

# Master of Science in Business Analytics

This worksheet is intended to help you plan your course enrollments to be sure that they align with the Master of Science in Business Analytics curriculum. Use this worksheet along with Degree Works to track your progress toward program completion. **Please note in order to graduate students must:**

- Complete all degree requirements within five years
- Earn a minimum of 2.7 cumulative GPA

### Advising Guidance:

- Only foundation courses may be waived.
- Students must complete all required prerequisites before taking a course, including any prerequisite sequences. For example: GR 521 -> ST 625 -> ST 635 -> MA 710
- MA courses are only offered in the fall and spring semesters. Refer to the [Graduate Catalogue](#) for guidance about when classes are typically offered.

Course	Title	Prerequisite
<b>Total</b>		30 - 33 credits · 10 - 11 courses
<b>Required Courses</b>		3 credits · 1 course
GR 521	Managerial Statistics	None

<b>Analytics Required Courses *</b>		21 credits · 7 courses
CS 605	Data Management & SQL for Analytics	None
CS 655	Managing with Analytics	None
MA 610	Optimization & Simulation for Business Decisions	GR 521
MA 611	Time Series Analysis	ST 625
MA 710	Data Mining	ST 635
ST 625	Quantitative Analysis for Business	GR 521
ST 635	Intermediate Statistical Modeling for Business	ST 625

\* Students who have completed equivalent coursework to the Accounting Core Foundation may substitute electives for these courses. Course equivalency is evaluated during the admission process and students are notified with their admission letter.

<b>Elective Courses *</b>		9 credits · 3 courses
ST 701	Internship in Business Data Analysis	ST 625
MA 795	Business Analytics Project Course	ST 635, CS 605 & MA 705
MA 799	Experimental Course in MA	Varies
<b>Data Science</b>		
CS 602	Data-Driven Development with Python	None

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CS 603	Algorithmic Thinking with Java	None
CS 612	Cloud-Based Enterprise Applications	CS 602 & CS 605
CS 650	Data Analytics Architectures with Big Data	CS 602 & CS 605
CS 753	Business Intelligence Methods & Technologies	CS 605
MA 705	Data Science	Pre or Co-Req: GR 521
MA 706	Design of Experiments for Business	ST 625
MA 707	Introduction to Machine Learning	Pre or Co-Req: ST 635 Pre-Req: MA 705 or CS 602
<b>Finance</b>		
EC 611	The Macroeconomics of Financial Markets	GR 522 & (GR 525 or FI 625)
FI 623	Investments	None
FI 635	Fixed Income Valuation & Strategies	Pre or Co-Req: FI 623
FI 640	Equity Valuation	FI 623
FI 645	Derivatives	Pre or Co-Req: FI 623
<b>Information Management</b>		
CS 725	Information Security, Control & Ethics	None
GR 602	Business Process Management	CS Department Chair Permission
HF 730	Visualizing Information	HFID Program Director Permission
<b>Management</b>		
MG 632	Leading Effective Work Teams	None
MG 635	Negotiating	None
MG 645	Leading Change	None
<b>Marketing</b>		
MK 711	Marketing Research & Analysis	Pre or Co-Req: GR 521 & GR 523
MK 725	E-Marketing	GR 523
MK 726	Customer Data Analysis & Relationship Marketing	Pre- or Co- Req: GR 523
MK 758	Enhancing Creativity	None

\* Choose 3 courses from the list of electives below. While mixing electives between clusters is permitted, choosing courses entirely from within one elective cluster is recommended to develop area expertise. Graduate courses not listed may not be used as electives without the approval of the program director.

# Master of Science in Business Analytics

Name:

Matriculation Date:

Bentley ID:

Anticipated Completion Date:

Course Number & Title	Cr.	Summer	Fall	Spring	Note
<b>Program Foundation Courses</b>					3 credits · 1 courses
1. GR 521 Managerial Statistics	3				
<b>Required Analytics Courses</b>					21 credits · 7 courses
1. CS 605 Data Management & SQL for Analytics	3				
2. CS 655 Managing with Analytics	3				
3. MA 610 Optimization & Simulation for Business Decisions	3				
4. MA 611 Time Series Analysis	3				
5. MA 710 Data Mining	3				
6. ST 625 Quantitative Analysis for Business	3				
7. ST 635 Intermediate Statistical Modeling for Business	3				
<b>Electives Courses</b>					9 credits · 3 courses
1.	3				
2.	3				
3.	3				
<b>Total Credits</b>					

**Note:**