Daniel Felix Ritchie School of Engineering & Computer Science
UNIVERSITY OF DENVER

MS in Applied Data Science and AI - Sample Course Sequence

All classes are 4 credit hours. The program is a total of 48 credit hours

There are many pathways through the MS in Applied Data Science and AI program. Your pathway will depend on prior learning you come in, whether you are taking the program as a full-time or part-time student as well as your start date.

Below is one sample path through the program as a full-time student. These schedules and courses offered may not be possible each year and offerings may vary. You will work with the Data Science and AI Student Success Manager to customize your plan.

- This does not account for credit for prior learning or certificate-based course subsitutions
- This is a sample schedule with the minium course offerings and additional course schedules may vary from term to term
- International Students will need to work with their Student Success Advisor as they follow different rules for online and in-person courses

Hybrid Roadmap

Example for a full-time student

Students can complete their degree requierements taking one class in-person and one online each quarter

	YEAR 1				YEAR 2		
	Autumn	**Winter**	**Spring**	**Summer**	**Autumn**	**Winter**	**Spring**
Autumn Start	Foundations in Python Programming COMP 4005	Python Software Development COMP 4006	Machine Learning COMP 4432	Database Organization and Management I COMP 4421	Deep Learning: Model Design & Application COMP 4531	Elective	
	Essential Math for Applied Data Science & AI COMP 4009	Intro to Probability & Statistics for Data Science & AI COMP 4441	Data Visualization COMP 4433	Elective	Elective	Elective	
	8 credit hours	8 credit hours	8 credit hours	8 credit hours	8 credit hours	8 credit hours	**48 Credit Hours**
Winter Start		Foundations in Python Programming COMP 4005	Python Software Development COMP 4006	Machine Learning COMP 4432	Deep Learning: Model Design & Application COMP 4531	Elective	Elective
		Essential Math for Applied Data Science & AI COMP 4009	Intro to Probability & Statistics for Data Science & AI COMP 4441	Data Visualization COMP 4433	Database Organization and Management I COMP 4421	Elective	Elective
	8 credit hours	8 credit hours	8 credit hours	8 credit hours	8 credit hours	8 credit hours	**48 Credit Hours**

Online Roadmap

Example for a full-time student

Students can complete their degree requirements taking only online courses each quarter

	YEAR 1				YEAR 2		
	Autumn	**Winter**	**Spring**	**Summer**	**Autumn**	**Winter**	**Spring**
Autumn Start	Foundations in Python Programming COMP 4005	Python Software Development COMP 4006	Elective	Machine Learning COMP 4432	Deep Learning: Model Design & Application COMP 4531	Elective	
	Essential Math for Applied Data Science & AI COMP 4009	Intro to Probability & Statistics for Data Science & AI COMP 4441	Data Visualization COMP 4433	Elective	Database Organization and Management I COMP 4421	Elective	
	8 credit hours	8 credit hours	8 credit hours	8 credit hours	8 credit hours	8 credit hours	**48 Credit Hours**
Winter Start		Foundations in Python Programming COMP 4005	Python Software Development COMP 4006	Machine Learning COMP 4432	Deep Learning: Model Design & Application COMP 4531	Elective	Data Visualization COMP 4433
		Essential Math for Applied Data Science & AI COMP 4009	Intro to Probability & Statistics for Data Science & AI COMP 4441	Elective	Database Organization and Management I COMP 4421	Elective	Elective
	8 credit hours	8 credit hours	8 credit hours	8 credit hours	8 credit hours	8 credit hours	**48 Credit Hours**

Example for a part-time student

For the first 4 quarters

	YEAR 1				
	Autumn	**Winter**	**Spring**	**Summer**	**Autumn**
Autumn Start	Essential Math for Applied Data Science & AI COMP 4009	Foundations in Python Programming COMP 4005	Python Software Development COMP 4006	Machine Learning COMP 4432	
	4 credit hours	4 credit hours	4 credit hours	4 credit hours	
Winter Start		Foundations in Python Programming COMP 4005	Python Software Development COMP 4006	Data Visualization COMP 4433	Essential Math for Applied Data Science & AI COMP 4009
	4 credit hours	4 credit hours	4 credit hours	4 credit hours	4 credit hours