

The B.S. in Computer Science equips students with the technical, analytical, and problem-solving skills needed to design, develop, and maintain innovative software systems while preparing them for diverse careers in the technology industry and related fields. The career infused degree map allows students to commit to their career exploration by aligning coursework with career readiness milestones.

ACADEMICS

CAREER READINESS

CREDITS

- 3

ENG 111 - English Composition I
- 4

MAT 172 - Precalculus
- 3

Flexible Core - Scientific World
- 4

CMP 167 - Programming Methods I
- 1

CMP 157 - Programming Methods I Lab
- 3

LEH 250 - First-year Seminar
- 18

TOTAL CREDITS

1ST SEMESTER

- ☐

Activate your [Handshake](#) account to begin exploring career resources and opportunities available through your college's [Career Exploration and Development Center](#).
- ☐

Join a Lehman student club or organization to begin building your network and developing your soft skills (CSxCSC, Lehman Girls Who Code College Loop, Archimedes Club, S-STEM Club, ColorStack x Computer Science Club).
- ☐

Create a resume to begin documenting your achievements. Review resume samples for your major in the Resources section of the Career Center page on Handshake.
- ☐

Enroll in free introduction to MS 365 computer skills workshops, tutoring support, and/or leadership training ([Lehman IT Center](#), [Computer Science Lab](#) (Gillet Hall Rm. 222), [Lehman Tutoring Center](#), [Office of Campus Life](#)).

2ND SEMESTER

- ☐

Create a [LinkedIn](#) account to establish your professional presence online, build industry connections, and follow developments and trends.
- ☐

Explore computer science software engineering [career paths](#), [occupations](#), [employment outlooks](#), and take the [Focus 2 Career Assessment](#) (code: Lightning).
- ☐

Create a first-draft cover letter to apply to professional development opportunities ([scholarships](#), [research opportunities](#), [CS department internships](#), [CUNY pipeline programs](#)).
- ☐

Participate in an early career skills training program ([CUNY Tech Prep](#), [Sprinternships](#), [AI Program](#), [America Needs You](#), [CUNY Beyond](#), [Year Up](#)).

CREDITS

- 3

General Education Foriegn Language Option
- 4

CMP 334 - Computer Organization
- 4

CMP 338 - Data Structures and Algorithms
- 4

MAT 176 - Calculus II
- 1

MAT 156 - Calculus II Lab
- CED 102 - Introduction to Career Development
***Note:** This course is optional*
- 16

TOTAL CREDITS

1ST SEMESTER

- ☐

Identify a mentor with whom you can check-in periodically (Code.org, MentorCruise, SWE, The Urban Male Leadership Program, CREAR Futuros, City Mentors).
- ☐

Build an electronic portfolio of projects on [GitHub](#).
- ☐

Apply for internships that provide hands-on experience in computer science and software engineering (Google, Microsoft, Bloomberg, Two Sigma, Spotify, Pinterest, Airbnb, LinkedIn, Inroads, Handshake, [CUNY industry partnerships](#)).
- ☐

Apply to the [Department Internship or Independent Study](#) with the Computer Science Department.
- ☐

Create a LeetCode account to begin practicing data structures and algorithms for technical interviews.

2ND SEMESTER

- 3

General Education Foreign Language Option
- 3

Flexible Core - Individual Society
- 3

Flexible Core - U.S. Experience in Its Diversity
- 4

MAT 226 - Vector Calculus
- 3

CMP 465 - Technical Interview Preparation
(*Prerequisite: CMP 338*)
- 13

TOTAL CREDITS

- ☐

Identify hackathons, coding bootcamps, and certificates you can earn to specialize or supplement your growing expertise (DevPost; hackNY; HackNYU; LeapCode; codebar; Udemy; Code Academy; freeCodeCamp; GitHub; [CUNY Upskilling](#); [LinkedIn Learning](#), free with an [NYPL](#) card; [Coursera](#), free via [NYS DOL](#)).
- ☐

Meet with a faculty or academic [advisor](#) to learn about research opportunities for sophomores via the [School of Natural & Social Sciences](#) (S-STEM, REACH, LSAMP, REUs) and explore [honor society options](#) on campus.
- ☐

Become a student member of a professional organization in your field (SWE, IEEE and ACM).

