



# WPI

Department of Electrical and Computer Engineering

## ***New ECE Graduate Student Orientation Meeting***

Thursday, August 15, 2019

1:00PM - AK 219

# ***Introductions....***



- **ECE Department Head** – Professor Rick Brown
- **ECE Associate Department Head** – Professor Reinhold Ludwig
- **Graduate Program Committee Chair** – Professor Berk Sunar
- **ECE Shop Technicians** – Bill Appleyard
- **ECE Lab and Office Manager** – James O'Rourke
- **ECE IT Support** – WPI Helpdesk ([its@wpi.edu](mailto:its@wpi.edu) or go to the library)
- **ECE Department's Office (AK202) Staff:**
  - Colleen Sweeney – Main contact person for any graduate program questions (*i.e. forms, paperwork, letters, etc.*)
  - Jessie Curley – Main contact for undergraduate program questions.
  - Deb Thompson – Main contact for questions about expense reports, reimbursements, etc.

# ECE Department Website and Social Media

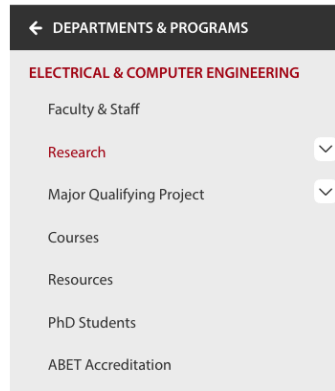


# WPI



WPI's Electrical and Computer Engineering (ECE) Department, located in the historical Atwater Kent Laboratories, is a community of world-class faculty and students conducting research on diverse subjects including machine learning, cryptography and information security, signal processing, autonomous vehicles, smart health, prosthetic control, analog and digital microelectronics, and wireless information networks. We have a strong tradition of making significant contributions to science and engineering, ranging from the invention of the negative feedback amplifier to laying the foundations of the first wireless local area networks.

Through our innovative Theory and Practice curriculum, hands-on laboratories, and project-based learning, the ECE Department continuously strives to develop the next generation of engineers who will develop new technologies and seek creative solutions to society's most pressing problems. We pride ourselves on our culture of creative scholarship; faculty, students, and staff work closely together and encourage each other through challenges both in the classroom and in life.



@ECEWPI



@WPI\_ECE



YouTube

# ***ECE Department & Grad School Focus on Research***



# **WPI**

## **Philosophy behind ECE Department Research**

- **Theory ↔ practice**
- **Intellectual merit**
- **Broad societal impact**
- **Application driven technology**

## **Expectation as Member of Research Community**

- **MS: Master disciplinary area**
- **PhD: Independent contribution to knowledge**
- **You are always representing WPI!**



# Smart World: Cyberphysical Systems



**Rick Brown**  
Professor



**Xinming Huang**  
Professor



**Kaveh Pahlavan**  
Professor



**Alex Wyglinski**  
Professor

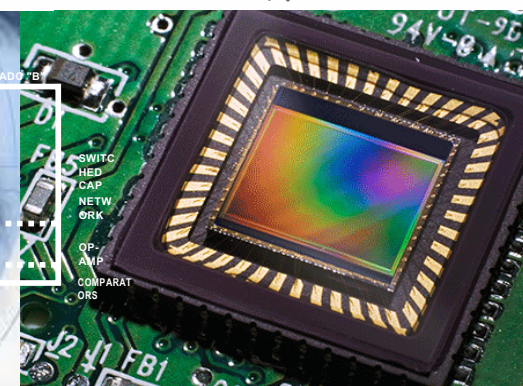
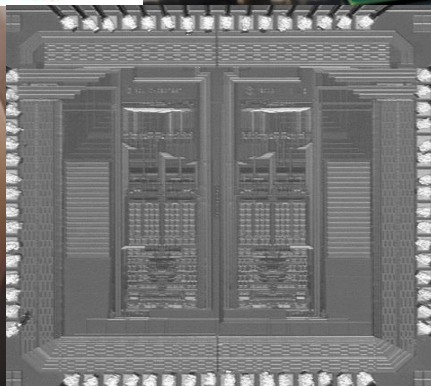
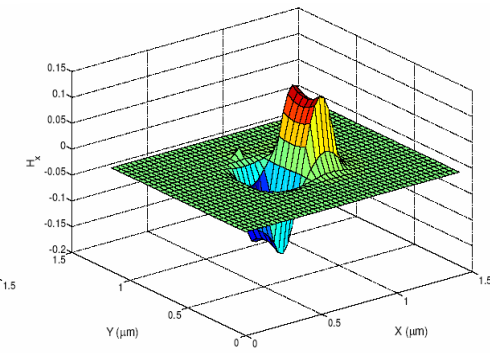
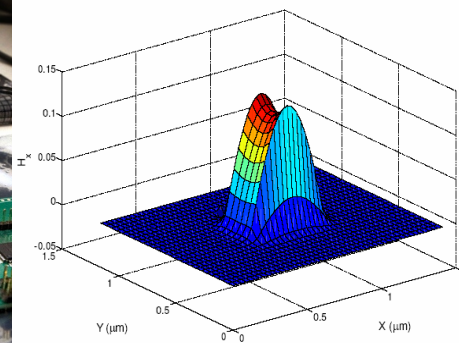
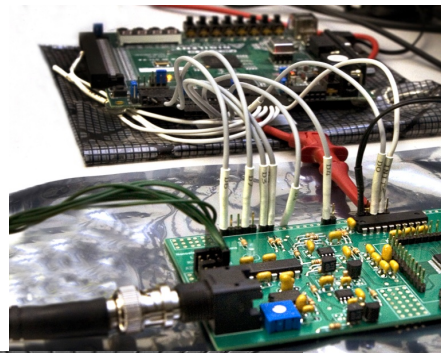


