Computer Science Education

Advance Certificate

This Advanced Certificate will prepare candidates to teach Computer Science Education at all grade levels. Courses will be offered in an online format. Candidates will complete 7 courses and a minimum of 100 clock hours of field/clinical experience. This program consists of 21 credits (7 core courses). Program completion qualifies a teacher who currently holds a valid teaching certificate to add computer science to the base certificate.

Successful completion of the program leads to institutional recommendation to NYSED for initial and or professional certification (teacher licenses). Program completers must also meet all other NYSED certification requirements including, passing the Content Specialty Test in Computer Science, to receive certification from NYSED.

ADMISSIONS REQUIREMENTS

- Valid Initial/Provisional or Professional Teaching Certificate.

- Grades of B or Better in a Pre-Calculus Course or Equivalent.

- Two letters of recommendation

  ➢ One recommendation must be from college or university instructor (required).

  ➢ Second recommendation can be obtained from another instructor or supervisor in a work setting.

- Current professional resume.

- A 500-word essay focused on career goals.

- Applicants who satisfy the preliminary admission requirements will be invited to an individual interview with the program coordinator. If a candidate does not meet preliminary admission requirements, they can request a meeting to discuss conditional admission.

Notes

* Please review the New York State Education website for updates about certification (Teacher License) requirements.

* The Computer Science Content Specialty Test is not yet available. Candidates will be manually exempted from this requirement until the CST is available https://eservices.nysed.gov/teach/certhelp/search-cert-reqs

* The new New York Education Department Computer Science Content Specialty Test (194) is expected to be available for testing in summer 2025 https://www.nystce.nesinc.com/TestView.aspx?f=HTML_FRAG/NY194_TestPage.html

Questions about the program?

Prof. Wesley Pitts
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Questions about admissions?

The Office of Graduate Admissions
https://www.lehman.edu/graduate-admissions/applying/

DEGREE REQUIREMENTS

Course Requirements		Credits
Computer Science Education (9 credits; 100 clock hours of field experience)		
ESC 537	Principles of Computer Science Education I	3
ESC 538	Principles of Computer Science Education II	3
ESC 539	Fieldwork in Computer Science Education	3
Computer Science Content (12 credits)		
CMP 566	Computer Thinking for Educators	3
CMP 567	Programing Methods I for Educators	3
CMP 568	Programing Methods II for Educators	3
CMP 569	Data Structures and Algorithms for Educators	3

Course Sequence:

Fall 1

ESC 537: Principles of Computer Science Education I

CMP 567: Programing Methods I for Educators

Spring 1

ESC 538: Principles of Computer Science Education II

CMP 568: Programing Methods II for Educators

Fall 2

CMP 566: Computer Thinking for Educators

CMP 569: Data Structures for Educators

Spring 2

ESC 539: Principles of Project Design and Evaluation in Computer Science Education