Computer Programming (PBS) (DE only)

Description

The Computer Science Department offers the Computer Programming Certificate (CPC) to post-baccalaureate students (PBS) to enable them to change careers, enhance their professional credentials, or simply learn more about computer programming. The focus of the required courses is the theory and practice of the basics of Computer Science and computer programming. Rather than teach applications and a single skill set, the program focuses on higher order analytical skills that are crucial to mastery of an ever-changing field. This certificate is offered via Distance Education.

Program Coordinators

Certificate Director
Dr. Sarah Heckman
North Carolina State University
Department of Computer Science-Engineering
Campus Box 8206
Raleigh, NC 27695
919-515-2042
sarah_heckman@ncsu.edu

Director of Engineering Online
Dr. Linda Krute
North Carolina State University
College of Engineering – Dean’s Office
Campus Box 7547
Raleigh, NC 27695
919-515-5440
linda_krute@ncsu.edu

Curriculum

Required Courses:

- MA 121 Introduction to Calculus (or any college calculus course)
  *Please note that students who intend to pursue graduate study after completion of the CPC need MA 141, not MA 121.
- CSC 116 Introduction to Computing – Java (3 cr)
- CSC 216 Programming Concepts (4 cr)
- CSC 226 Discrete Mathematics (3 cr)
- CSC 230 C and Software Tools (3 cr)
- CSC 236 Computer Organization and Assembly Language (3 cr)
- CSC 246 Concepts and Facilities of Operating Systems (3 cr)
- CSC 316 Data Structures (3 cr)

** The Department of Computer Science waives the pre/co-requisite of MA 121 or 131 or 141 so students interested in the CPC may begin by taking CSC 116. However, a Calculus I class remains a requirement for the CPC program. E 115 is waived as a prerequisite for CSC 116 since this is a DE program and E 115 material is not needed for student success.
Total Hours Required: 24

Admissions Requirements

Although anyone with the prerequisites can take CSC classes offered through the CPC Program, the CPC is a distance-only program for PBS students. After students have been accepted as an NDS student at NC State, they may apply for the CPC program. Students must submit a BS/BA transcript from a degree other than computer science or computer engineering. The certificate is awarded to students completing the required courses with a grade point average of 2.0 or above.

Engineering Online and the Department of Computer Science jointly maintain and distribute a written description for interested prospective students. The Director of Advising for the Department of Computer Science coordinates with Registration & Records in issuing of certificates.

All course descriptions are identical to regular courses.

Students may enroll for classes through Engineering Online.

Plan of Study

Contact the Program Coordinators.

Registration Information

Contact the Program Coordinators.

Academic Structure

Term Effective: 1/1979; 8/2011, 1/2019
Plan Code: 14CPCTU, 32CPCTU
CIP Code: 14.0901
Description: Undergraduate Certificate in Computer Programming
Offered: Distance Education format only