



DS Cert + MS-DS + AI Cert (33 cr.)

**DS Certificate
(ALL REQUIRED)**

**MS-DS Degree
(ALL REQUIRED)**

**AI Certificate
ML + 3 specializations =**

4 specializations total

**MSDS PATHWAY:
Data Science Foundations:
Statistical Inference (3 credits)**

**Computing, Ethics,
and Society (3 credits)**
(Cannot be applied to DS electives)

**MSDS PATHWAY:
Data Science Foundations:
Data Structures &
Algorithms (3 credits)**

**Vital Skills for
Data Scientists (4 credits)**

**Foundations of
Autonomous Systems
(3 credits)**

**Introduction to Robotics
with Webots (3 credits)**

**Data Mining Foundations
& Practice (3 credits)**

**Generative AI
(3 credits)**

**Statistical Modeling for
Data Science (3 credits)**

**Natural Language
Processing (3 credits)
(under development)**

**Databases
(2 credits)**

**Artificial Intelligence
(3 credits)**

ELECTIVES (9 credits):

**Statistical Learning for
Data Science (3 credits)**

+

**Choose 2 specializations:
6 outside elective courses that
overlap with AI Cert (except
Computing, Ethics, and Society)**

**Reinforcement Learning
(3 credits)**

Black box indicates which specializations also count towards MS-DS outside electives

Machine Learning (ML) (3 credits)

NOTES:

- In order to earn the MS-DS degree, the DS Certificate, and the AI Certificate, you will need to declare each program using Program Action Form in Buff Portal.
- In order to apply outside electives (CSCA courses - up to 6 outside electives allowed), you will need to complete the 'outside electives' survey that you will receive in your email near the end of each session.
- The Graduate School prohibits students from applying the same credit towards two credentials at the same level. You will need to let us know that you will want to apply your Machine Learning credits to the AI Certificate by completing the 'certificate check in' survey that is sent to your student email near the end of each session.
- Not all AI certificate courses are fully developed, and we do not have estimates on when they will be available.
- Electives cannot be mixed and matched in order to earn the credentials as listed. You will need to complete each specialization in full.