

New ECE Degree Plan

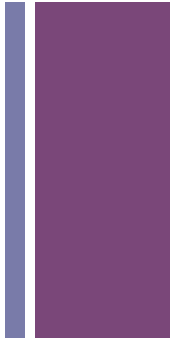
Effective Fall 2014

+ Summary of Changes

■ 129 hours (down from 131)

■ 6 Concentration areas in EE

1. Signals, Communications & Controls
2. Electronics & Integrated Circuits
3. Applied Electromagnetics
4. Nanosystems
5. Power & Renewable Energy
6. Computers & Embedded Systems



+ Summary of Changes *cont'd*

■ BSEE:

- ECE Base is the first two years
- Last two years student chooses a Concentration, and consequently electives within the Concentration.

■ BSCpE:

- ECE Base is the first two years
- Last two years student chooses ECE and COSC electives

+ Summary of Changes *cont'd*

■ Electives in BSEE:

- 7 Concentration Electives
- 2 ECE Electives
- 1 Technical Elective (ECE, or non-ECE from a list)

■ Electives in BSCpE:

- 2 CpE Electives (from a list, as now)
- 1 ECE Elective
- 1 ECE/COSC Elective (COSC from a list)



Summary of Changes *cont'd*



- **Removed from ECE Base:**
 - ENGI 2334 Thermodynamics
 - MECE 3400 Mechanics
 - ECE 2317 EM Fields replaced by ECE 3317 EM Waves (or a redesigned Waves course)
 - ECE 3441 Digital Logic Design (introduction is covered in new First Year and ECE 4436)
 - ECE 3364 Circuits and Systems
 - ECE 4339/4119 Solid State Devices

- **Some Concentrations put some of these back.**



Summary of Changes *cont'd*

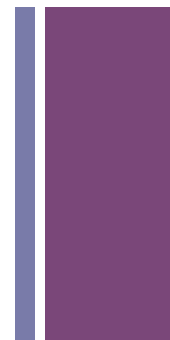


- Added to ECE Base:
 - ENGI 1100 (PROMES)
 - Physics I and II Labs
 - ECE 2317 Applied E&M is replaced by ECE 3317 Applied EM Waves
 - Numerical Methods (ECE 2331 next year, new number after that)

- First and Second years are still identical for BSEE and BSCpE.

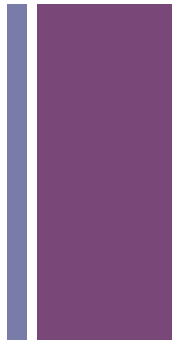


BSEE Degree Plan



Sem	Topic	Cr.	Topic	Cr.	Topic	Cr.	Topic	Cr.	Topic	Cr.	Topic	Cr.	Topic	Cr.	
1	Hist 1377	3	ENGI 1100	1	Engl 1303	3	ECE 1100	1	Math 1431	4	Chem 1372/1117	4			16
2	Hist 1378	3			Engl 1304	3	ECE 1331	3	Math 1432	4	Phys 1321/1121	4			17
3			Pols 1336	3	ECE 2100	1	ECE 2300	3	Math 2433	4	Phys 1322/1122	4	Math 3321	3	18
4	Humanities	3	Engi 2304	3	ECE 3331	3	ECE 3337	3	ECE 4436	4					16
5			Vis Perf Arts	3			ECE 3355/3155	4	Concentration Elec	3	ECE 3317	3	ECE Elective	3	16
6	Pols 1337	3	Inde 2333	3	Elective Lab	1	Concentration Elec	3	ECE 2331	3			ECE Elective	3	16
7	Econ 2304	3	ECE 4335	3	Elective Lab	1	Concentration Elec	3	Concentration Elec	3			Technical Elective	3	16
8			ECE 4336	3	Elective Lab	1	Concentration Elec	3	Concentration Elec	3	Concentration Elec	3	Elective Lab	1	14

+ BScpE Degree Plan



	Topic	Cr.	Topic	Cr.	Topic	Cr	Topic	Cr.	Topic	Cr.	Topic	Cr.	Topic	Cr.	
Sem 1	Hist 1377	3	ENGI 1100	1	Engl 1303	3	ECE 1100	1	Math 1431	4	Chem 1372/1117	4		16	
Sem 2	Hist 1378	3			Engl 1304	3	ECE 1331	3	Math 1432	4	Phys 1321/1121	4		17	
Sem 3			Pols 1336	3	ECE 2100	1	ECE 2300	3	Math 2433	4	Phys 1322/1122	4	Math 3321	3	18
Sem 4	Humanities	3	Engi 2304	3	ECE 3331	3	ECE 3337	3	ECE 4436	4				16	
Sem 5			Vis Perf Arts	3			ECE 3355/3155	4	ECE 3441	4	ECE 3317	3	COSC 1320	3	17
Sem 6			Inde 2333	3			CPE Elective&Lab	4	ECE 3457	4	MATH 3336	3	COSC 2320	3	17
Sem 7	Econ 2304	3	ECE 4335	3			CPE Elective&Lab	4			COSC 4351	3	ECE 5367	3	16
Sem 8	Pols 1337	3	ECE 4336	3					ECE Elective	3			ECE/COSC Elec	3	12



Transition Issues for Current Students



- Physics labs may be waived for students who have already successfully completed Physics (prior to Fall 2014), but hours must be made up with excess ECE Lab hours.
- ENGI 1100 may be waived for students who have already successfully completed ECE 1331 (prior to Fall 2014), but the hour must be made up with an excess ECE Lab hour.
- ECE 2317 Applied E&M already successfully completed (prior to Fall 2014) may be accepted in lieu of ECE 3317 Applied EM Waves.



Transition Issues for Current Students *cont'd*



- Either Thermo or Mechanics already taken will be accepted as the Technical Elective. If both are already taken, no degree plan credit will be given for the second.
- Other previously required ECE courses (2317, 3441, 3364, 4339/4119) can be used in one of the categories of electives.
- Some courses have changed prerequisites; list is available in the Department.
- All degree plan exceptions require Dept. approval. File the appropriate petition.



Who will want to change to the new degree plan?



- Students in their first two years: likely yes.
- Possibly students in their third year, addressing the transition issues via advising.
- Students already in Senior Design will likely not gain anything by changing.
- Get a new flow chart and compare! You must fully satisfy one of the degree plans.