**Zain Navabi**  
Adj. Teaching Prof.



**Ziming Zhang**  
Assistant Professor

Autonomous Vehicles / Systems  
Embedded Systems  
Digital Signal Processing  
AI / Machine Learning  
Real-Time / High Performance Computing  
Logic Synthesis / Testing Methodologies  
RF / Mixed Signal / VLSI Circuits  
Applied Electromagnetics • Digital Radar  
Cognitive / Software-Defined Radio  
Wireless Communications / Networking  
WiFi / UWB / Indoor Localization



# Smart World: Robotics



**Bill Michalson**  
Professor



**Ziming Zhang**  
Assistant Professor



**Jie Fu**  
Asst. Professor



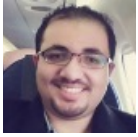
**Cagdas Onal**  
Asst. Prof. [ME]

Machine Vision • Image Recognition  
Assistive Robots • Soft Robotics  
Cooperative “Swarm” Robotics  
Control of Hybrid Dynamical Systems  
Formal Methods • Automata Theory  
Optimization Theory





# Smart World: Energy / Sustainability



**Yousef Mahmoud**  
Asst. Professor



**Stephen Bitar**  
Instructor



**Maqsood Mughal**  
Asst. Teaching Prof.



**Sundari Ramabhotla**  
Asst. Teaching Prof.

Solar / Wind / Renewable Energy  
Power / Automotive Electronics  
High-Voltage Technology  
Energy Conversion  
Smart Cities • Smart Grid  
Sustainability Engineering  
Power Systems • Power Quality



