Curricular Plan
Combined Bachelor of Science in Electrical Engineering/Masters of Business Administration

The plan below provides a roadmap for completing this academic program and the UB Curriculum within x 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 per 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	MQR	4
CHE 107 General Chemistry for Engineers	SLI 1	4
EAS 199 Engineering Principles, or Equivalent	UBS	3
UB Gen Ed	GP1	3
UB Gen Ed	CL1	4
	Total Credits:	18

First Year – Spring Semester		
Course	*Category*	*Credit*
MTH 142 College Calculus 2	MQR	4
EE 178 Digital Principles	M	4
PHY 107 General Physics I	SLI 1	4
EAS 202 Engineering Impact on Society	M	1
UB Gen Ed	TP1	3
	Total Credits:	16

Second Year – Fall Semester		
Course	*Category*	*Credit*
MTH 306 Introduction to Differential Equations	M	4
EE 202 Circuit Analysis	M	3
PHY 108 General Physics II	SLI 2	4
PHY 158 General Physics II Lab	SLI 2	1
EAS 360 STEM Communications, or Equivalent	CL2	3
	Total Credits:	15

Second Year – Spring Semester		
Course	*Category*	*Credit*
MTH 241 College Calculus 3		4
EE 205 Signals and Systems		4
PHY 207 General Physics III		4
PHY 257 General Physics III Lab		1
EAS 240 Programming for Engineers		3
	Total Credits:	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
	Total Credits:	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	GP3	3
EE 383 Communications Systems I	TP 3	3
EE 336 Fundamentals of Energy Systems	M	3
MGX 648 MBA Internship (Summer)	M	3
	Total Credits:	18

Fourth Year – Fall Semester		
Course	*Category*	*Credit*
EE 478 HDL Based Digital Design with Programmable Logic	M	3
MGB 610 Organizational Behavior	M	2
MGQ 608 Statistical Analysis	M	2
MGA 603 Financial Accounting	M	2
MGO 695 Intro to Entrepreneurship	M	1.5
MGF 611 Financial Analysis	M	2
MGB 611 Team Skills	M	1
MGQ 609 Analytics	M	1
MGG 635 Management Communications	M	1.5
MGM 615 Marketing	M	2
	Total Credits:	18

Fourth Year – Spring Semester		
Course	*Category*	*Credit*
MGO 640 Business Strategy	M	2
MGO 620 Operations Management	M	2
MGS 605 IT for Managers	M	2
MGE 604 Business Economics	M	2
MGA 605 Acctg for Mgt Decision Making	M	2
UB Gen Ed, Global Cluster 2	GP2	3
UB Gen Ed, Thematic Cluster 2	TP2	3
UB Gen Ed, Integrative Capstone	CAP	1
	Total Credits:	17

Fifth Year – Fall Semester		
Course	*Category*	*Credit*
MBA Elective	M	3
MBA Elective	M	3
MBA Elective	M	3
EE 408 Senior Seminar	M	1
EE Technical Elective	M	3
	Total Credits:	13

Fifth Year – Spring Semester		
Course	*Category*	*Credit*
MGO 642 Integration of Business Functions		1
MGO 644 Business Practice		1
MBA Elective		3
MBA Elective		3
MBA Elective		3
EE 494 Senior Capstone Design Project		3
EE Technical Elective		3
	Total Credits:	17

Total Credits Required for Degree:	165

Category Legend:
CAP - UB Capstone
CL1/CL 2 - Communication Literacy 1/2
DL - Diversity Learning
E - Elective (not required for major or UB Curriculum)
GP1/GP2/GP3 - Global Pathway Course 1/2/3
M - Major requirement (including pre-requisites needed for admission to the major)
MQR - Math and Quantitative Reasoning
SLI1/SLI2 - Scientific Literacy and Inquiry 1/2
TP1/TP2/TP3 - Thematic Pathway Course 1/2/3
UBS - UB Seminar