

Finish in 4 Curricular Plan Bachelor of Science Electrical Engineering



A Finish in 4 Curricular Plan provides a roadmap for completing this academic program and the UB Curriculum in four years. Your actual plan may vary depending on point of entry to the university, course placement and/or waivers based on standardized test scores, earned alternative credit and/or college transfer credit.

All students are encouraged to use this plan in conjunction with other academic planning resources such as your academic advisor, the hUB Academic Advisement Report, My Planner and Path Finder tool.

In addition to following this course roadmap, all other admission and academic requirements of this major as listed in the Undergraduate Catalog must be met in order to successfully complete this degree.

First Year – Fall Semester		
Course	Category	Credit
MTH 141 College Calculus I	M/MQR	4
CHE 107 General Chemistry for Engineers	M/SLI 1	4
EAS 199	M/UBS	3
Global Pathway	GP1	3
ENG 105	CL1	4
<i>Total Credits:</i>		18

First Year – Spring Semester		
Course	Category	Credit
MTH 142 College Calculus 2	M	4
EE 278 Digital Principles	M	4
PHY 107 General Physics I	M/SLI 2	4
EAS 202 Engineering Impact on Society	M	1
Thematic Pathway	TP1	3
<i>Total Credits:</i>		16

Second Year – Fall Semester		
Course	Category	Credit
MTH 306 Introduction to Differential Equations	M	4

Second Year – Spring Semester		
Course	Category	Credit
MTH 241 College Calculus 3	M	4

EE 202 Circuit Analysis	M	3
PHY 108 General Physics II	M	4
PHY 158 General Physics II Lab	M	1
EAS 360	M/CL2	3
<i>Total Credits:</i>		15

EE 205 Signals and Systems	M	4
PHY 207 General Physics III	M	4
PHY 257 General Physics III Lab	M	1
EAS 240 Programming for Engineers	M	3
<i>Total Credits:</i>		16

Third Year – Fall Semester		
Course	Category	Credit
EE 310 Electronic Devices and Circuits I	M	3
EE 352 Introduction to Electronics Lab	M	3
EE 324 Applied Electromagnetics	M	4
EE 305 Applied Probability	M	4
MTH 309 Introductory Linear Algebra or EAS230 Engineering Computations	M	3
<i>Total Credits:</i>		17

Third Year – Spring Semester		
Course	Category	Credit
EE 311 Electronic Devices and Circuits II	M	3
EE 353 Electronic Circuits Lab	M	3
EE 379 Embedded Sys & Appl	M	3
EE 383 Communications Systems I	M/TP3	3
EE 336 Fundamentals of Energy Systems	M/GP3	3
<i>Total Credits:</i>		15

Fourth Year – Fall Semester		
Course	Category	Credit
EE 408 Senior Seminar	M	1
EE 478 HDL Based Digital Design with Programmable Logic	M	3
Technical Elective	M	3
EE Technical Elective	M	3
Global Pathway	GP2	3
Thematic Pathway	TP2/DL	3
<i>Total Credits:</i>		16

Fourth Year – Spring Semester		
Course	Category	Credit
EE 494 Senior Capstone Design Project	M	3
Technical Elective	M	3
Technical Elective	M	3
EE Technical Elective	M	3
UBC 399	CAP	1
<i>Total Credits:</i>		13

Total Credits Required for Degree:	126
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Category Legend:

M = Course Required for Major (including pre-requisites needed for admission to the major)

E = Elective (course not required for major or UB Curriculum)

The following are all components of the UB Curriculum (UBC) For more information on the UBC and course options visit: <http://undergrad-catalog.buffalo.edu/policies/degree/ubcurriculum.html>

- UBS = UB Seminar
- CL1/CL 2 = Communication Literacy (2 required)
- CAP = UB Capstone
- DL = Diversity Learning
- GP1/GP2/GP3 = Global Pathway Course (3 required)
- MQR = Math and Quantitative Reasoning
- SLI1/SLI2 = Scientific Literacy and Inquiry (2 required)
- TP1/TP2/TP3 = Thematic Pathway Course (3 required)

Note: Some classes may count toward both a major (M) and UB Curriculum (UBC) requirement. Courses that count towards more than one requirement are indicated by a "/" (slash) in the category column indicating which categories the course will satisfy.