# Health Care and Quality of Life



**Ted Clancy**  
Professor



**Xinming Huang**  
Professor



**Reinhold Ludwig**  
Professor



**Sergey Makarov**  
Professor



**Ulkuhan Guler**  
Asst. Professor



**John McNeill**  
Professor

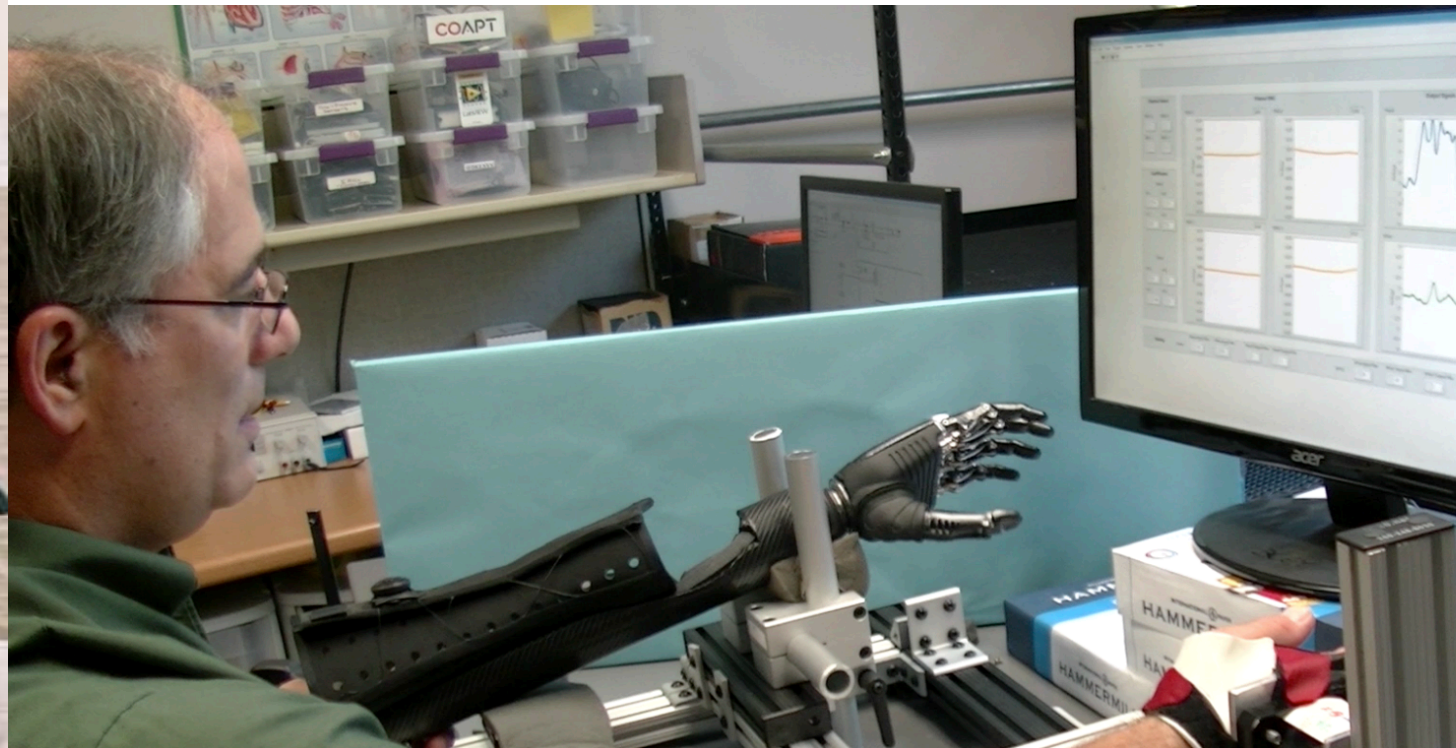


**Kaveh Pahlavan**  
Professor



**Gene Bogdanov**  
Asst. Teaching Prof.

Biomedical Signal Processing / Modeling  
Smart Prosthetics • Assistive Technology  
Wearable Sensors • Medical Imaging  
Biomedical Instrumentation  
Optimization Methods for MRI  
Nanotechnology for Biomedical Sensing  
Body Area Networking  
Computational “Virtual Human” Modeling  
On-Body Antenna Prototyping





# Security and Privacy



**Berk Sunar**  
Professor



**Andrew Clark**  
Asst. Professor



**Patrick Schaumont**  
Professor



**Bill Martin**  
Professor [MA]



**Craig Shue**  
Assoc. Prof. [CS]



**Koksai Mus**  
Asst. Teaching Prof.



**Yarkin Doroz**  
Asst. Teaching Prof.

**Secure Control of Cyberphysical Systems**  
**Cryptographic Algorithm Implementation**  
**Smart Grid Security • Network Security**  
**Embedded Security Design**  
**Physical Security / Side-Channel Cryptanalysis**



BIZ & IT —

## Storing secret crypto keys in the Amazon cloud? New attack can steal them

Technique allows full recovery of 2048-bit RSA key stored in Amazon's EC2 service.

DAN GOODIN • 9/28/2015, 2:55 PM



### Security

## Boffins bag side-channel bugs before they bite

How to spot a side order of Rowhammer in a benign binary

By [Richard Chirgwin](#) 4 Jan 2017 at 06:04

SHARE ▼



Rowhammer and similar side-channel attacks aren't caught by anti-virus, so a bunch of US boffins have set about working out how to catch their signatures.



# *Main ECE Graduate Degree Programs*



# WPI

- **Master of Science (MS)** - Students have the option of following two routes to this degree: (1) a non-thesis option requiring 30 graduate credits in course work, independent study or directed research, or (2) a thesis option also totaling 30 graduate credits and including a thesis of nine credits. Students completing a master's degree with thesis option will be required to do a presentation of their thesis as part of their degree requirements.
- **Doctor of Philosophy (PhD)** - Students with a M.S. degree in electrical and computer engineering may apply for the doctoral program; admission is contingent on a review of the application and associated references. Requirements: 30 credits of coursework, plus an additional 30 credits of dissertation research. Students will also need to pass the Diagnostic Qualifying Exam during their first year in the PhD program as well as an Area Exam at least 3 months prior to their Dissertation Defense.

## ***Other ECE Graduate Degree Programs***




# WPI

- **Combined BS+MS** – WPI students are allowed to double count courses (*up to 12 credits*) taken as an undergrad towards their MS degree provided that they are accepted into this program. Students in the combined program continue to be registered as undergraduates until they have completed all requirements for the B.S. degree.
- **Master of Engineering (MEng)** - The MEng degree is tailored for individuals seeking an industrial career path. Similar to the M.S. degree, the MEng degree requires the successful completion of at least 21 credits of WPI ECE graduate courses. In contrast to the M.S. degree, the MEng degree allows up to 9 credits of non-ECE courses to be chosen as management courses and does not include a thesis option.
- **Graduate Certificate (GC)** – the graduate certificate program allows students to take five courses that are focused in a specific technical area (*SYS, PSE, or PSM*) which can be used towards a graduate degree program should the student decide to further their education.

# ECE Program of Study Forms

All graduate students are required to submit their completed program of study forms to Colleen in the ECE office (AK202) by the end of their first semester in the graduate program.

**WPI**  
Department of Electrical and  
Computer Engineering

**Master of Engineering  
Plan of Study Form**

Student ID Number: \_\_\_\_\_ BS/MS \_\_\_\_\_ Full Time \_\_\_\_\_ Part Time \_\_\_\_\_  
(please check one)

Student Name: \_\_\_\_\_  
(last) (first) (middle)

Address (home): \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Work Phone: ( ) \_\_\_\_\_ Home or cell # ( ) \_\_\_\_\_ Email \_\_\_\_\_

Advisor's Name (please print): \_\_\_\_\_

Required: 21 credits of WPI ECE graduate courses, including thesis and directed research  
(not including transfer credits)

Course No.	Course Title	Term/Year	Grade	Credits
ECE				
ECE				
ECE				
ECE				
ECE				
ECE				

Required: 9 credits from 4000-level (maximum of two) or 500-level courses from ECE, Computer Science,  
Physics, Engineering, Mathematics or Management (graduate courses only)

Course No.	Course Title	Term/Year	Grade	Credits

Required: Graduate Seminar Courses (two courses for full-time regular MS, one course for full-time BS/MS)

