

MAJOR IN INTEGRATED BUSINESS AND ENGINEERING

Curricula

	Courses	Credits
Magis Core	15	49
Business Core	12	36
Engineering Courses	8	25
Elective Courses	5	15
Total	40	125

Magis Core Curriculum for Integrated Business and Engineering Major

15 courses, 49 credits

Beginning with the Class of 2023, all undergraduate students will be required to complete the newly designed *Magis* Core Curriculum. For students entering Fairfield prior to fall 2019, please reference the Catalog Archive. Students pursuing the integrated business and engineering major will fulfill certain areas of the *Magis* Core by taking specified courses as outlined below. Please refer to the Curricula section of this catalog for full requirements and a detailed explanation of the *Magis* Core.

Tier I: Orientation

Code	Title	Credits
Mathematics		
MATH 1141	Calculus I for Chemistry, Engineering, and Physics Majors	4
MATH 1142	Calculus II for Chemistry, Engineering, and Physics Majors	4
Modern or Classical Language		
	Select one language course based on placement	3

Tier II: Exploration

Code	Title	Credits
Behavioral and Social Sciences		
ECON 1011	Introduction to Microeconomics	3
ECON 1012	Introduction to Macroeconomics	3
Natural Science		
PHYS 1171 & 1171L	General Physics I and General Physics I Lab	4
PHYS 1172 & 1172L	General Physics II and General Physics II Lab	4

Business Core Requirements

12 courses; 36 credits

Code	Title	Credits
ACCT 1011	Introduction to Financial Accounting ¹	3
ACCT 1012	Introduction to Management Accounting ¹	3
AETH 2291	Business Ethics	3
BUSN 1101	Messaging and Persuasion: Effective Business Communication ¹	3
BUSN 3211	Legal Environment of Business	3
DATA 1101	Business Analytics	3

FNCE 2101	Introduction to Finance ²	3
INTL 2101	Introduction to International Business	3
MATH 2217	Statistics I ²	3
MGMT 2101	Introduction to Management ²	3
MGMT 4300	Business Strategies in the Global Environment ³	3
MKTG 1101	Principles of Marketing ²	3
Total Credits		36

¹ These courses should be primarily taken in the first year.

² These courses should be primarily taken in the second year.

³ This course may not be taken until the senior year.

Engineering Course Requirements

8 courses; 25 credits

Code	Title	Credits
ENGR 1031	Fundamentals of Engineering ¹	3
CPSC 1101	Introduction to Computing ¹	3
ENGR 2145	Mathematical Analysis	3
ENGR 4360	Engineering Project Management	3
ENGR 4310	Industrial Quality Control	3
ELEG 2213 & 2213L	Introduction to Electric Circuits and Electric Circuits Lab	4
or MEEG 2201 & MEEG 2206L	Engineering Statics and Mechanics Lab	
Engineering Elective		3
Engineering Elective		3
Total Credits		25

Plan of Study

Course	Title	Credits
Freshman		
Fall		
ACCT 1011	Introduction to Financial Accounting	3
ECON 1011	Introduction to Microeconomics	3
MATH 1141	Calculus I for Chemistry, Engineering, and Physics Majors	4
ENGR 1031	Fundamentals of Engineering	3
PHYS 1171 & 1171L	General Physics I and General Physics I Lab	4
Credits		17
Spring		
ACCT 1012	Introduction to Management Accounting	3
ECON 1012	Introduction to Macroeconomics	3
MATH 1142	Calculus II for Chemistry, Engineering, and Physics Majors	4
CPSC 1101	Introduction to Computing	3
PHYS 1172 & 1172L	General Physics II and General Physics II Lab	4
Credits		17

Sophomore**Fall**

MATH 2217	Statistics I	3
FNCE 2101	Introduction to Finance	3
MKTG 1101	Principles of Marketing (History course)	3
	History course	3
ENGL 1001	Introduction to Rhetoric and Composition	3
Credits		15

Spring

DATA 1101	Business Analytics	3
MGMT 2101	Introduction to Management	3
INTL 2101	Introduction to International Business	3
BUSN 1101	Messaging and Persuasion: Effective Business Communication	3
	Modern Language course	3
Credits		15

Junior**Fall**

ENGR 2145	Mathematical Analysis	3
	Philosophy course	3
ELEG 2213 & 2213L	Introduction to Electric Circuits or Engineering Statics <i>and</i> Mechanics	4
	or MEEG 2201 Lab	
	<i>and</i> MEEG 2206L	
	Literature course	3
	Elective course	3
Credits		16

Spring

ENGR 4310	Industrial Quality Control	3
BUSN 3211	Legal Environment of Business	3
	Religious studies course	3
	History or Philosophy or Religious Studies course	3
	Elective course	3
Credits		15

Senior**Fall**

MGMT 4300	Business Strategies in the Global Environment	3
	Visual & Performing Arts course	3
ENGR 4360	Engineering Project Management	3
	Engineering Elective	3
	Elective	3
Credits		15

Spring

	Engineering elective	3
AETH 2291	Business Ethics	3
	History or Philosophy or Religious Studies course	3
	Elective course	3
	Elective course	3
Credits		15

Total Credits		125
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