Advising Syllabus Overview

From Declaration Day to graduation day, this document is meant to be a hands-on guide to your advising process and a reference tool to help you navigate your academic and professional goals. We have outlined expectations for the advising relationship between you, the student, your staff advisor, and faculty. Your advisors are here to serve as your resource for navigating through your experience at Carnegie Mellon University. This document is available online on the ECE Academic Guide webpage under "Resources for Creating a Course Schedule".

Table of Contents

We have provided quick links for all of the sections of this extensive document for your reference.

Student learning outcomes	Page 1
Overview of advising in ECE	Page 2
Recommended resources for students	Page 2
Knowledge milestones for your academic career	Page 3
Types of advising appointments	Page 4
How to schedule an advising appointment.	Page 4
Why should I meet with my advisor?	Page 4
ECE curriculum requirements	Page 5
Sample fouryear plan	Page 6
CMU Statementon Advising	Page 7
Expectations of students and advisors	Page 7
Glossary of Terms	Page 7

Student Learning Outcomes

graduation destination

As	a	result	ot	your	active	advising	relationship,	you v	viII
----	---	--------	----	------	--------	----------	---------------	-------	------

major/minor, co-op, IMB, etc.) to a four-year plan

~3	a result of your active advising relationship, you will
	Understand the advising resources in your department
	 Know how and when to contact your academic advisor
	 Recognize what to expect from your academic advisor
	 Recognize what is expected of you in a positive advising relationship
	 Identify when to utilize various types of advising
	Identify where to find department, college, and university policies and laws (i.e., FERPA) that impact your academic career
	Find campus and community resources that support student success
	Utilize resources for building a course schedule, such as (but not limited to):
	☐ <u>Academic audit and degreeplanner</u>
	□ <u>University Catalog</u>
	□ Schedule of Classes search tool
	□ <u>ECE Academic Guide webpage</u>
	☐ <u>Faculty Course Evaluations</u>
П	Apply your curriculum requirements and other academic options (such as study abroad, research, additional,

Begin to facilitate planning, goal-setting, and decision making regarding your academic schedule and post-

How is Academic Advising Divided in ECE?

ECE students have two different advisors. Once you are admitted into ECE at the end of your first year, you will be assigned a staff academic advisor and a faculty advisor. Peer advisors are also available as a third advising resource.

- Your academic advisor is a full-time staff member who is here to assist you with curriculum questions, course questions, study abroad opportunities, and anything else pertaining to your academics. Your ECE academic advisor is with you through the duration of your academic career in the department. The academic advisors for ECE undergraduates are Danielle Bonatesta, Kaycee Palko, Jeannette Daly, Monique Moreland, and Holly Skovira. You can find your academic advisor listed as "primary advisor" in the contacts tab of SIO.
- Your faculty advisor is an ECE faculty member that is assigned to you for the duration of your undergraduate career (in addition to your academic advisor). Your faculty advisor is a person that can help you decide what areas within ECE are related to your interests, help you with choosing courses, and help you plan a course timeline within ECE. You can find your faculty advisor listed as "secondary advisor" in the contacts tab of SIO.
- Peer advisors are senior and MSIMB ECE students that have been trained on the curriculum and creating course schedules that help to meet your career goals while keeping you on track for a timely graduation. These students are available for meetings once the Schedule of Classes is released for the following semester through registration.

Valuable Resources for ECE Students

ECE has numerous staff and connections on campus available to help you during your time at CMU! Don't hesitate to visit your academic advisor for advice on important people to know. We've included just a short list of some important contacts for you here.

- <u>ECE Students Affairs Support Resources:</u> If you live on campus, your primary Student Affairs contact will be your Housefellow. If you live off campus, your College Liaison is Veella Grooms, <u>vgrooms@andrew.cmu.edu</u>. All students are also supported by the Student Support Resources Team.
- ECE Career Services Liaison: Ray Mizgorski, raymizgo@andrew.cmu.edu
- <u>ECE HUB Liaison:</u> Melissa Skasik, <u>skasik@andrew.cmu.edu</u>
- For advising questions on the General Education Requirements:
 - Please contact <u>Kurt Larsen</u> if your last name begins with A-D.
 - Please contact <u>Treci Bonime</u> if your last name begins with E-J.
 - Please contact Conrad Zapanta if your last name begins with T-W.
 - Please contact <u>Nisha Shukla</u> if your last name begins with N-R.
 - Please contact <u>Kourtney Bandish</u> if your last name begins with S-Z.