Course No.	Course Title	Term/Year	Grade	Credits
ECE 596	Graduate Seminar (full-time students only)			
ECE 596	Graduate Seminar (full-time students only)			

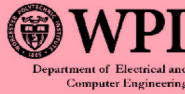
Transfer Courses / Additional Courses (not counted towards MS degree requirements)

Course No.	Course Title	Term/Year	Grade	Credits

Student's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Advisor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Over for instructions  
3/26/2014

**WPI**  
Department of Electrical and  
Computer Engineering

**Master of Science  
Plan of Study Form**

Student ID Number: \_\_\_\_\_ BS/MS \_\_\_\_\_ Full Time \_\_\_\_\_ Part Time \_\_\_\_\_  
(please check one)

Student Name: \_\_\_\_\_  
(last) (first) (middle)

Address (home): \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Work Phone: ( ) \_\_\_\_\_ Home or cell # ( ) \_\_\_\_\_ Email \_\_\_\_\_

Advisor's Name (please print): \_\_\_\_\_

Required: 21 credits of WPI ECE graduate courses, including thesis and directed research  
(not including transfer credits)

Course No.	Course Title	Term/Year	Grade	Credits
ECE				
ECE				
ECE				
ECE				
ECE				
ECE				

Required: 9 credits from 4000-level (maximum of two) or 500-level courses  
from ECE, computer science, physics, other engineering, or mathematics

Course No.	Course Title	Term/Year	Grade	Credits

Required: Graduate Seminar Courses (two courses for full-time regular MS, one course for full-time BS/MS)

Course No.	Course Title	Term/Year	Grade	Credits
ECE 596	Graduate Seminar (full-time students only)			
ECE 596	Graduate Seminar (full-time students only)			


Transfer Courses / Additional Courses (not to be counted towards M.S. degree requirements)

Course No.	Course Title	Term/Year	Grade	Credits

Student's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Advisor's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Over for instructions  
3/26/2014

**WPI**  
Department of Electrical and  
Computer Engineering

**Doctor of Philosophy  
Plan of Study Form**

Student ID Number: \_\_\_\_\_ Full Time \_\_\_\_\_ Part Time \_\_\_\_\_  
(please check one)

Student Name: \_\_\_\_\_  
(last) (first) (middle)

Address (home): \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Work Phone: \_\_\_\_\_ Home or cell # \_\_\_\_\_ Email \_\_\_\_\_

Research Advisor (please print): \_\_\_\_\_

Required 36 credits (minimum amount) for ECE 699 Ph.D. dissertation  
(more can be taken to fulfillment of Ph.D. degree requirements)

Course No.	Course Title	Term/Year	Grade	Credits
ECE 699	Ph.D. Dissertation			
ECE 699	Ph.D. Dissertation			
ECE 699	Ph.D. Dissertation			
ECE 699	Ph.D. Dissertation			
ECE 699	Ph.D. Dissertation			
ECE 699	Ph.D. Dissertation			
ECE 699	Ph.D. Dissertation			
ECE 699	Ph.D. Dissertation			
ECE 699	Ph.D. Dissertation			

Required 18 credits (maximum amount) of other coursework and/or dissertation  
contributing to the 60 credits total for Ph.D. requirements

Course No.	Course Title	Term/Year	Grade	Credits

Required 6 credits for first minor (courses cross-listed with ECE do not count;  
physics, math, computer science, and engineering are recommended)

Course No.	Course Title	Term/Year	Grade	Credits

Updated 3/26/2014

# Other Commonly Used ECE Graduate Forms



- **Transfer Credit Authorization Forms** – *needed when transferring courses taken at other institutions into student's degree program - grade received must be a B or better and can only transfer up to 9 credits [3 courses] and must be equivalent to those offered at WPI.*
- **Graduate Petition Forms** – *These forms are needed for students with extenuating circumstances when approvals are needed from the graduate program committee. (i.e. academic probation or suspension from the graduate program, transfer of credits for graduate courses, etc.)*
- **Change of Status Form** – *needed if changing status from full-time to part-time or changing degree program from MS to MENG or vice-versa.*
- **TA Time Commitment Worksheets and Research Summary Forms** – *Students who have been awarded a department TA position will need to fill out the TA Time Commitment Worksheet form with the instructor for the course they will be a TA for in order to define what their TA responsibilities will be for that particular course. Research Summary Forms must be filled out by all department funded TA's at the end of the semester that they are a TA, summarizing their current research and listing the courses they took for that semester. Once complete, this form will need to be signed by the student's research advisor and submitted to Colleen.*