ACADEMICS

CAREER READINESS

JUNIOR

CREDITS

- 3 LEH 352 - Studies in Literature **OR**
LEH 353 - Studies in the Arts **OR**
LEH 354 - Studies in Historical Studies **OR**
LEH 355 - Studies in Philosophy, Theory and
Abstract Thinking
- 3 Flexible Core - World Cultures and Global Issues
- 3 Major Elective
- 4 MAT 313 - Elements of Linear Algebra
- 3 CMP 485 - Independent Study
Note: This course is optional
- 13 TOTAL CREDITS

1ST SEMESTER

- ☐ Attend career fairs and industry conferences to network with professionals and meet recruiters. Apply for the Student Travel Grant with Student Affairs.
- ☐ Mark your calendar and register for the annual fall CEDC Internship Fair at Lehman.
- ☐ Meet with your CEDC Career Specialist to practice your elevator pitch and update your resume and cover letter.
- ☐ Join the Cybersecurity Internship Program (contact Swathy Gopal)
- ☐ Attend the ‘Networking Strategies workshop on Handshake and widen your network of contacts across Lehman and platforms like LinkedIn.
- ☐ If pursuing graduate study, begin exploring the process for applying to graduate school.

2ND SEMESTER

- 3 LEH 352 - Studies in Literature **OR**
LEH 353 - Studies in the Arts **OR**
LEH 354 - Studies in Historical Studies **OR**
LEH 355 - Studies in Philosophy, Theory and
Abstract Thinking
- 3 Required Core - Life and Physical Sciences
- 4 CMP 340 - Introduction to Probability for Computer Science
- 4 CMP 269 - Programming Methods III
- 4 CMP 408 - Software Engineering
- 18 TOTAL CREDITS

- ☐ Mark your calendar and register for the annual spring CEDC Job & Internship Fair at Lehman.
- ☐ Take a project or leadership role in the club or professional organization you belong to or engage in relevant volunteerism.
- ☐ Continue to update your resume and online profiles/portfolios (LinkedIn, GitHub) with relevant projects, experiences, and skills.
- ☐ Sign up for news, industry, and job alerts via CUNY Weekly and Digital NYC, and technology job sites like Dice, TechJobsForGood, The Muse, and BuiltIn.
- ☐ Research graduate school or other postgraduate opportunities if considering further education.

SENIOR

CREDITS

- 4 Major Elective
- 4 CMP 410 - Design and Analysis of Algorithms
- 4 Major Elective
- 12 TOTAL CREDITS

1ST SEMESTER

- ☐ Meet with your Career Specialist for full-time job search preparation: finalize your professional resume, cover letter, portfolio, and practice for technical interviews.
- ☐ As graduation nears reconnect with mentors for career advice, job leads, references, and continued mentorship post-graduation.
- ☐ If applicable, begin drafting your application materials and identify your faculty references for graduate school or other postgraduate opportunities.

2ND SEMESTER

- 4 Major Elective
- 3 Flexible Core - Creative Expression
- 4 CMP 346 - Object Oriented Techniques
- 4 CMP 428 - Video Game Programming
- 15 TOTAL CREDITS

- ☐ Attend employment fairs, professional panel, and conferences across NYC organizations and colleges to widen your network and connect with recruiters (e.g., Tech Week, TECHSPO, Pulse, and Women in Tech Job Fair).
- ☐ Mine job sites and apply for career relates roles. Record your progress and remember to follow up on your applications.
- ☐ Join the Lehman Alumni Network and CUNY Alumni Network for valuable career resources and continuous support.
- ☐ Complete the Cap and Gown Survey in CUNYfirst.
- ☐ If applicable, complete the process of applying to graduate school.