BACHELOR OF SCIENCE (BS) DATA ANALYTICS: GENERIC SPECIALIZATION

Major Prerequisites (13-22 hours)

These courses may overlap with the General Education curriculum where appropriate. Courses in **BOLD** must be completed before submitting an application to the Data Analytics major program.

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 or ***CSE 1224** – Computer Programming in Python	3	AU/SP/SU
Specialization-specific prereqs	(See data-analytics.osu.edu for specific prereqs)	0-9	AU/SP/SU

*CSE 1222 or CSE placement level A can also fulfill this prerequisite; however, 1223 or 1224 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	Term 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/SU
	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

Data Analytics Specialization (14-19 hours)

Specialization electives (See data-analytics.osu.edu for specialization specific requirements)	10-15
CSE 59xx/STAT 4911 – Capstone in Data Analytics (Senior year)	4-6

GENERAL EDUCATION

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