## ***PhD-Specific Forms***



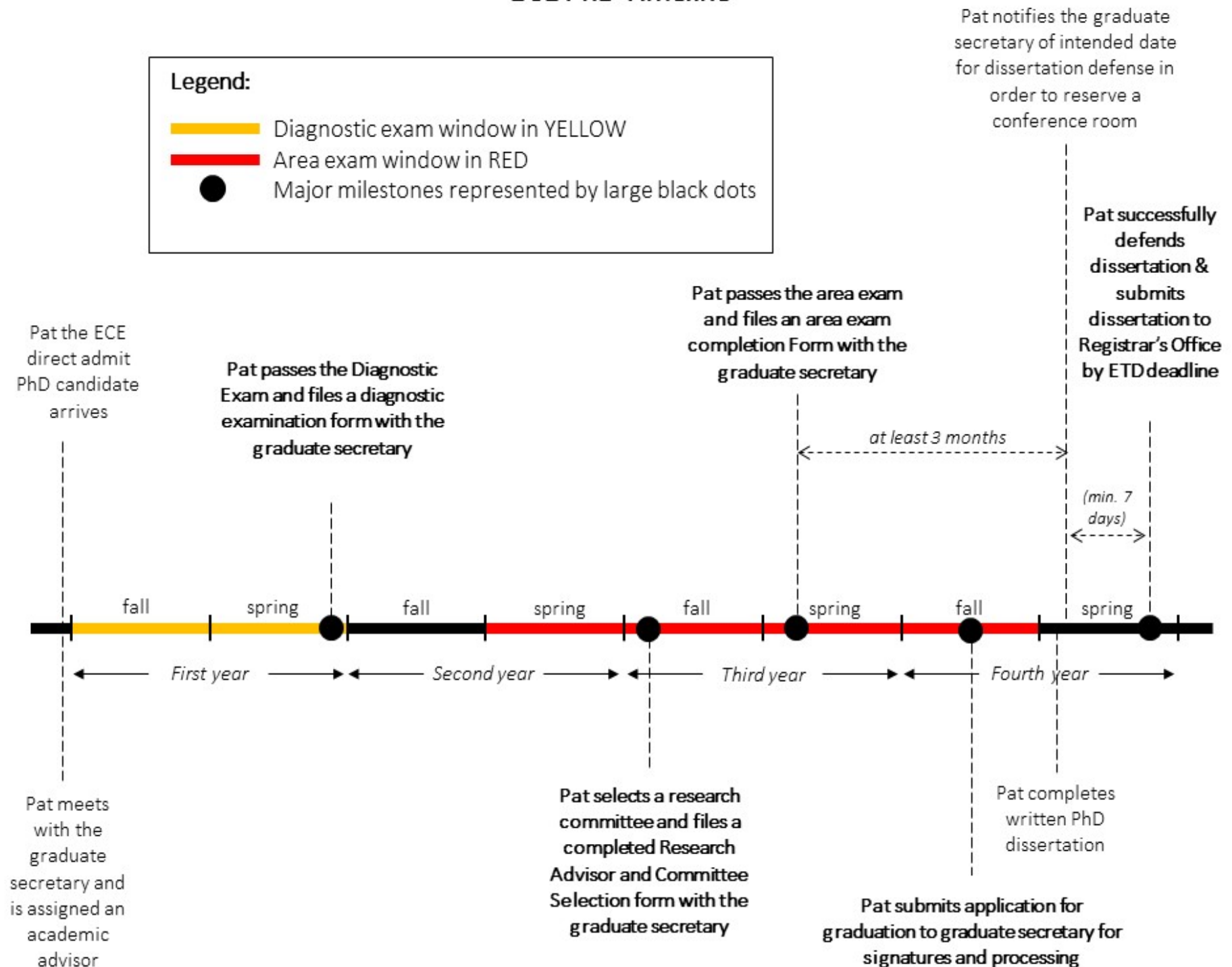
- **Research Committee Forms** are completed once a PhD student has selected their research advisor, which is usually by the beginning of the student's second semester in the PhD program and must be filed with Colleen in the ECE office prior to taking their Diagnostic Exam.
- **Diagnostic and Area Exam Forms** are to be completed once the PhD student has completed each of these exams. Colleen will send a hard copy of the completed forms to the registrar's office and will keep the original in the student's file in the ECE office..



# ECE PhD Timeline

## Legend:

- Diagnostic exam window in YELLOW
- Area exam window in RED
- Major milestones represented by large black dots