Other Recommended Success Resources

CMU Course Catalog coursecatalog.web.cmu.edu/	Career and Professional Development Center www.cmu.edu/career/
ECE Academic Guide webpage bit.ly/ECEAreas	Student Academic Success Center www.cmu.edu/acadev/
Stellic Academic Audit and Degree Planner academicaudit.andrew.cmu.edu	Office of International Education www.cmu.edu/oie/
HUB Schedule of Classes Search Tool bit.ly/HUBSOC	Counseling and Psychological Services www.cmu.edu/counseling/
CMU Academic Calendar www.cmu.edu/hub/calendar/index.html	Alumni Advisor Network https://cmu.firsthand.co/
Disability Resources www.cmu.edu/disability-resources/	Schedule a meeting with your advisor https://go.oncehub.com/ECEAdvisingTeam

The following boxes present important milestones for each year of your academic career that we recommend you be familiar with.

Create a 4-year plan

- Use the <a href="Months: Comparison of Com
- Use your <u>Academic Audit</u> to see your curriculum requirements
- Use the ECE department website or CMU course catalog for information on department policies
- Meet with your advisor for assistance with resources and help with crafting your plan

Prepare for advising appointments

- Use the CMU Academic Calendar to be familiar with academic dates and deadlines
- Refer to our chart on page 4 to determine the type of advising appointment that you need
- If your need requires a scheduled appointment, schedule a meeting ahead of time
- Be prepared to talk about your life both in and outside of your classes to the degree you are comfortable

Connect your educational plan to your career goals

- Utilize your advisors to tailor your course selection to your career goals
- Explore additional majors and minors related to your interests
- Use the <u>Career and Professional Development Center</u> for assistance with career exploration
- Use the <u>Alumni Advisor Network</u> for advice on career and coursework
- · Contact your faculty advisor throughout the year

Sophomore year

Plan for a summer internship or research

- Utilize the CPDC for resume and interview advice
- Investigate and attend career fairs such as the TOC or SPARK
- Use <u>Handshake</u> to search for internships
- Use online resources to search for available research opportunities or research faculty interests
- Utilize the <u>Undergraduate Research Office</u> and the <u>Student Project Tracker</u> website to find available funding or research opportunities

Build and refine connections with faculty

- Research faculty interests and find a research opportunity (mandatory if you are pursuing a PhD option)
- Visit office hours regularly
- · Apply to TA a class that you enjoyed and did well in

Make plans for graduate school (if applicable)

- Know the difference between various types of graduate degrees
- Ask your advisor about the integrated MS options
- Prepare to take the GRE (or other entrance exams)
- Think about who you would ask for letters of recommendation

Junior year

Graduate and prepare for your future

- Triple check your graduation requirements with your advisor and academic audit
- Double check your diploma information in SIO
- Solidify your post-graduation plans for work or graduate school
- Participate in commencement (optional but recommended)
- Know your options for participating in the alumni network

Senior year

Do you need to schedule an advising appointment?

Your time, like ours, is valuable. If you just need our signature or to drop off a form, there's no need to schedule an appointment. On the other hand, walk-in hours are not an appropriate time to discuss your academic plan and study abroad plans cannot be mapped out over email.

Appointment	Walk-in	Email*
Dedicated time to meet used for:	First-come, first-served used for:	Used for:
Academic difficulty	Form signature	 Clarifying what was discussed at a previous meeting
Personal difficulty	 Policy clarification 	·
 Academic plan andgoals 	 Check-in or follow up from a 	Resource referral
 IMB planning 	previous meeting	Graduation check
Change of major	Registration check	* Please allow 2 business days for a
Study abroad		reply.
 Financial Aid Academic Improvement Plan 		. ,
• Leave of Absence		
 Transferring or withdrawing 		
Questions about or requesting an overload schedule		



Step 1: Visit https://go.oncehub.com/ECEAdvisingTeam

or click on the link in our email signature.

Step 2: Select an appointment length.

Step 3: Select your assigned advisor from the list.

Why should I meet with my academic advisor?

As an academic advisor, our role is to ensure that you are successful in your time at Carnegie Mellon University. Success looks different for every student, and in order for us to help you achieve your own definition of success, it's important for us to understand what your priorities and goals are. The more we know about you and your own goals, the more we can help you to craft your journey here at CMU. While you can minimally use your advisor to make sure you are staying on track for a timely graduation, we are also here to help you utilize your resources as CMU in the most efficient and helpful ways possible. The list in the chart above is just a small number of things that we are here to help you with.

