

M.S. Biomedical Data Science Program Course Progression

Course Number	Course Name	Prerequisites	Credit Hours
MSDS510	Computer Programming Foundations for Data Science		3
MSDS515	Data Conscientiousness		3
MSBD520	Introduction to Biostatistics	Elementary Statistics	3
MSDS525	Data Management Foundations for Data Science	MSDS 510,515	3
MSBD530	Methods for Biomedical Data Science	MSDS 510, (MSDS 520 or MSBD 520)	3
MSBD535	Precision Medicine Informatics (Precision Medicine Informatics Track) OR	MSDS 525, (MSDS 530 or MSBD 530)	3
MSBD536	Population Health Informatics (Population Health Informatics Track)	MSDS 525	
MSBD540	Introduction to Artificial Intelligence in Healthcare	MSDS 510, (MSDS 520 or MSBD 520)	3
MSDS545	Introduction to Computational Software Engineering (Precision Medicine Informatics Track) OR	MSDS525	3
MSBD545	GIS for Health Informatics (Population Health Informatics Track)	MSDS525	
MSBD550	Applied Machine Learning for Biomedical Data Science	MSDS 530 or MSBD 530), (MSDS 535 or MSBD 540)	3
MSDS565	Predictive Modeling and Analytics (Precision Medicine Informatics Track) OR	MSDS 550 or MSBD 550	3
MSBD565	GIS Algorithms and Programming in Health (Population Health Informatics Track) OR	MSBD 545 or MSDS 550 or MSBD 550	
MSDS570	Visualization and Unstructured Data Analysis	MSDS 520 or MSBD 520	3
MSDS575	Ethics in Data Science	MSDS530 or MSBD530	3
MSDS580	Research Methods	MSDS565, 575	3
MSBD590	Capstone	MSDS580	3
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