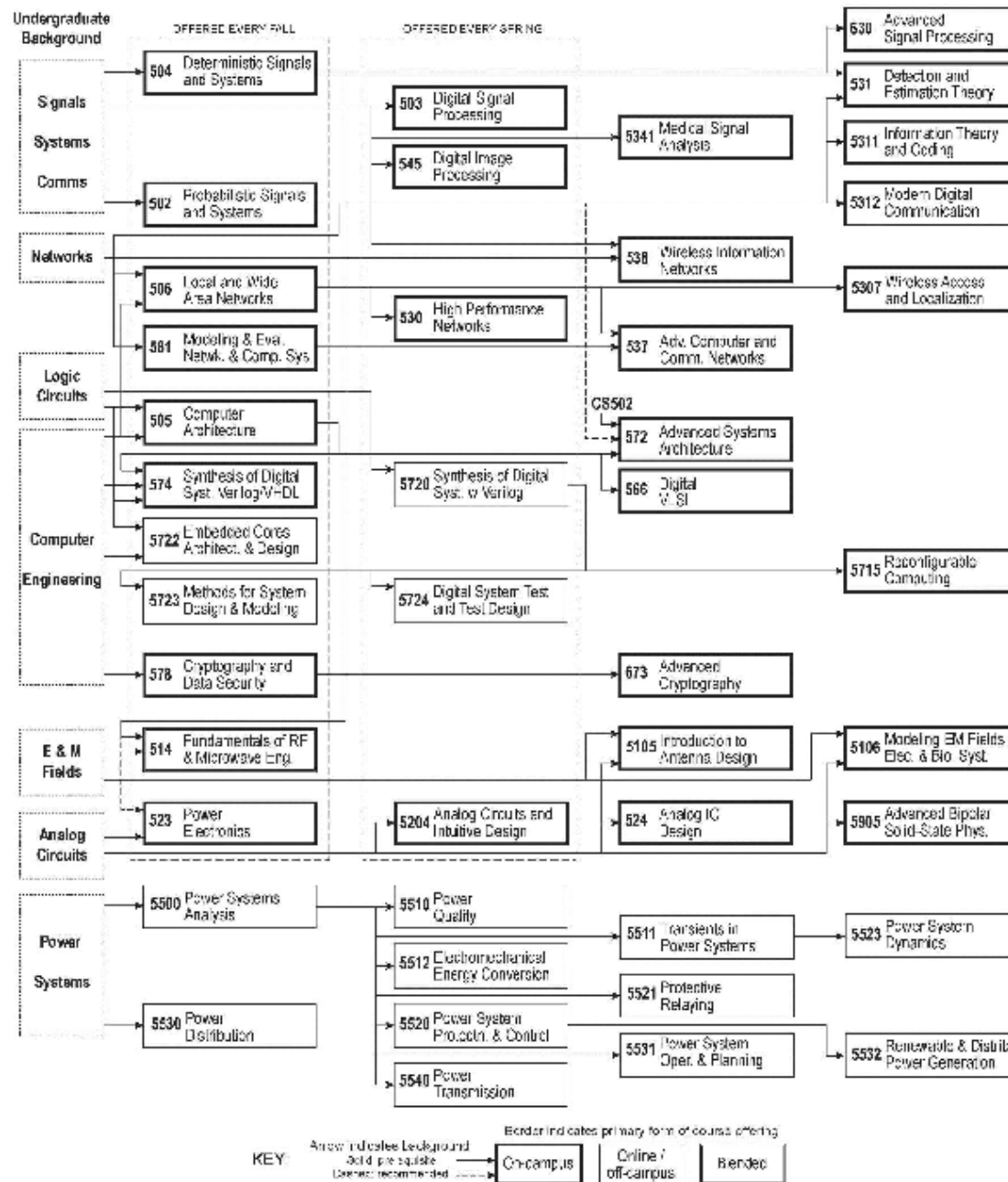


## ECE GRADUATE COURSE CHART AY2018-19



# WPI

# ECE Graduate Course Flow Chart (in the Grad Catalog)



# ***Introductory ECE Graduate Courses***



The following are considered “*introductory*” ECE graduate courses that new students usually register for during their first or second semester:

- **ECE 502. ANALYSIS OF PROBABILISTIC SIGNALS AND SYSTEMS**

Applications of probability theory and its engineering applications. Random variables, distribution and density functions. Functions of random variables, moments and characteristic functions. Sequences of random variables, stochastic convergence and the central limit theorem. Concept of a stochastic process, stationary processes and ergodicity. Correlation functions, spectral analysis and their application to linear systems. Mean square estimation. (Prerequisite: Undergraduate course in signals and systems.)

- **ECE 503. DIGITAL SIGNAL PROCESSING**

Discrete-time signals and systems, frequency analysis, sampling of continuous time signals, the z-transform, implementation of discrete time systems, the discrete Fourier transform, fast Fourier transform algorithms, filter design techniques. (Prerequisites: Courses in complex variables, basic signals and systems.)

# ***Introductory ECE Graduate Courses***



- **ECE 504. ANALYSIS OF DETERMINISTIC SIGNALS AND SYSTEMS**

Review of Fourier series and linear algebra. Fourier transforms, Laplace transforms, Z transforms and their interrelationship. State space modeling of continuous-time and discrete-time systems. Canonical forms, solution of state equations, controllability, observability and stability of linear systems. Pole placement via state feedback, observer design, Lyapunov stability analysis. (Prerequisite: Undergraduate course in signals and sys.)

- **ECE 505. COMPUTER ARCHITECTURE**

This course introduces the fundamentals of computer system architecture and organization. Topics include CPU structure and function, addressing modes, instruction formats, memory system organization, memory mapping and hierarchies, concepts of cache and virtual memories, storage systems, standard local buses, high-performance I/O, computer communication, basic principles of operating systems, multiprogramming, multiprocessing, pipelining and memory management. The architecture principles underlying RISC and CISC processors are presented in detail. The course also includes a number of design projects, including simulating a target machine, architecture using a high-level language (HLL). (Prerequisites: Undergraduate course in logic circuits and microprocessor system design, as well as proficiency in assembly language and a structured high-level language such as C or Pascal.)

# ***Introductory ECE Graduate Courses***



# WPI

- **ECE 506. INTRODUCTION TO LOCAL AND WIDE AREA NETWORKS**

This course provides an introduction to the theory and practice of the design of computer communications networks according to IEEE 802 standard model for lower layers and IETF standard for TCP/IP higher layers. Analysis of network topologies and protocols, including performance analysis, is treated. Current network types including local area and wide area networks are introduced, as are evolving network technologies. The theory, design and performance of local area networks are emphasized. The course includes application of queueing analysis to performance analysis of medium access control (MAC) and application of communication theory in design of physical layer (PHY). (Prerequisites: familiarity to MATLAB programming is assumed. Background in undergraduate level courses in networking, probability, statistic, and signal processing.)