While we don't wish for roadblocks or obstacles on your academic journey, most students take 8 semesters to graduate with a BS in ECE. Over the course of this time, it's possible that you will encounter difficulties or challenges. We are here not only to celebrate your successes, but also to help you in the times that life is not as easy for you. If you're struggling with any kind of personal difficulties—whether it is illness, personal challenges, unexpected life events—please let your advisor know. It can be complicated and hard to navigate being a student on top of these kinds of circumstances, and we are happy to help you in any way that we can.



Curriculum Requirements

5 Areas of ECE:

Device Sciences and Nanofabrication:

Solid State Physics, Semiconductors, Magnetics, Electromagnetic Fields and Waves, Optics, etc.

Signals and Systems:

Digital Signal Processing, Communication Systems, Control Systems, Power Systems, etc.

Circuits:

Analog and Digital Circuits, Integrated Circuit
Design, etc.

Hardware Systems:

Logic Design, Computer Architecture, etc.

Software Systems:

Programming, Embedded Systems, Data Structures, Compilers, Networks, Operating Systems, etc.

Visit the ECE webpage at bit.ly/ECEAcademicGuide for detailed information about ECE courses and requirements.

Important Notes:

- A full time course load is 36 units.
- The maximum number of units per semester is 54 (55 for your fall sophomore year for 18-200).
- First semester sophomores can never overload. Beginning in second semester of sophomore year, ECE students need to have a QPA of 3.5 in order to overload.
- A 'C' or better is needed in all math courses (except math/science electives).
- A 'C' or better is required for all prerequisites to ECE area courses.
- 18-200 is a mini only offered in the fall semester. It is strongly recommended you take it during your sophomore year.
- Three semesters of Experiential Learning are required in order to graduate.
- <u>Please don't hesitate to contact your academic</u> advisor if you have any questions.

For BS in Electrical and Computer Engineering, 2022-23 Course Catalog Year: Total 379 Units

CIT	General	Education	Requirements:	143 units

Computing @ Carnegie Mellon 3 units	
CIT General Education:	
Interpretation & Argument9 units	
Innovation & Internationalization 9 units	
People, Places & Cultures	
Social Analysis & Decision Making 9 units	
Writing & Expression 9 units	
General Education Electives x 3 27 units	*
*Only 18 units of AP credit may count for this requirement	
Experiential Learning x 3 0 units	
Differential and Integral Calculus 10 units	
Integration & Approximation 10 units	
Introductory Engineering Elective 12 units	
Physics I12 units	
Physics II12 units	
Fund. of Programming & Comp. Sci 12 units	

See <u>bit.ly/CITGenEds</u> for in-depth information about CIT general education requirements.

General Technical Requirements: 61 units

Math/Science Electives x 2	18 units
Probability Requirement	9 units
Mathematical Foundations of EE: 18202	12 units
Concepts of Mathematics	12 units
Principles of Imperative Computation	.10units

See <u>bit.ly/ECETechReq</u> for in-depth information about ECE math/science/technical requirements.

ECE Course Requirements: 121 units

Introduction to ECE: 18100	12 units
ECE Sophomore Seminar: 18200	. 1 unit
Introduction to Computer Systems: 18213	12 units
Electronic Materials & Analog Circuits: 18220	12 units
Structure & Design of Digital Systems: 18240 .	. 12 units
Signals & Systems: 18290	12 units
Two courses in 1 of the ECE Areas	24 units
One course in a different ECE Area	12 units
ECE Coverage	12 units
ECE Capstone Design Requirement	12 Units

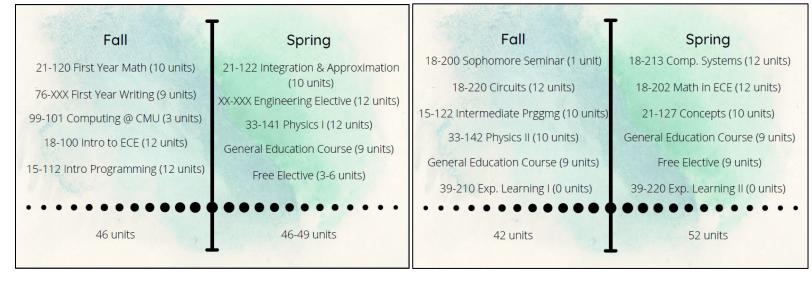
Free Electives: 54 units*

*For most students, the curriculum above will result in a remainder of **54 units** of free electives to achieve the 379 required total units. Up to 9 units of pass/fail credit can be used in this category.

