

MASTER OF BUSINESS ADMINISTRATION (STEM)

Bentley's STEM MBA program integrates strong technology knowledge and skills focus with competencies in ethical, globally oriented business leadership. STEM-focused electives in Accounting Analytics, Business Analytics, Financial Analytics, and Information Systems and Technology, together with the core courses, comprise four distinctive majors. They all provide students with an in-depth understanding of how integrated expertise on data, IT applications, and a domain of business forms a strong foundation for sustainable success.

Course	Title	Credits
Pre-program Foundation Requirements		
GR 521	Managerial Statistics	3
GR 522	Economic Environment of the Firm	3
GR 523	Marketing Management	3
GR 524	Accounting for Decision-Making	3
GR 525	Financial Statement Analysis for Decision-Making	3
Total Credits:		15

Note: Students who complete all other program requirements in fewer than 36 credits, after applicable waivers for foundation courses, are required to complete designated electives to complete the program's minimum of 36 credits.

Course	Title	Credits
Program Requirements		
CS 605	Data Management and SQL for Analytics	3
GR 601	Strategic Information Technology Alignment	3
GR 602	Business Process Management	3
GR 603	Leading Responsibly	3
GR 604	Global Strategy	3
GR 645	Law, Ethics and Social Responsibility	3
Major Courses (Students must select a Major from the list below):		12 to 15
Accounting Analytics (p. 1)		
Business Analytics (p. 1)		
Financial Analytics (p. 1)		
Information Systems and Technology (p. 1)		
Credits from foundation courses or additional electives		3 to 6
Total Credits		36

Accounting Analytics

Course	Title	Credits
Choose any 4 courses from the following		12
AC 611	Financial Reporting and Analysis	
AC 612	Advanced Topics in Financial Reporting	
AC 621	Managerial Accounting	
AC 701	Internship in Accounting Practice ¹	
AC 730	Business Processes and Controls Assessment	
AC 731	Financial Information Systems	

AC 741	Financial Statement Audit	
AC 742	Information Technology Audit	
AC 744	Internal Audit	
AC 750	Federal Income Taxation	
AC 754	Accounting for Income Taxes	
AC 770	Data Analytics for Accountants	
AC 777	Accounting Analytics in Practice	
AC 793	Professional Judgment, Ethics and Decision Making	
Total Credits		12

¹ AC 701 must be approved in advance by Accounting Analytics major advisor and internship advisor to ensure full STEM coverage.

Business Analytics

Course	Title	Credits
MA 610	Optimization and Simulation for Business Decisions	3
MA 705	Data Science	3
MA 707	Introduction to Machine Learning	3
ST 625	Quantitative Analysis for Business	3
ST 635	Intermediate Statistical Modeling for Business	3
Additional elective if needed		3
MA 611	Time Series Analysis	
MA 706	Design of Experiments for Business	
CS 753	Business Intelligence Methods and Technologies	
ST 701	Internship in Business Data Analysis ¹	
Total Credits		15

¹ ST 701 must be approved in advance by Business Analytics major advisor and internship advisor to ensure full STEM coverage.

Financial Analytics

Course	Title	Credits
Foundation Course		
GR 526	Calculus	3
Required Courses		
FI 623	Investments	3
FI 650	Quantitative Investment Management	3
FI 774	Computational Finance	3
CS 655	Managing with Analytics	3
Additional electives if needed		0 to 6
FI 631	Financial Modeling	
FI 645	Derivatives	
Total Credits		12

Information Systems and Technology

Course	Title	Credits
Select four of the following		12
CS 602	Data-Driven Development with Python	

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CS 607	Cybersecurity
CS 610	Enterprise Architecture
CS 650	Data Analytics Architectures with Big Data
CS 655	Managing with Analytics
CS 725	Information Security, Controls and Ethics
CS 733	Artificial Intelligence Techniques and Applications
CS 741	Enterprise Systems Planning and Configuration
CS 753	Business Intelligence Methods and Technologies
GBE 790 or CS 881	Global Business Experience ¹ Computer Information Systems Internship
Total Credits	12

¹ GBE 790 and CS 881 must be approved in advance by Information Systems Technology (IST) major advisor and internship advisor to ensure full STEM coverage.