# ECE Funding Opportunities



- **Research Assistants\*** – Please visit ECE's research pages (<http://www.wpi.edu/academics/ece/research.html>) for information on the department's research labs and to check for open RA positions.
- **Teaching Assistants and Graduate Tutor Positions\*** – Students interested in TA or tutor positions should contact Professor Reinhold Ludwig and let him know which classes you would be interested in being a TA or tutor for as well as the grades you received for these classes. These positions are usually assigned mid-summer for fall openings and the end of fall semester for spring openings.
- **Graduate Internships** – Students are responsible for obtaining their own internship positions and will need to fill out CPT forms (for international students only). Start and end dates must follow the academic calendar and are only allowed for paid positions. Students should speak to their advisors in regards to what evaluation materials will need to be submitted at the end of their internship.

\*New students who have been awarded RA or TA positions should see Colleen in the ECE office for additional information regarding paychecks, mailboxes, forms, etc.

# ***ECE Academic Advisors***



## ➤ **Why do I need an academic advisor?**

*Advisors can answer questions you may have regarding courses, course pre-requisites or research opportunities, as well as any questions you may have about your graduate program. They can also help with other problems that may require a graduate petition which would need their approval.*

## ➤ **How do I know if I have been assigned an advisor?**

*Please see Colleen Sweeney in the ECE office if you haven't done so already, and she will let you know who your advisor is and how to contact them.*

## ➤ **Am I allowed to change my advisor? What is the process?**

*If for any reason, you decide to change your academic advisor, please see Colleen in the ECE office and she will assign you a different advisor and will update your file accordingly.*

## ➤ **Is my academic advisor also my research advisor?**

*No, an academic advisor is only assigned to advise academic issues, e.g., course selection. If you end up working with a research advisor different from your academic advisor, it is common to make your research advisor also your academic advisor.*



# WPI

## ***Department Policies and Expectations on Academic Honesty***

The following slides are a review of what the ECE Department refers to as academic dishonesty as well as the procedural flowchart for dishonesty violations.

# ***Department Policies & Expectations on Academic Honesty\****



## ➤ ***What is considered academic dishonesty?***

- **Fabrication** *(examples)*
  - ✓ Altering grades or other official records
  - ✓ Changing exam solutions after the fact
  - ✓ Inventing or changing laboratory data
  - ✓ Falsifying research
  - ✓ Inventing sources
  - ✓ Sabotaging another student's work or academic record
- **Plagiarism** *(examples)*
  - ✓ Misrepresenting the work of another as one's own
  - ✓ Inaccurately or inadequately citing sources, including those from the Internet

*\*Text taken from WPI handbook "Student Guide to Academic Integrity"*

# ***Department Policies & Expectations on Academic Honesty\****



- **Cheating** *(examples)*
  - ✓ Using purchased term papers
  - ✓ Copying exams, homework, or take-home exams
  - ✓ Using unauthorized materials or sources of information (*e.g., cheat sheet, preprogrammed calculator*)
  - ✓ Assisting another person in cases where prohibited
- **Facilitation** *(examples)*
  - ✓ Sharing test questions or answers from an exam with another student
  - ✓ Letting another student copy a solution to a homework problem, exam, or lab
  - ✓ Taking an exam for another student
  - ✓ Assisting in any act of academic dishonesty of another student

*\*Text taken from WPI handbook "Student Guide to Academic Integrity"*



# Miscellaneous Information...



# WPI

## ➤ Printing Services

- *ECE Students can make copies as well as scan or fax documents in the ECE office. (Printing Fee: B & W – 10¢ /pg. and Color - 30¢ /pg. Scanning & faxing options are free).*
- *ECE Plotter – The office plotter can print posters up to 24" wide for students and faculty who need research posters printed for conferences or for other research events on campus. (Free for ECE students and faculty only. Students from other departments will be required to pay for poster printing - usual cost of a 24 x 36 inch poster is \$12) Please see Colleen in the ECE office for more information.*

# Miscellaneous Information...



## ➤ Mail and Package Services

- Students having packages or letters mailed to them at WPI should make sure that the sender includes the following information on any correspondence:

Student's Name  
ECE Department, WPI  
100 Institute Road, Worcester, MA 01609

*(Note: Packages or letters that do not have this information will be sent back to the post office and will be returned to sender.)*

- Packages that have been delivered for students can be picked up from the ECE office. Students will be sent an email to let them know that they have a package that needs to be picked up.
- Stamps/Postage – students in need of postage for letters or small packages will need to bring them to the WPI mailroom (*bottom floor of the campus center*).
- UPS drop off – students having packages shipped UPS can bring them to the ECE office mailroom for pick-up. Be sure that the UPS label is attached!
- Federal Express packages – Please see one of the admins in the ECE office for more information.

The answers to the ECE Department's most frequently asked questions can be found below and on the subsequent slides. If you don't see the question and answer you are looking for, please let us know!

