

DEPARTMENT OF MECHANICAL AND AEROSPACE ENGINEERING
and
SCHOOL OF MANAGEMENT
University at Buffalo

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

The Department of Mechanical and Aerospace Engineering and the School of Management offer a five-year program leading to a joint Bachelors degree in aerospace 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 (aerospace 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. For additional information or to set up an appointment, please contact:

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Assistant Director of Admissions
School of Management
203 Alfiero Center
(716)645-7853
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BS/MBA AEROSPACE 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	MAE 177 Intro to Eng Drawing/CAD	2
ENG 101 or 102 Writing **	3	EAS 230 Higher Level Languages (Pr. EAS 140)	3
General Education %	3	ENG 201 Adv. Writing or Humanities **	3
Total Credits		Total Credits	
17		16	

Library Skills *

Second Year

MTH 241 Calculus III (Pr. MTH 142)	4	MTH 306 Differ. Equations (Pr. MTH 142)	4
PHY 108 Physics II (Pr. PHY 107)	4	EAS 208 Dynamics (Pr. EAS 207, MTH 241)	3
PHY 158 Physics II Lab	1	EAS 209 Mech of Solids (Pr. EAS 207, MTH 241)	3
EAS 207 Statics (Pr. PHY 107, MTH 142)	3	EE 200 EE Concepts (Pr. PHY 108)	3
MAE 204 Thermodynamics (Pr. MTH 142)	3	Science Elective ^^	4-5
MAE 277 Intro to MAE Practice	3	Total Credits	
Total Credits		17-18	
18			

Third Year

MAE 335 Fluid Mechanics	3	MAE 336 Heat Transfer	3
CIE 308 Engineering Stats (Pr. MTH 241)	3	MAE 385 Materials Lab	1
MAE 334 Instru. & Computers	3	MAE 422 Gas Dynamics	3
MAE 381 Engrg. Materials I	3	MAE 340 Systems Analysis	4
MAE 377 Product Design in a CAD Envir.	3	MAE 376 Applied Math for MAE's	3
Total Credits		General Education %	3
15		Total Credits	
		17	

MBA applications are due by May 1 of third year

Summer

2 General Education Classes %

Fourth Year

MGA 604 Financial Analysis & Reporting	3	MGM 625 Marketing Management	3
MGB 601 Behav & Organiz Concepts	3	MGO 630 Operations & Service Mgt	3
MGT 601 Ethics & Corporate Finance	1.5	MGO 641 Strategic Management	3
MGF 631 Financial Management	1.5	MGA 609 Management Accounting	3
MAE 423 Introduction to Propulsion	3	MGF 631 Financial Management	1.5
MAE 424 Aerodynamics	4	MGG 635 Business Communications	1.5
MAE 436 Flight Dynamics	3	General Education %	3
MAE 338 Fluid/Heat Transfer Lab	1	Total Credits	
Total Credits		18	
20			

Summer Option

MBA Practicum (May be taken during a regular semester but not recommended due to course loads.)

Fifth Year

MGE 601 Economics for Managers	3	MBA Elective @	3
MBA Elective @	3	MBA Elective @	3
MBA Elective @	3	MBA Elective @	3
MBA Elective @	3	MAE 416 Aero Structures	3
MAE 415 Analysis of Structures I	3	MAE 434 Aircraft Design	3
MAE 451 Design Process & Methods	3	MAE 425 Spacecraft Dynamics	3
Total Credits		Total Credits	
18		18	

- 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 (%).
 - ^^ CHE 101-102 OR CHE 105-106 may be substituted for CHE 107-108.
 - ^^ PHY 207 (Physics III) w/lab (PHY 257), CHE 108 w/lab, or an approved biology course w/lab.
 - % 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.
Please note: MGO 630 satisfies the MAE technical elective normally required for the BS in aerospace engineering.
CIE 308 satisfies the applied math elective normally required for the BS in aerospace engineering as well as a statistics requirement in the MBA.