

DEPARTMENT OF ELECTRICAL ENGINEERING  
and  
SCHOOL OF MANAGEMENT  
University at Buffalo

**JOINT FIVE-YEAR PROGRAM  
BS (Electrical Engineering)/MBA**

The Department of Electrical Engineering and the School of Management offer a five-year program leading to a joint Bachelors degree in electrical engineering and Masters degree in business administration. This program reduces by one year the usual pattern of a four-year undergraduate degree and a two-year MBA program. At completion, you will be awarded a BS diploma and an MBA diploma, with a transcript notation that these degrees were awarded as part of a combined degree program.

Students wishing to pursue the dual program should take the GMAT and apply to the MBA program early during their junior year. Admissions will be limited to students who can satisfy the entrance requirements for the MBA program.

Each candidate must meet all the degree requirements of each program, except for the reduction in the total credit hours required for the usual pattern of a four-year BS (electrical engineering) degree and a two-year MBA degree.

Applications for the joint five-year program can be found on the web at [www.mgt.buffalo.edu](http://www.mgt.buffalo.edu). For additional information or to set up an appointment, please contact:

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# BS/MBA ELECTRICAL ENGINEERING

Course Guide for students starting MBA classes Fall 2006 or later

## First Year

Fall Semester	Credit Hrs	Spring Semester	Credit Hrs.
MTH 141 Calculus I	4	MTH 142 Calculus II (Pr. MTH 141)	4
CHE 107 Chemistry I ^^	4	PHY 107 Physics I	4
EAS 140 Engineering Solutions	3	EE 101 Basic Electronics or Technical Elective ***	3-4
ENG 101 or 102 Writing **	3	ENG 201 Adv. Writing or Humanities **	3
General Education %	3	General Education %	3
Total Credits	17	Total Credits	17-18
Library Skills *			

## Second Year

MTH 306 Differ. Equations (Pr. MTH 142)	4	MTH 241 Calculus III (Pr. MTH 142)	4
PHY 108 Physics II (Pr. PHY 107)	4	PHY 207 Physics III	4
PHY 158 Physics II Lab	1	PHY 257 Physics III lab	1
EAS 207 Statics (Pr. PHY 107, MTH 142)	3	EE 203 Circuit Analysis II (Pr. EE 202)	4
EE 202 Circuit Analysis I (Pr. MTH 142)	4	EAS 230 Higher Level Language	3
Total Credits	16	Total Credits	19
		General Education %	
		3	

## Third Year

EE 310 Electrical Dev. & Circs.	3	EE 311 Electronic Circ.	3
EE 352 Phys. Elect. Lab	3	EE 353 Electronic Circ. Lab	3
EE 378 Digital Principles	3	CSE 379 Microproc./Microcomp.	3
EE Requirement I ^	4	CSE 380 Microproc. Lab	3
General Education %	3	EE Requirement II ^	4
Total Credits	16	Total Credits	16
MBA applications due by May 1 of third year			

## Fourth Year

MGA 604 Financial Analysis & Reporting	3	MGO 641 Strategic Management	3
MGB 601 Behav & Organiz Concepts	3	MGM 625 Marketing Management	3
MGT 601 Ethics & Corporate Finance	1.5	MGO 630 Operations & Service Mgt	3
MGF 631 Financial Management	1.5	MGA 609 Management Accounting	3
EE 408 Senior Seminar	1	MGF 631 Financial Management	1.5
EE Requirement III ^	4	MGG 635 Business Communications	1.5
Technical Elective with Design ***	3-4	EE/CSE Technical Elective ***	3
Total Credits	17-18	Total Credits	18

## Fifth Year

MBA Practicum @	3	MBA Elective @	3
MGE 601 Economics for Managers	3	MBA Elective @	3
MBA Elective @	3	MBA Elective @	3
MBA Elective @	3	MBA Elective @	3
EE/CSE Technical Elective ***	3	General Education	3
Total Credits	15	Total Credits	15

- Pr. Indicates a prerequisite for the course. Not all prerequisites are noted.
- \* Library Skills Test is required for all students entering UB in Fall of 1997 and thereafter.  
See the Library Skills website at <http://ublib.buffalo.edu/libraries/units/ugl> or go to room 107 in UGL.
- \*\* ENG 101 and ENG 201 or ENG 102 and Humanities (Writing Skills Requirement) as determined by placement: SAT/ACT, AP, TOEFL, or transfer credit. SAT verbal 400-570 = ENG 101 and then 201, 580-720 = ENG 102 and Humanities (%), 730-800 = Exempt from Writing Skills but need Humanities (%).
- ^ EE Requirements I, II and III are fulfilled by taking EAS 305, EE 303, and EE 324 in any order.
- ^^ CHE 101-102 OR CHE 105-106 may be substituted for CHE 107-108.
- \*\*\* Engineering Technical Electives (minimum 12 credits). A total of 4 technical electives is required. At least three must be upper division technical electives. No more than one may be a lower division technical elective such as EE 101. At least one of the upper division technical electives must be a course with significant design content from an approved list. In addition to the one technical elective with significant design content at least two other upper division technical electives must be EE courses or CSE courses or MAE 340 Systems Analysis, MAE 443 Continuous Control Systems, or MAE 444 Digital Control Systems. The free elective, two unrestricted TE's, and additional TE with significant design required in the standard BS degree are satisfied by the MBA core when the requirements for the combined degree are fulfilled.
- % World Civilizations I and II, American Pluralism or approved cognate, Social & Behavioral Science, Arts, and Humanities (if not required to complete ENG 101-201 sequence).
- @ Contact the School of Management for advisement on MBA electives.