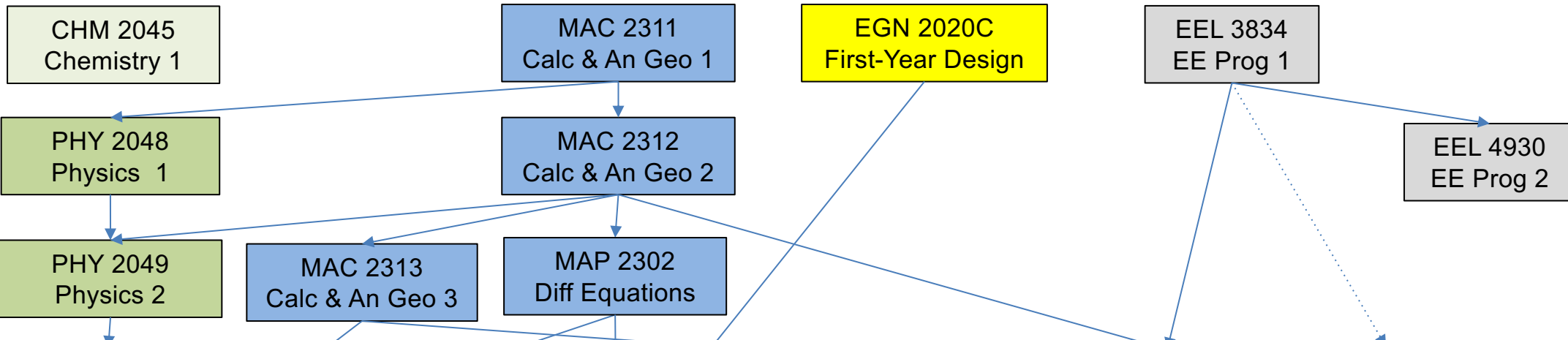


UF ECE Graduate Tracks

BSEE Curriculum 2021 3/23/2021

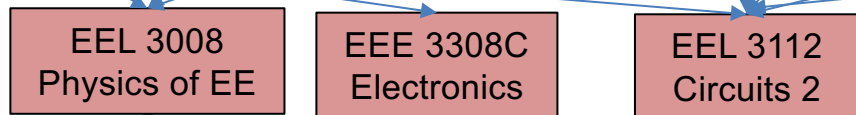
Preparation:



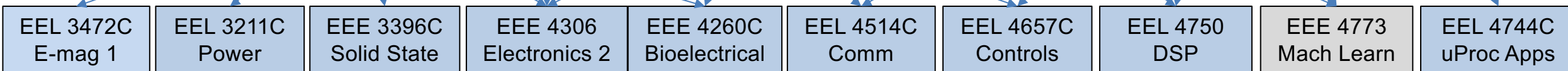
Introductory:



Foundational:



Breadth (Choose 3 courses):



Depth: Choose 2 Courses from the Following Areas (must be from different areas)



Motivation for Graduate Tracks

- UF ECE MS degrees is ten 3-credit courses
- Essentially no structure
- Helps them plan their program of study
- Employers can better identify students

Rules

- Students take 4 courses to complete a track (must earn B or better in each course)
- Tracks are not required but encouraged. Both Master's and PhD students can complete 1 or more tracks.
- Tracks are not generally available for online students
- Starting in Fall 2021 as an experiment

Rules for Tracks

- 4 courses determine a track
- At least one required course, guaranteed to be taught every year
- At least 4 elective courses, 3 must be taught every year
- Each course can only be in one track (No double-counting, no double-listing!)
- Can only include courses that we plan to teach

List of Tracks

1. Computer Architecture
2. Computer Systems
3. Hardware & Systems Security
4. IoT/Networking
5. Communications
6. Controls
7. Signal Processing
8. Machine Learning & AI
9. RF & Power Electronics
10. Electronic Integrated Circuits
11. Nano & Quantum Devices
12. Microsystems Technology
13. E&M, Power & Optics

Signal Processing

REQUIRED:

- EEE5502 Foundations of DSP

CHOOSE 3 OF THE FOLLOWING:

- EEE6512 Image Processing/Computer Vision
- EEL5406 Computational Photography
- EEL6935 Biosignals & Systems Analysis
- EEE6561 Fundamentals of Biometric ID
- EEL6825 Pattern Recognition
- EEE5725 Acoustics

Electronic Integrated Circuits

REQUIRED:

- EEE5322 Digital IC Design 1 (VLSI Circuits & Tech)

CHOOSE 3 OF THE FOLLOWING:

- EEE5320 Analog IC Design 1
- EEE6321 Analog IC Design 2
- EEE6323 Digital IC Design 2 (Adv VLSI Design)
- EEE5400 Future of Microelectronic Technology
- EEE5364 Fund Data Converters

Communications Track

REQUIRED:

- EEE5544 Stochastic Methods for Engineering 1 (Noise Linear Sys)

CHOOSE 3 OF THE FOLLOWING:

- EEL6535 Digital Communications
- EEL6509 Wireless Communications
- EEE6935 Stochastic Methods for Engineering 2
- EEL6528 Digital Communications w/ Software-defined Radios
- EEL6550 Error Correction Coding
- EEL6532 Information Theory

What say you?