introductory paragraph.
 - Demonstrate how your experience, skills, and education make you a fit for the opportunity.
 - Highlight your CMU experience, specialized training, and the skills you're developing in your program and/or through your research.
 - Elaborate on the most relevant skills and experiences (education, research, and professional work/intern experience) found in your résumé and connect them to the job qualifications versus simply restating your resume.
 - Present information specific to you versus using general language that could have been written by any candidate in your program.

Concluding Paragraph:

- Restate why you're a strong candidate for the position.
- Reference any documents you've attached or enclosed (if sent via email).
- State your interest in interviewing or moving forward in the hiring process.
- Thank your reader.

Closing salutation,

Your Name

Example Only – Do Not Duplicate

Andy Carnegie
example@andrew.cmu.edu | (555)-555-5555

November 14, 2025

Jaycott Technologies, Inc.
123 Kline Drive
Pittsburgh, PA 15216

Dear Hiring Committee,

**Qualifications
listed should
align to the job
description
requirements/
qualifications**

I am writing to apply for the Manufacturing/Equipment/Supplier Engineering Intern position (Job ID: 554433221), which was shared with me by John Smith at Carnegie Mellon University's STEM Career Fair. I am a graduate student in Biomedical Engineering and Engineering & Technology Innovation Management at Carnegie Mellon University, graduating in May 20XX. Jaycott's mission to advance invasive care through intelligent, manufacturable technology strongly aligns with my interest in developing reliable, patient-impacting hardware. With my hands-on experience in [mechanical design and CAD prototyping](#), [strong cross-functional communication skills](#), and [solid understanding of manufacturing processes](#), I am confident in my ability to contribute effectively to Jaycott's engineering teams.

My academic and project work has trained me to [design mechanical systems with manufacturability, robustness, and validation](#) in mind. Most notably, I designed and prototyped multiple structural and kinematic subsystems for a multimodal lower-limb exoskeleton, iterating through [SolidWorks](#) design, assembly, and testing cycles. Across additional robotics projects, including a pipeline inspection robot and a soft robotic manta ray, I [conducted tolerance analyses, selected materials, and validated designs using machining and 3D printing](#). These experiences strengthened my ability to translate designs into functional, manufacturable hardware.

I also bring strong [cross-functional communication](#) skills, developed through both industry and team-based engineering work. During my internship with the Vehicle Integration team at ABC Company, I [collaborated](#) closely with packaging, manufacturing, and electrical engineering teams to [evaluate design decisions](#) and [resolve assembly constraints](#). Similarly, my robotics project experience required [coordination](#) across mechanical, electrical, and software teams to align system requirements and execution. These experiences have prepared me to contribute effectively within Jaycott's multidisciplinary environment.

Additionally, my hands-on exposure to [manufacturing and prototyping processes](#) equips me to support manufacturing lines, equipment development, or supplier-engineering efforts. For example, I designed and built a modular benchtop assembly fixture for small medical device components, using CAD, CNC machining, and 3D printing. By iterating based on assembly studies and operator feedback, I improved repeatability and reduced variability, experience that directly translates to Jaycott's focus on optimizing production processes and supporting scalable, manufacturable designs.

I am excited by the opportunity to add value to Jaycott's engineering efforts while continuing to develop professionally. Thank you for your time and consideration. I would welcome the opportunity to discuss how I can support Jaycott's mission this summer.

Sincerely,
Andy Carnegie

**Paragraph themes/emphasis
should align to key
qualifications from the
introduction paragraph**

Example Only – Do Not Duplicate

Andrew Carnegie
example@andrew.cmu.edu | (555) 555-5555

February 6, 2026

ABC Company
321 Main Street
Pittsburgh, PA 15216

Dear Recruitment Team,

**Qualifications
listed should
align to the job
description
requirements/
qualifications**

I am applying for the Product Design Engineer position (Job ID: 876543210) at ABC Company, as listed on your website. I am currently pursuing an M.S. in Mechanical Engineering at Carnegie Mellon University, with a concentration in Design and Manufacturing, and expect to graduate in December 20XX. I am drawn to the consumer hardware space and to ABC Company in particular for its ability to combine human-centered design with rigorous engineering and manufacturability. With experience spanning [concept development through production, including design validation and manufacturing integration](#), I am well prepared to contribute to your product design efforts.

In my role as an Unmanned Aerial Systems Intern at Mason, Inc., I worked across the [full product development lifecycle, from early design iteration through manufacturable implementation](#). I redesigned a drone frame to improve weight and strength using FDM additive manufacturing, applying finite element analysis to simulate stress conditions and guide iterative design decisions. I balanced performance improvements with manufacturability by managing the bill of materials and conducting [cost-benefit analyses](#), ensuring that the final design met both engineering and production requirements. This experience aligns closely with ABC Company's need for engineers who can balance performance, cost, and manufacturability in consumer product design.

