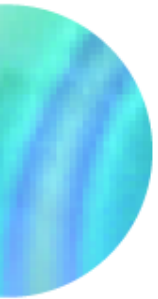


BS/MS Program

Electrical and Computer Engineering

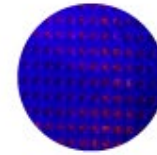




Why BS/MS?

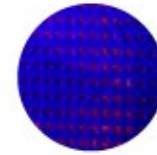
- Double-count up to 9 credits
- Complete both degrees in as little as 5 years
- GRE waiver
- Earning potential
- Financial support
- Resume builder

Financial support



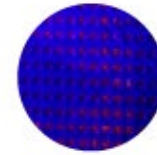
- Corporate-sponsored scholarships (Leidos, Northrop Grumman)
- ECE MS Scholarship
- Graduate teaching assistantship
- Graduate research assistantship

Requirements



- 3.6 GPA requirement
- 9 credits of 300-level ENEE or CMSC coursework completed
- Plan of study
- Faculty mentor

Timeline



Second Semester Junior Year: Determine eligibility for BS/MS program

Meet with
undergraduate advisor

Meet with faculty
mentor

Meet with graduate
student advisor



Semester before taking grad classes: Apply for the BS/MS program

Submit BS/MS Plan of Study

Submit BS/MS Mentor Form

GPA: 3.6, 9 credits
300-level coursework



By December 15 before BS Graduation: Submit a Graduate School application

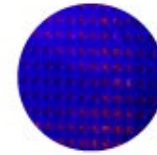
December 15 for fall admission

March-April admissions decision

Spring admission possible



Potential BS/MS Candidates

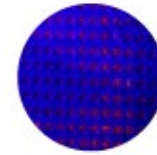


- Excellent academic record
- Ability to handle heavy course loads
- AP credits
- Early planning
- Have a sense of research interests
- Interest in graduate school
- Grad courses fit into student plan

Applying Graduate Level Courses

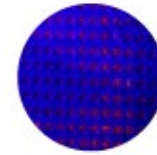
- ENEE graduate level courses can satisfy major technical requirements
 - Electrical Engineering
 - Category A Technical Elective
 - General Technical Elective
 - Computer Engineering
 - Category C Technical Elective
 - ENEE646 can replace ENEE446 (by faculty approval)
 - Category F or additional Tech Electives
 - ECE Honors: Grad course can replace H-level courses

Meeting with Undergrad Advisor



- ECE students can meet with their assigned undergrad advisor to discuss the program
- Freshmen/Sophomores
 - Discuss BS/MS program in your next registration meeting or during off peak times
- Juniors
 - Meet with advisor in the semester when you are completing your 9 credits of 300-level ENEE/CMSC courses
- BS/MS advising meeting can be held after registration period ends

Faculty Mentor Meeting



- Faculty mentor will provide guidance on selecting 9 credits of BS/MS grad courses
- In selecting a mentor, a good place to start is the ECE Research website:
ece.umd.edu/research
- In preparation for your meeting:
 - Bring a copy of your transcripts
 - Review course descriptions
 - Be familiar with research interests

Research Areas



CSP (Communications & Signal Processing)	ENEE222, ENEE322, ENEE324
CONT (Controls)	ENEE222, ENEE322, ENEE324
COMP (Computer Engineering)	ENEE150, ENEE244, ENEE245, ENEE350
ELEC (Electrophysics)	PHYS, ENEE205, ENEE380, ENEE381
MICR (Microelectronics)	ENEE205, ENEE303, ENEE307, ENEE313



MS Core Courses

Communications & Signal Processing (CSP)

ENEE 620

Random Processing in Communication & Control

ENEE 621

Estimation & Detective Theory

ENEE 627

Information Theory

ENEE 630

Advanced Digital Signal Processing

Computer Engineering (COMP)

ENEE 640

VLSI Architecture

ENEE 641

Mathematical Foundations for Computer Systems

ENEE 645

Compilers and Optimization

ENEE 646

Digital Computer Design

MS Core Courses

Controls (CONT)

ENEE 620

Random Processing in
Communication & Control

ENEE 660

Systems Theory

ENEE 661

Nonlinear Control Systems

ENEE 662

Convex Optimization

ENEE 664

Optimal Control

Microelectronics (MICR)

ENEE 600

Solid State Electronics

ENEE 601

Semiconductor Devices and Technology

ENEE 611

Integrated Circuit Design and Analysis

ENEE 612

Advanced Power Electronics

Electrophysics (ELEC)

ENEE 680

Electromagnetic Theory I

ENEE 681

Electromagnetic Theory II

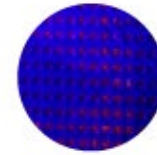
ENEE 690

Quantum & Wave Phenomena
with Electrical Application

ENEE 692

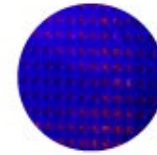
Introduction to Photonics

Graduate School Application



Admission Requirement	Standard ECE Graduate Admission
Transcript	Required, GPA ≥ 3.5
General GRE	Currently not required
Letters of Recommendation	3 (two from ECE faculty recommended)
Statement of Purpose	Required
Resume or CV	Required

Questions?



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