

Mechanical Engineering

Elective Focus Area (EFA)

Management

Mechanical Engineers are often faced with managerial tasks, project management, and financial assessments as they relate to project budgets, cost calculations, and optimizations. The Management EFA prepares students for a career in management for engineering. By following this EFA, students will be able to obtain a Minor in Business Administration. Information on the Business Administration Minor can be found at <http://www.biz.uiowa.edu/upo/programs/minor.html>. The following table explains the requirements for a Business Minor, and how they can be satisfied by undergraduate students in the Mechanical Engineering (ME) program. It can be seen that three courses for the Business Minor can be satisfied by courses already required in the ME curriculum. Another two should be taken as part of the General Education Component (GEC), and six courses should be taken as part of the 21 semester hours of classes reserved for the EFA.

Required Courses for Business Minor	SH	Equivalent Courses for ME Majors	SH
22M:017 Calculus & Matrix Algebra for Business	4	22M:031 Engineering Mathematics I	4
22S:008 Statistics for Business	3-4	22S:039 Probab. & Statistics for Engrs.	3
6E:001 Principles of Microeconomics	4	<i>Take as part of GEC</i>	4
6E:002 Principles of Macroeconomics	4		4
6A:001 Introduction to Financial Accounting	3	<i>Take as part of EFA</i>	3
6A:002 Managerial Accounting	3	<i>Take as part of EFA</i>	3
6J:047 Introduction to Law	3	<i>Take as part of EFA</i>	3
6J:048 Introduction to Management	3	<i>Take as part of EFA</i>	3
6K:070 Computer Analysis	3	59:006 Engineering Problem Solving II	3
6M:100 Introduction to Marketing	3	<i>Take as part of EFA</i>	3
6F:100 Introd. Financial Management (or 56:054)	3	<i>Take as part of EFA</i>	3
Total hours required:	36-7		36

An EFA schedule accommodating the Business Minor could thus be designed as shown in the following table. **This schedule assumes that 6E:001 and 6E:002 are taken as part of the GEC.** A Math/Science Elective is required for any EFA and suitable courses are listed in the last table.

Semester	Course	Session	SH	Pre-/Co-Requisites
4 (Spring)	6A:001 Introduction to Financial Accounting	All	3	Sophomore standing
5 (Fall)	6A:002 Managerial Accounting	All	3	6A:001, 6E:001, 22M:031
6 (Spring)	Math/Science Elective		3	
7 (Fall)	6J:047 Introduction to Law	All	3	Sophomore standing
7 (Fall)	6J:048 Introduction to Management	All	3	Sophomore standing
8 (Spring)	6M:100 Introduction to Marketing	All	3	6E:001, Junior standing
8 (Spring)	6F:100 Introductory Financial Management or 56:054 Engineering Economy	All S	3 3	6E:1&2, 6A:1&2, Jun. st. /22S:039

Math/Science Elective Courses (3 s.h. min.)	SH	Pre-/Co-Requisites
29:083 Modern Physics	3	029:082
4:012 Principles of Chemistry II	4	4:011
22M:072 Elementary Numerical Analysis	3	22M:032, 59:006
2:010 Principles of Biology I	4	4:011

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