AU-ABC Bachelor of Science in Data Science Agreement

Air University Associate-to-Baccalaureate Cooperative (AU-ABC) establishes partnerships between the Air University and civilian institutions to provide Community College of the Air Force (CCAF) graduates advanced education opportunities at the baccalaureate level.

Minot State University is offering a Bachelor of Science in Data Science program plan to meet the needs of Community College of the Air Force (CCAF) students looking for advanced education opportunities in management at the baccalaureate level.

CCAF students with degrees in any area are eligible to participate.

The Bachelor of Science in Data Science program includes the following degree requirements:

- General Education Coursework
- Data Science Required Core
- Electives
- 120 Total Credits

This program plan is designed to be an AU-ABC Category II program. As prerequisites to this program, students must complete the following:

- ENGL 120 College Composition II (This course is in addition to the required CCAF Written Communication course.)
- An additional CCAF General Education Humanities course with a different prefix (Courses completed for the CCAF degree must include two General Education Fine Arts, Humanities, and History courses in two different prefixes.)
- An additional CCAF General Education Social Science course with a different prefix (Courses completed for the CCAF degree must include two General Education Social Science courses in two different prefixes.)

Students considering this BS degree are encouraged to contact an academic advisor at Minot State **as early as possible** to ensure maximum transferability and a smooth transition.

Bachelor of Science in Data Science
Program Plan File (PPF)
Category II

Degree Requirement	Required Semester Credits	CCAF Transfer Credits	Minot State Course Credits
Data Science Core Courses	**37**	**0**	**37**
CSCI 111 Introductory Programming and Big Data or CSCI 160 Computer Science I (counts under General Education)			
MATH 146 Applied Calculus (counts under General Education) [2]			
MATH 208 Discrete Mathematics I			
DATA 211 Applied Statistics and Data Visualization or MATH 210 Elementary Statistics (counts under General Education) [2]			
DATA 347 Data Analytics and Visualization	3		3
DATA 240 Programming for Data Science	4		4
MATH 305 Linear Algebra	4		4
CSCI 356 Database Management I or CIS 454 Data and Information Management	4		4
CIS 453 Systems Analysis or CSCI 497 Internship	3		3
SOC 278 Social Research Methods or DATA 350 Project Design and Techniques	3		3
MATH 445 Probability and Statistics I	4		4
MATH 446 Probability and Statistics II	4		4
CSCI 456 Machine Learning, Data Mining, and Artificial Intelligence	4		4
DATA 491 Data Science Capstone I	2		2
DATA 494 Data Science Capstone II	2		2

Degree Requirement	Required Semester Credits	CCAF Transfer Credits	Minot State Course Credits
General Education Coursework	**36**	**21**	**15**
I. Communication			
CCAF Written Communication (ENGL 110 College Composition I)		3	
ENGL 120 College Composition II[1]		3	
CCAF Oral Communication (COMM 110 Fundamentals of Public Speaking)		3	
II. Quantitative Reasoning			
MATH 146 Applied Calculus[2]			3
III. Fine Arts, Humanities, and History			
CCAF Humanities		3	
ND:FA, ND:HUM, or ND:HIST in a different prefix[1]		3	
IV. Natural Sciences and Technology			
ND:LABSC			4
V. Social Science			
CCAF Social Science		3	
ND:SS in a different prefix[1]		3	
VI. Choice			
CSCI 111 Introductory Programming and Big Data or CSCI 160 Computer Science I			4
DATA 211 Applied Statistics and Data Visualization or MATH 210 Elementary Statistics[2]			4
Other Electives[3]	**47**	**39**	**8**
Total Credits Required[4]	**120**	**60[5]**	**60**

Footnotes:

[1] As prerequisites to this program, students must complete the following:

- ENGL 120 College Composition II (This course is in addition to the required CCAF Written Communication course.)
- An additional CCAF General Education Humanities course with a different prefix (Courses completed for the CCAF degree must include two General Education Fine Arts, Humanities, and History courses in two different prefixes.)
- An additional CCAF General Education Social Science course with a different prefix (Courses completed for the CCAF degree must include two General Education Social Science courses in two different prefixes.)

[2]Many introductory math courses can be transferred and counted towards completion of your general education coursework. Introductory courses in statistics or calculus may additionally count towards completion of the Data Science major.

[3]Courses completed in the Technical Core, Technical Electives, and Program Electives will be evaluated by the department for transferability towards the Data Science Required Core. The total number of other electives required can change depending on the transferability of courses.

[4]Students must take 30 credits from Minot State University and 30 credits of 300-400 level coursework.

[5]Credits earned through examination may not meet Minot State University requirements. Please see the NDUS Credit-By-Exam chart for accepted exams.