

8-Semester *Suggested* Plan of Study + NWACC 2+2

Year 1 – Fall		Year 1 -- Spring	
ENGL 1013	Composition I	MAT 2204	Calculus I (MATH 2554) (NWACC)
DASC 1003 DASC 1003	Intro to Data Science (incl. CoE, WCOB, ARSC Persp.) Intro Data Science (NWACC)	ENGL 1033	Gen Ed, Technical Composition II
DASC 1104 PROG 1003 AND PROG 1001	Programming Languages for Data Science (Python, R) Intro to Programming Logic (NWACC) R for Data Science (NWACC)	GNED NNN3	Gen Ed, History or Government
GNED NNN3	Gen Ed Social Science	DASC 1223 DASC 1223	Role of Data Science in Today's World Role of Data Science in Today's World (NWACC)
GNED NNN3	Gen Ed Arts and Humanities	DASC 1204 PROG 1403	Intro to Object-Oriented Programming Programming Logic II (NWACC)
16 hours	Total	16 hours	Total

Year 2 – Fall		Year 2 -- Spring	
MAT 2304	Calculus II (MATH 2564) (NWACC)		
DASC 2213 DASC 2213	Data Visualization & Communication Data Visualization & Communication (NWACC)	GNED NNN4	Gen Ed, LAB Science Elective
DASC 2113 DASC 2113	Principles & Techniques of Data Science Principles & Techniques of Data Science (NWACC)	ECON 2143	Economics for non-Business majors.
GNED NNN3	Gen Ed, Social Science Elective	DASC 2203 CISM 1433	Data Management & Data Base Database & SQL Concepts (NWACC)
GNED NNN4	Gen Ed, LAB Science Elective	GNED NNN3	Gen Ed, Arts & Humanities
17 hours	Total	13 hours	Total

B.S. Data Science (Core)

Year 3 – Fall		Year 3 -- Spring	
DASC 2594	Multivariable Math for Data Scientists	SEVI 2053	Business Foundations (DASC-only section)
INEG 2313	Applied Probability and Statistics for Engineers I	INEG 2333	Applied Probability and Statistics for Engineers II
DASC 2133	Data Ethics & Privacy (replaces PHIL 3103)	DASC 3203	Optimization Methods in Data Science
DASC 3103	Cloud Computing & Big Data	DASC 3213	Statistical Learning
RRRR NNN3	[Required Concentration Course]	RRRR NNN3	[Required Concentration Course]
16 hours	Total	15 hours	Total

Year 4 – Fall		Year 4 -- Spring	
DASC 4892/H	<i>Data Science Practicum I</i>	DASC 4993/H	<i>Data Science Practicum II</i>
DASC 4113/H	<i>Machine Learning</i>		(ECON slot satisfied in Year 1 spring)
DASC 4123	<i>Social Problems (Issues) in DASC & Analytics</i>	CCCC NNN3	Concentration Elective
RRRR NNN3	[Required Concentration Course]	CCCC NNN3	Concentration Elective
CCCC NNN3	[Concentration Elective]	CCCC NNN3	[Concentration Elective]
14 hours	Total	16 hours	Total

Total Hours by Course Category	
121 hours	Total
65 hours	Data Science Core - Required (New + Existing Courses)
21 hours	Data Science – Concentration Required + Elective
36 hours	Gen Ed
0 hours	General Elective

120 Total Credit Hours of which 21 Credit Hours are Concentration-specific Hours
 Concentration-specific hours are notational for hours and when in this *suggested* Plan of Study

Note 1: Students at [NWACC](#) may require MATH 1285 Accelerated Pre-Calculus for this program.

Note 2: DASC 1104 Programming Languages for Data Science ([Python](#), [R](#)) are taught in PROG 1003 ([NWACC](#)) and PROG 1001 ([NWACC](#)).

Note 3: [PROG 1403 Programming Logic II \(NWACC\)](#) = [DASC 1204 Intro to Object-Oriented Programming](#)

Note 4: First two years ([NWACC](#)) [DASC 2594](#) and [Probability & Statistics sequence](#) will be taken in Year 3 [DASC](#) (UAF) and [DSCV](#) (NWACC) are paired with their equivalents in the proper sequence

[CIS 1433 Database & SQL Concepts \(NWACC\)](#) = [DASC 2203 Data Management & Data Base](#)

Note 5: ([STAT 3013](#) Intro. to Probability + [STAT 3003](#) Statistical Methods) can be substituted for ([INEG 2323](#) + [INEG 2314](#)).

B.S. Data Science (Core)

Note 6: [STAT 3013](#) or [STAT 3003](#) or [INEG 2323](#) or [INEG 2314](#) satisfy WCOB/BUSI 1033 Data Analysis & Interpretation.

Note 7: Students doing an Honors Thesis use [DASC 400VH Honors Thesis in Data Science](#) (at least 1 credit hour) in Year 4 and usually Year 4 – Spring.