GENERIC BACHELOR'S + MS IN COMPUTER SCIENCE

Program Overview

Program Coordinator	Chirakkal Easwaran, (845) 257-3514, easwaran@newpaltz.edu
Program ID	270M
Credits	120 UG + 30 GR
Program Length	The MS can be completed in one additional year of study if enrolled full-time, but students must complete the degree within 7 years.
Modality	In-person
Full-time/Part-time	Full-time or Part-time
Transfer Credits	6
Capstone	Comprehensive Exam or Thesis

Program Description

This accelerated plan of study provides a pathway to earning a Master's degree (MS) in computer science along with a Bachelor's (BA/BS) in **any subject** in five years.

The 4+1 dual BS/MS program will allow you to take Computer Science MS courses while still enrolled in the Bachelor's program of your major. You will pay regular undergraduate tuition for these graduate courses. Up to a total of 12 graduate credits can be applied towards your bachelor's as well as master's degrees ('double-dipped'). At the end of your bachelor's program you can graduate and decide not to pursue the graduate degree, or continue to your MS in Computer science with up to 12 graduate credits already applied towards the program. An additional 18 credits, which you can complete during the subsequent fall and spring terms, will earn you a master's degree in Computer Science.

Admission Requirements

Contact Professor Easwaran to express interest in the program and to prepare the graduate application:

Application Procedures

- Apply using the link above to our new application system.
- Create an account (if new to applying) and follow the steps.
- Select the fall term when you would like to begin your graduate coursework and major code (270M).
  NOTE: This program only admits for the fall term.
- Select the "Generic Bachelor's + MS in Computer Science" program as the intended curriculum.

Upload Checklist Items

To expedite a faculty review of an application, students may upload the following items:

- Personal statement explaining your interest in the 4+1 program in Computer Science
- Contact information for three references
- Student copies of transcripts* from every college/university attended

- Full admission REQUIRES the submission of official transcripts and successful completion of undergraduate degree

Check Your Application Status

- Check your application status through your applicant portal.

Graduate study in Computer Science enables students to individualize their program of study by pursuing ten computer science courses (30 credits) and passing a comprehensive exam, or completing eight courses (24 credits) and delving into a 6-credit thesis project. This flexibility allows students to explore conceptually-based classes, enhance technical skills through applied learning courses, stay abreast of current trends in the field through a wide range of special topics courses, and engage in research by pursuing an optional six-credit thesis.

Students in this program begin taking graduate courses during the senior year earning twelve credits of graduate course work by the time they complete their Bachelor's degree. They are then able to complete the graduate degree requirements by enrolling in eighteen credits during the subsequent fall and spring terms.

Academic Standing Requirements for Bachelor's/Master's Students

A cumulative GPA of less than 3.0 in graduate-level courses taken in the undergraduate portion of a 4+1 program precludes the student's good standing. Students with GPA of 2.75 to 2.99 strongly advised to reconsider continuing into GR program. Students below 2.75 may not continue and will be de-matriculated from GR program.

Graduate Program Requirements

- Review graduate "plan of study" during the first semester after matriculation into the MAT portion of the program.

- Maintain a graduate cumulative grade point average of 3.0 or better with no more than two grades below B-

- Successful completion of practicum during the final semester of study. Students are responsible for their own transportation to the field and student teaching placements and must be prepared to commute up to 45 miles, one way, to these placements.

Graduate Program Learning Outcomes

Computer Science (MS)

Candidates who successfully complete all required components of the MS in Computer Science program at SUNY New Paltz will:

- Develop skill in programming in several high-level languages, assembly language, machine language, and microcode.

- Develop the ability to learn new programming languages without formal instruction.
- Design and analyze algorithms.
- Design a new programming language and write a compiler or interpreter for it.

- Apply object-oriented programming and software engineering principles.
- Design and implement digital circuits.

- Understand the structure and operation of a modern operating system.
- Understand theoretical computer science concepts, such as the Turing machines and automata and computability theory.
- Understand continuous and discrete mathematical structures relevant to computing.