I further developed [end-to-end product design](#) capabilities through academic projects and research focused on precision and scalable manufacturing. In a modular eyewear project, I moved from concept development to production-ready design by applying [Design for Manufacturing and Assembly principles](#), reducing part count, and optimizing components for both additive and molding processes. I defined GD&T for key interfaces to ensure consistent fit and reliable assembly. Additionally, during my Research Co-op at Atlas Advanced Manufacturing Laboratory, I supported [process validation and production quality](#) by applying Design of Experiments to Laser Powder Bed Fusion systems, using sensor data [to identify anomalies and improve process control](#). These experiences directly support ABC Company's focus on scalable, high-quality product development and robust manufacturing integration.

Through these experiences, I have built a strong foundation in taking products from initial concept through validation and production, with a focus on [aligning user needs](#), engineering performance, and manufacturing feasibility. I am excited about the opportunity to bring this full-lifecycle perspective to ABC Company and contribute to developing high-quality consumer hardware products.

Thank you for your time and consideration, and I look forward to the opportunity to discuss my application further.

Sincerely,
Andy Carnegie

**Paragraph themes/emphasis
should align to key
qualifications from the
introduction paragraph**

Example Only – Do Not Duplicate

Andrew Carnegie
example@andrew.cmu.edu | (555) 555-5555

April 28, 2026

XYZ Corporation
124 Tannis Drive
Pittsburgh, PA 15213

Dear Hiring Committee,

I am writing to apply for the Senior Robotics Research Engineer position (Job ID: 012345678), which I found on XYZ's website. I recently completed my Ph.D. in Robotics at Carnegie Mellon University, where I developed expertise in autonomous control, multi-agent systems, and robotic deployment in unstructured environments. My experience in **full-stack robotic system development, learning-based methods, and real-world deployment** aligns closely with XYZ's mission to advance general-purpose robotics through integrated learning and physical systems.

During my doctoral research in the Next-Generation Robotic Mobility Lab, I developed **full-stack robotic systems** by integrating perception, planning, and control into deployable platforms. I led projects in multi-agent coordination and safe control, validating performance through simulation and field testing using digital twins. These experiences prepared me to design and deploy integrated robotic systems that perform reliably in real-world environments, directly aligning with XYZ's needs.

My experience with **learning-enabled and optimization-driven methods** further strengthens my ability to **build general-purpose robotic systems**. I have implemented **motion planning, model predictive control, reinforcement learning, and mixed-integer optimization within Python and C++ codebases**, always with a focus on integrating these methods into end-to-end systems. I also developed infrastructure for **logging, evaluation, and reproducibility**, which allowed for systematic validation of learning-based behaviors and ensured reliability over long-horizon autonomy tasks and high-speed operations. These skills align closely with XYZ's focus on combining learning-driven approaches with robust system integration to enable scalable, real-world robotic intelligence.

In addition to technical development, I bring strong experience **deploying robotic systems through interdisciplinary collaboration**. At Carnegie Mellon University, the Advanced Vehicle Systems Laboratory, and the Ground Systems Research Center, I worked closely with engineers and researchers to **integrate hardware and software, validate system performance, and transition research prototypes into operational platforms**. These experiences reinforced my ability to move beyond isolated components and contribute to complete, real-world robotic systems that meet performance and reliability requirements, a skill crucial to this role.

I am motivated by building systems that bridge cutting-edge research with dependable deployment. I am confident that my experience in full-stack development and real-world system validation would enable me to contribute effectively to your team, and I look forward to the opportunity to discuss how my skills can support your mission.

Sincerely,
Andy Carnegie

Qualifications listed should align to the job description requirements/qualifications

Paragraph themes/emphasis should align to key qualifications from the introduction paragraph

Graduate Cover Letter Self-Review

GENERAL

- ☐ Entire document uses one-inch margins
- ☐ Heading includes your contact information, followed by the date, and employer's name and address
- ☐ Salutation is formal: Using the hiring manager's name if known OR a general salutation such as Dear Hiring Manager or Dear Recruitment Team
- ☐ Total document is one page or less
- ☐ Paragraphs are short, concise, and direct
- ☐ Cover Letter is free of grammatical and spelling errors
- ☐ Font is size 11-12

INTRODUCTION

- ☐ Names the position to which you are applying
- ☐ States your degree, major, college/school affiliation and graduation date
- ☐ Last sentence makes a strong claim about your candidacy that previews 2-3 qualifications you discuss in the body paragraphs
- ☐ Qualifications listed directly correlate to the job description for the position to which you have written the letter

BODY PARAGRAPHS

- ☐ The 2-3 qualifications highlighted in the introduction align to the body paragraph topics, with one or two qualifications highlighted per paragraph
- ☐ Qualifications or skills gained from experiences are presented, not just the experiences themselves
- ☐ Paragraphs focus on connecting your past and present skills, qualifications, and education to the company and/or position (i.e., your future)
- ☐ Specific details and/or examples are provided and generalities are avoided
- ☐ Does not simply restate or summarize the resume
- ☐ Strong action verbs and direct language are used

CONCLUSION

- ☐ Reminds the reader why you are a strong match for the position and references the key qualifications you highlight in the introduction and body paragraphs
- ☐ Includes a call to action—requests an interview, refers to future contact, etc.
- ☐ Mentions the other document(s) you are enclosing and/or the document(s) you are submitting as part of your application (as appropriate)
- ☐ Thanks the reader