



DEPARTMENT OF  
**ELECTRICAL &  
COMPUTER ENGINEERING**

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## **New Computer Engineering Curriculum**

Starting Fall 2024

Starting in Fall 2024, two new courses will be introduced into the Computer Engineering curriculum to replace the current versions. These improved courses are designed to give you better coverage of topics related to the fields of Electrical and Computer Engineering.

Students who are currently enrolled in Computer Engineering will have the opportunity to switch to the new curriculum, or continue in their current program. They will notify their academic advisor about which path they want to take, and the advisor will update their record accordingly.

### **New Curriculum Courses Currently Offered**

Students have an opportunity to preview these new courses and apply them to their current degree requirements. These courses will be required for new students starting in Fall 2024.

#### **ENEE290: Introduction to Differential Equations and Linear Algebra for Engineers**

##### **4 credits**

- A combination of MATH246 (Differential Equations) and MATH240/461 (Linear Algebra)
- Linear algebra has been missing as a requirement for ECE students and is an essential topic. This course ensures students will get exposure to linear algebra early on, and will help prepare students better for ENEE222 and ENEE322.
- **ENEE290 will replace the MATH246 requirement.** Students taking MATH290 will not be able to use MATH461 as a Category A course due to content overlap.

#### **ENEE304: Introduction to Micro and Nanoelectronics**

##### **3 credits**

- Will replace ENEE303 (Analog and Digital Electronics) and add some topics in devices.
- Computer Engineering students will choose between ENEE304 and ENEE322 (Signal and System Theory).

#### **A Note about ENEE322**

- Starting in Fall 2024, Electrical Engineers will be required to take a new course called ENEE323 (Signals and Systems- Theory and Applications), which adds a 1-credit lab component to ENEE322.
- Computer Engineering students are still only required to take either ENEE322 (Signal and System Theory) or ENEE303 (Analog and Digital Electronics) for their major requirement.
- Any Computer Engineering student who wants to take the course with the lab is permitted to take ENEE323 to replace ENEE322.

**Other Changes**

- Linear algebra will no longer be covered in ENEE222 (Elements of Discrete Signal Analysis).
- The overall degree credits for Computer Engineering will increase by 1 credit to make a total of 125-129 credits required.

**Course Offerings Transition Plan Timeline**

<b>Course</b>	<b>Fall 2024</b>	<b>Spring 2025</b>	<b>Fall 2025</b>
<b>ENEE290</b>	Yes	Yes	Yes
<b>ENEE303</b>	Yes	No	No
<b>ENEE304</b>	Yes	Yes	Yes
<b>ENEE322</b>	Yes	Yes	Yes
<b>ENEE323</b>	Yes	Yes	Yes

**Questions?**

Please contact your assigned ECE academic advisor for clarification on any of the curriculum changes or courses listed above. You can also email [eceadvise@umd.edu](mailto:eceadvise@umd.edu).

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