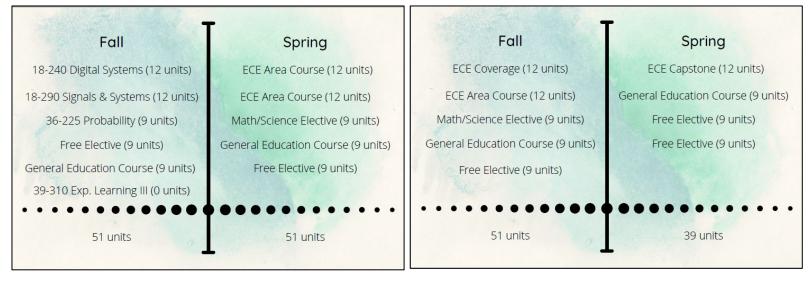
Sample 4 Year Plan

This plan is for demonstration purposes only—PLEASE always contact your advisor when making a schedule plan!

Year 1 Year 2



Year 3 Year 4



We strongly recommend that you utilize the <u>Stellic Degree Planning tool</u> to create a four year plan!

Carnegie Mellon University Institutional Statement on Academic Advising

Academic advising is integral to the educational mission of Carnegie Mellon. Advising is an intentional process, grounded in teaching and learning, and providing each student with guidance for developing and achieving meaningful educational, professional, and personal goals. Successful advising at Carnegie Mellon depends upon a shared understanding of, and commitment to, the advising process by students, advisors and the University. Academic advisors engage students in learning, promote students' academic success, and foster students' personal, ethical, and intellectual growth, all of which will carry into their roles as citizens and lifelong learners.

Expectations of Students

- Demonstrate respect for others and self at all times
- Be knowledgeable of degree requirements
- Take ownership of your academic plan and performance using a variety of resources and tools
- Adhere to Carnegie Mellon standards, policies and procedures: <u>www.cmu.edu/student-affairs/</u> <u>theword/</u>
- Seek out advisors, faculty interactions, contacts, and information on a regular basis
- Utilize campus resources (including your advisor), systems and planning tools
- Check your Andrew email account regularly (also during breaks), manage your inbox and respond to actionable items
- Be actively engaged with your academic advisor and adhere to deadlines
- Be prepared to collaborate with your advisor to set goals and to trouble shoot problems

Expectations of Advisors

- Demonstrate respect for others and self at all times
- Be knowledgeable of and communicate degree requirements
- Empower students to create an academic plan in attainment of degree completion and academic goals
- Advocate for student success and development
- Be knowledgeable about Carnegie Mellon's standards, policies and procedures: www.cmu.edu/student-affairs/theword/
- Serve as a liaison for students with campus resources, faculty and professional staff
- Respond to email in a timely manner and be available to students during regularly scheduled office hours
- Maintain courteous, respectful and supportive advising environment
- Collaborate with students to generate solutions to challenges and to re-frame issues for growth
- Appreciate and advocate for diversity and equity in line with the university's strategic plan
- Adhere to the guidelines set forth by the Family and Educational Rights and Privacy Act (FERPA)

Glossary

- Academic audit: An academic audit is a tool both you and your academic advisor will use throughout your academic career to track your progress towards graduation. The current CMU academic audit is housed within Stellic.
- Course Catalog: The undergraduate course catalog is your contract with CMU. It outlines degree requirements, courses and minors, academic policies, and much more. The year you entered CMU as a fully matriculated student is known as your "catalog year," and you'll be bound by the requirements as outlined in your catalog year, even if they change in the future.
- IMB: The Integrated Master's/Bachelor's program allows students to pursue an undergraduate and graduate degree simultaneously. Students typically take between 4 and 5 years to finish the IMB program.
- **Stellic:** Stellic is the interactive academic planning platform you can use to view your degree requirements, plan courses into the future, and easily see which courses will satisfy each of your graduation requirements.
- **Student Affairs Liaison**: Your Student Affairs Liaison is a staff member outside of your academic department who is available to help with a wide variety of issues. If you live on-campus, your liaison is your Housefellow.