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## ***How long will it take me to finish my degree program?***

*Length of the degree programs vary based on the type of degree and whether the student is full-time or part-time.*

*The total number of tuition credits needed for the **MS program is 30 credits**. On average, a full-time MS student, taking 9 credits (3 classes) per semester, will be able to complete the requirements for their degree program in about two years or less. Part-time students, taking one to two classes per semester, can complete their degree program in about 3 to 5 years.*

*The Ph.D. program requires students to complete **30 credits of coursework and an additional 30 credits of research**. Full-time students pursuing a Ph.D. degree can usually complete their degree requirements in about 3 or 4 years depending on the number of credits the student has completed each semester.*

## ***Are grad students allowed to take undergraduate courses for graduate credit?***

*Graduate students are allowed to up to two 4000-level ECE courses that can be used towards their graduate course requirements. The credit hours will then be adjusted/converted from 3.0 to 2.0 for the graduate credit. It is important to note that graduate students cannot register for undergraduate courses because of their level restrictions and will need to contact Jeannette Dailida ([jdailida@wpi.edu](mailto:jdailida@wpi.edu)) in the registrar's office in order to register for these courses. See below for further instructions.*

## ***How do I register for directed research, independent study or thesis & dissertation credits?***

*Currently: Please contact Jeannette Dailida ([jdailida@wpi.edu](mailto:jdailida@wpi.edu)) in the registrar's office to register for these credits and provide her with the following information:*

- Your name and ID number*
- The type of credits you are registering for*
- The number of credits you are registering for*
- The name of your research advisor*

*In the future (by Summer 2020), this will be handled in Workday.*

## ***What is the department's policy regarding internships and is it possible to register for tuition credits during the semester that the internship takes place?***

- *Students who are offered an internship position that will take place during the academic year must follow WPI's academic calendar! Students will need to register for ECE 597 for zero credits which is used as a placeholder for the internship on the student's transcripts. Please note that internship positions must be directly related to the student's graduate program and the courses listed on their plan of study form!*
- *Students who receive internship positions will need to meet with their advisor to discuss what will be expected of them once their internship has ended (i.e. paper, PPT presentation, etc. summarizing the details of the internship which should also include contact information for their immediate supervisor so that the information in their report can be verified).*
- *Student's working on a full-time internship will not be allowed to register for any additional course credits during the semester in which they are interning. Students working 20 hours or less per week will be allowed to register for no more than two courses (6 credits).*



## ***Internships (continued from previous slide)***

*International students who are offered internship positions must fill out a CPT form (Curricular Practical Training) along with an updated program of study form with the internship credit listed. Both forms will need to be signed off by the student's academic advisor then brought to Colleen in the ECE office so that she can make copies that will be put in the student's file. Then the completed forms will need to be brought to the International House for processing.*

## ***How many credits am I allowed to transfer for courses taken at another university?***

*Students can transfer up to 9 credits (3 courses) of coursework taken at another university provided that the courses are comparable to ones offered at WPI and the grades received were a B or better and providing that the courses being transferred were not used towards a previous degree. Transfer credit forms must be completed for any courses being transferred and must include the course description, syllabus, the book used and the homework assignments given. An updated program of study form with the transfer courses listed, must also be included.*

# FAQ's



## ***What if I fail a course or end up on academic probation?***

**Academic Warning:** *Students have one semester of course work to raise their cumulative overall GPA . Students who do not improve their GPA upon the next review will move down to the next level of standing. Students who do not have a cumulative overall GPA of at least 3.0 will remain in Academic Warning.*

**Academic Probation:** *Students have one semester of course work to raise their cumulative overall GPA. Students who improve their GPA but still remain below 3.0 will be moved up to Academic Warning. Students who do not improve their GPA upon the next review will move down to the next level of standing.*

**Academic Dismissal:** *Students are academically withdrawn from the University. Students may appeal dismissal by submitting a petition to the University Registrar.*

**Academic standing appeal procedure:** *Student petitions will be reviewed by the Committee on Graduate Studies and Research . A representative from the student's home department will be present during the appeal process. This petition must be submitted with any supporting documentation no later than the date specified in the dismissal letter, typically two weeks after semester end.*

## ***If I retake a failed course and receive a better grade, which of these letter grades will be listed on my transcript?***

*The better of the two grades received for that course will be evaluated in the academic review process and the graduation requirements, however both grades will be counted in the overall GPA on your transcript. If the student decides to take a different course, the course with the higher grade will remain on the student's transcript and will count in their overall GPA.*

## ***What are the graduate seminar course requirements?***

*Full-time MS, MENG, and PhD ECE graduate students are required to register and pass two semesters of ECE Graduate Seminar. BSMS students are only required to pass one semester of graduate seminar. Number of seminars attended needed to pass vary by instructor. Students should attend the first seminar meeting of the semester to find out the specifics.*

## ***Where can I find a listing of ECE's course schedules for the upcoming academic year?***

*All course schedules, past and present and future, can be found on the [registrar's web pages](#).*

## ***What are the graduation dates for the academic year?***

*WPI graduation dates are in October, February and May. Application for graduation forms must be filled out and submitted to Colleen in the ECE office for signatures so that the completed forms can be sent to the registrar's office by the deadlines listed on the application for graduation forms (September - July 1st, February - October 1st, May - February 1st).*



# WPI

Department of Electrical and Computer Engineering

***Thank you for attending!\****

***We look forward to  
helping you achieve your  
academic goals!***

(\*Please Note: Today's presentation slides will be posted on our ECE web page under "Resources" then "ECE Presentations" for students to reference.)