FIVE-YEAR BS IN COMPUTER ENGINEERING/MS IN ELECTRICAL ENGINEERING

Program Overview

Program Coordinator	Damodaran Radhakrishnan, (845) 257-3772, damu@newpaltz.edu
Program ID	268
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	Project or Thesis

Program Description

The 5-year BS in Computer Engineering + MS in Electrical Engineering program provides students with a fast-track Master of Science degree in Electrical Engineering. This program is open to SUNY New Paltz juniors who are in good academic standing and interested in pursuing a Bachelor of Science in Electrical Engineering.

Admission Requirements

To qualify for the BS in Computer Engineering + MS in Electrical Engineering program, students must have completed the first semester of their junior year in residence at SUNY New Paltz with an overall SUNY New Paltz GPA of at least 3.0.

To apply, students should:

- Complete the online graduate application via the link above (major 268)
- Upload an internal New Paltz transcript (they are free for NP students in my.newpaltz.edu)
- Provide the contact information for one faculty reference
- Pay the $60 Graduate application fee

Curriculum Requirements

Accepted students are permitted to enroll in two 500-level graduate courses (six credits). These courses, in addition to satisfying students' bachelor's degrees, will count toward their master's degrees. The remaining 24 credits of the master's requirement will be taken in the fifth year of study.

Code	Title	Credits
Engineering Coursework (0 Credits)		**15**
Working with your advisor, select five Engineering Courses		
Select the Project Option or Thesis Option (0 Credits)		**9**
Project Option:		
EGE532	Computer Arithmetic	
EGE533	Introduction to Parallel Computing	
EGE534	Fault-Tolerant Design of Digital Systems	
EGE535	Low Power VLSI Design	
EGE536	Computer Architecture	
EGE537	VLSI Design	
EGE543	Antennas and Wave Propagation	
EGE544	Microwave Circuits	
Thesis Option		
EGE590	Thesis in Electrical Engineering	
EGE593	Engineering Selected Topic	
Total Credits		**24**

Graduate Checklist

- Apply for graduation via my.newpaltz.edu under "Graduation" tab according to the schedule in the academic calendar.
- Resolve any pending admission conditions (outlined in your acceptance letter) and/or missing documents if applicable.
- Review your progress report via my.newpaltz.edu to ensure that you have completed all program requirements.
- Remember that only two grades below a B- may be applied to your plan of study
- Contact your advisor if you need to amend your plan or process transfer credit.
- Ensure that you are in good academic standing with a GPA (Grade Point Average) of 3.0 or higher.
- Pass your capstone or culminating assessment.
- Complete your degree within the specified time limit outlined in the Program Overview.

Program Requirements

Once admitted to the BS/MS program, students must maintain a 3.0 cumulative GPA in all courses through the senior year. In addition, students must earn a B or better in each of the two graduate courses that they take as undergraduates. Students not satisfying these requirements will be re-evaluated for continuation in the program.

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.

Undergraduate Program Learning Objectives

Computer Engineering (BS)

The Computer Engineering Program has continued to adopt ABET Criterion 3 (a) - (k) as its guiding outcomes, as specified below.

a) an ability to apply knowledge of mathematics, science, and engineering

b) an ability to design and conduct experiments, as well as to analyze and interpret data

c) an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability

d) an ability to function on multi-disciplinary teams

e) an ability to identify, formulate, and solve engineering problems

f) an understanding of professional and ethical responsibility

g) an ability to communicate effectively

h) the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context

i) a recognition of the need for, and an ability to engage in life-long learning

j) a knowledge of contemporary issues

k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice

Graduate Program Learning Outcomes

Electrical Engineering (MS)

- Demonstrate a high level of expertise and competence in an area of concentration in electrical engineering.
- Play a meaningful role in research or technical development leading to significant contributions to engineering and technology.
- Demonstrate leadership skills in the workplace, function professionally in a globally competitive world, and communicate engineering results effectively.
- Demonstrate strong interpersonal and teamwork skills.