Rutgers ECE Combined BS/MS Information Session

Waheed U. Bajwa

> ECE Graduate Program Office November 18, 2024





- 1 Why a Master's Degree?
- **2** Why the Combined BS/MS Option?
- **3** Insights from BS/MS Program Participants
- **4** Next Steps for Interested Students



1 Why a Master's Degree?

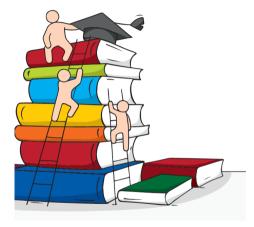
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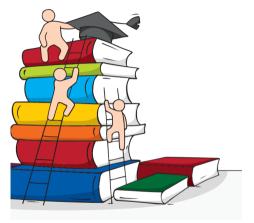
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ECE Graduate Program Office (Rutgers)

Are We Moving the Goalpost?



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NO! A BS in Electrical and Computer Engineering alone will continue to serve many of the students rather well.

There are several reasons for why a student might consider pursuing an MS degree in Electrical and Computer Engineering

Reason 1: Intellectual Growth

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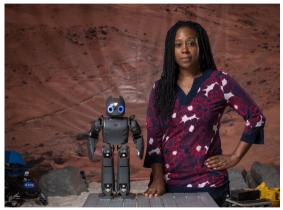
Reason 2: Higher Likelihood of Job Satisfaction

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Reason 3: Higher Lifetime Earning Potential

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- The Dean's Office will give a one-time, **\$1,000 scholarship** to any BS/MS student enrolled in full-time graduate study in Fall 2025 or Spring 2026.
- While being an MS student, you can take up to three graduate courses from Princeton University, without paying any additional tuition, under the Rutgers-Princeton Exchange partnership

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But BS/MS students are allowed to use up to a maximum of 12 unused undergraduate credits[†] towards completion of the MS degree

† Subject to approval; some credits at the 300 level and most credits at the 400 level are transferable

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Scenario 1: Senior needing 18 credits to graduate with the BS degree

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- Instead of 12 credits per semester, enroll in 15 credits per semester
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- Engage in two summers of for-credit internships (3-credits each)[†]

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- You may not need recommendation letters

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- Program: MS in ECE, with a Concentration in Machine Learning
- Graduation: BS in Spring 2023
- Distinction: SOCRATES Fellow
- Some Highlights
 - Transferred 12 credits into the MS program
 - Currently taking a Princeton Exchange course

- Program: MS in ECE, with a Concentration in Machine Learning
- Graduation: BS in Spring 2024
- **Distinctions:** Former HKN President and winner of the 2024 Excellence in Undergraduate Leadership Award
- Some Highlights
 - Leadership roles during undergraduate studies
 - Earned three for-credit internship credits in Summer 2024 for an internship at AT&T
 - On track to graduate in one semester with an MS degree

- Program: MS in ECE, with a Concentration in Solid State Electronics
- Graduation: BS in Spring 2024
- Distinction: Air Force ROTC Cadet

ECE Graduate Program Office (Rutgers)

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- Why would you recommend the BS/MS program to students considering their options?
- Can you describe how being an MS student is both similar to and different from being a BS student?

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Plan Courses for the Senior Year

An MS degree helps you specialize in an area. So prepare an appropriate **plan for the unused undergraduate courses** in consultation with

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List of MS Specialization Areas

- Communications
- **2** Signal and Information Processing
- 8 Machine Learning
- **4** Systems and Controls
- **5** Computer Engineering
- 6 Software Engineering
- 7 Electronic Devices, Circuits, and Systems

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List of MS Specialization Areas

- Communications
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- **6** Software Engineering
- 7 Electronic Devices, Circuits, and Systems
- 8 Cross-cutting Specialization[†]

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Well-qualified students interested in being considered for the **TA position** must submit their applications by March 1 at the latest

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- Stay in Contact: Stay connected with the ECE Graduate Program Office by reaching out to the ECE Graduate Program Coordinator at ECEGradProgram@soe.rutgers.edu

