BACHELOR OF SCIENCE (BS) DATA ANALYTICS: BUSINESS ANALYTICS SPECIALIZATION

Major Prerequisites (19 hours)

These courses may overlap with the General Education curriculum where appropriate. Courses in **BOLD** should be completed before submitting an application to the Data Analytics major. Online options may be available for courses marked ●. Please refer to the ASC General Education course list for GE online courses.

Department	Course	Hours	Term Offered
Math	**Math 1151** ● (1161 or 1181H) – Calculus I	5	AU/SP/SU
	Math 1152 ● (1172, 2162 or 2182H) – Calculus II	5	AU/SP/SU
Computer Science & Engineering	***CSE 1223** – Computer Programming in Java	3	AU/SP/SU
Economics	ECON 2001.xx ● – Principles of Microeconomics	3	AU/SP/SU
	ECON 2002.xx ● – Principles of Macroeconomics	3	AU/SP/SU

*CSE 1222 or CSE placement level A can also fulfill this prerequisite; however, 1223 is *strongly* preferred.

Core Requirements (51 hours)

The Data Analytics Core courses follow a strict pre-requisite structure. Some courses are only offered once per year. Failure to successfully enroll in and complete these courses will delay graduation.

Department	Course	Hours	Terms Offered
Math	Math 2568 ● – Linear Algebra	3	AU/SP/SU
Industrial & Systems Engineering	ISE 3230 – Systems Modeling and Optimization	3	AU
Computer Science & Engineering	**CSE 2221** – Software I: Software Components	4	AU/SP/SU
	CSE 2231 – Software II: Development & Design	4	AU/SP/SU
	CSE 2321 – Foundations I: Discrete Structures	3	AU/SP/SU
	CSE 2421 or 3430 – Systems I: Computer Systems	4	AU/SP/SU
	CSE 3241 – Databases I: Computer Architecture	3	AU/SP/SU
	CSE 3244 or 5242 – Adv. DB & Cloud Computing	3	AU/SP
	CSE 5243 – Data Mining	3	AU/SP
	CSE 5544 or ISE 5760 – Data Visualization	3	AU/SP
Statistics	STAT 3201 – Probability for Data Analytics	3	AU/SP
	STAT 3202 – Statistical Inference for Data Analytics	4	AU/SP
	STAT 3301 – Statistical Modeling for Discovery I	3	AU
	STAT 3302 – Statistical Modeling for Discovery II	3	SP
	STAT 4620 – Statistical Learning	2	AU
	STAT 3303 – Statistical Decision Making	3	SP

Business Analytics Specialization (15 hours)

BUSADM 3630.05 – Business Analytics Immersion Course **(Taken AU of Junior year)**	3
BUSADM 3632.05 – Business Analytics Immersion Project Experience **(Taken SP of Junior year)**	3
Business electives – Choose 9 hours from back of sheet	9

GENERAL EDUCATION

Please visit http://artsandsciences.osu.edu/academics/current-students/advising/ge for a list of the General Education curriculum requirements.

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Students in the Business Analytics Track must take an **additional 9 credit hours** of coursework from the electives listed below. Courses are grouped to show possible focus areas, but students may select any combination of courses to meet the 9 credit hour requirement. Some courses require extensive pre-requisites for enrollment. **The prerequisite structure for the Data Analytics Major is strictly enforced.**

ELECTIVES: FINANCE FOCUS			
COURSE	TITLE	HOURS	PREREQUISITES
BUSFIN 3120	Foundations of Finance	3	ACCT 2000 & ECON 2001 & MATH 1130 or higher & CSE 1100 or higher; not open to students with credit for 3220
BUSFIN 3220	Business Finance	3	ECON 2001 ● & 2002 ● & ACCT 2300 (prereq or concur); not open to students with credit for 3120
BUSFIN 3222	Foundations of Investments	3	BUSFIN 3120 or 3220 & ACCT 2000
BUSFIN 3250	International Finance	3	BUSFIN 3120 or 3220 & ACCT 2000
BUSFIN 4201	Financial Data	1.5	BUSFIN 3220 & ACCT 2300 & STAT 3201 & 3202

ELECTIVES: ACCOUNTING FOCUS			
COURSE	TITLE	HOURS	PREREQUISITES
ACCTMIS 2000	Foundations of Accounting	3	None
ACCTMIS 3600	Intro to Accounting Information Systems	3	ACCT 3200 (Which requires ECON 2001 ● & ACCT 2300 & STAT 3201 & 3202)
ACCTMIS 4210	Financial Accounting	3	ACCT 3201 (Which requires ACCT 3200)
ACCTMIS 4310	Management Accounting	3	ACCT 3300 (Which requires ECON 2001 ● & ACCT 2300 & STAT 3201 & 3202)
ACCTMIS 4650	Decision Support and Expert Systems	3	CSE 3232 & STAT 3201 & 3202
ACCTMIS 5000	Accounting and Cost Analysis	3	ISE 2000 & 2040

ELECTIVES: CUSTOMER INSIGHT FOCUS			
COURSE	TITLE	HOURS	PREREQUISITES
BUSML 3150	Foundations of Marketing	3	ECON 2001 ●; not open to students with credit for 3250
BUSML 3250	Principles of Marketing	3	ECON 2001 ●; not open to students with credit for 3150
BUSML 4202	Marketing Research	3	BUSML 3250 & ACCT 2300 & STAT 3201 & 3202
BUSML 4210	Advanced Market Research	1.5	BUSML 4201 & 4202
BUSML 4211	Market Analysis, Development, and Forecasting	1.5	BUSML 4201 & 4202
BUSML 4212	Customer Relationship Mgmt	1.5	BUSML 4201 & 4202

ELECTIVES: OPERATIONS MANAGEMENT AND LOGISTICS FOCUS			
COURSE	TITLE	HOURS	PREREQUISITES
BUSOBA 3230	Intro to Operations Mgmt	3	ECON 2001 ● & 2002 ● & STAT 1430 or higher
BUSOBA 4250	Six Sigma Principles	3	ACCT 2300 & BUSMGT 3230 & STAT 3201 & 3202
BUSOBA 4251	Six Sigma Projects	3	BUSMGT 4250
BUSML 3380	Logistics Management	1.5	ECON 2001 ● & 2002 ●
BUSML 4382	Logistics Analytics	3	BUSML 4380 & STAT 3201 & 3202
BUSML 4386	Logistics Tech and Application	1.5	BUSML 3380 & ACCT 2300 & STAT 3201 & 3202