

# Analytics, MS

---

## **Delivery of Program**

Synchronously via DE technology

## **Sources of Data**

We aim to offer an equal experience for both face-to-face and distance students. We accomplish this through

- (1) ensuring all materials are shared electronically through the LMS,
- (2) building teams that have both local and distance students,
- (3) being proactive with retention monitoring which includes attendance reviews, grade reviews, and
- (4) ensuring faculty and staff are readily available for students to visit with us.

We measure the educational experience and learning of both the in-person and DE students by gathering, analyzing, and comparing:

- attendance rates and
- average cumulative GPA,
- GPA per course,
- course evaluations, and
- other surveys as needed (comparing in-person students to distance students, and historical comparisons if needed)
- current year Capstone technical competence AAC&U rubric measures

## **Findings**

### **Attendance:**

The MS Analytics program uses various methods to track attendance throughout the semesters:

- (1) Program Leadership marked attendance
- (2) Zoom generates a list of attendees that is used to mark off as part of the attendance process

The attendance rates for Distance Education (DE) students for the class of 2024 were **97%** for fall **2023**, and **96%** for spring **2024**. Attendance for In-person students was 98%.

The attendance rates for Distance Education (DE) students for the class of 2025 were **95%** for fall **2023**, and **97%** for spring **2024**. Attendance for In-person students was 96%.

A comparison of attendance rates between MS Analytics Distance Education students and In-Person students reveals minimal variance.

### Average Cumulative GPA:

A comparison of average cumulative GPA between MS Analytics Distance Education students and In-Person students reveals minimal variance.

Fall 2023 (Class of 2024)	DE Students	In- Person
ANLY 626	3.52	3.50
ANLY 620	3.96	3.92
BUAD 679	4.00	4.00

Spring 2024 (Class of 2024)	DE Students	In- Person
ANLY 601	4.00	3.9
ANLY 610	3.88	3.90
BUAD 689	3.79	No In-Person Section
BUAD 679	4.0	4.0

Fall 2023 (Class of 2025)	DE Students	In- Person
ANLY 608	3.81	3.61
ANLY 615	3.88	3.69
BUAD 679	4.00	4.0

Spring 2024 (Class of 2025)	DE Students - Sections 700	In- Person - Section 600
ISTM 637	4.0	3.97
MKTG 625	4.00	4.00
BUAD 679	4.00	4.00

### Retention Rate:

New for the Fall 2023, we implemented Weekly “Team Check-in.” Program staff created virtual Zoom hangouts where students in both delivery formats could attend and visit. In these check-ins, staff took a pulse on team dynamics, engagement, and feedback. This contributed to the successful retention of the first-semester students (which averaged about 10% withdrawal in previous years). We will continue the check-ins to improve retention efforts.

The retention rate for MS Analytics DE students is comparable to that of in-person students.

The retention rate for the Class of 2024 (fall 2023 and spring 2024) is **100%** retention for DE students and **100%** for in-person students.

The retention rate for the Class of 2025 (fall 2023 and spring 2024) is **98%** retention for DE students and **100%** for in-person students.

A comparison of retention rates between MS Analytics Distance Education students and In-Person students reveals minimal variance.

**Course Evaluations:**

We selected two questions from our course evaluations to ensure students in DE and In-person both have effective experiences. We compiled the overall average score for:

Questions #13 – Overall, this was an effective course.

Questions #14 – Overall, this was an effective instructor.

The following spreadsheet indicates a minimal difference between experience for DE students and In-Person students.

Faculty	Semester	Yr	Department	Course Number	Question #13 - Course (Average)	Question #14 - Instructor (Average)	# Responses	% Responses	Faculty GPA	DE/ In-person
Faculty 1	Fall	2023	XXXX	6##-600	3.88	4.50	8	33%	3.92	In-Person
Faculty 2	Fall	2023	XXXX	6##-600	4.64	4.55	11	64%	3.69	In-Person
Faculty 3	Fall	2023	XXXX	6##-600	4.63	4.63	8	33	3.50	In-Person
Faculty 4	Fall	2023	XXXX	6##-600	4.67	4.58	12	70%	3.61	In-Person
Faculty 5	Fall	2023	XXXX	6##-651	3.64	4.36	11	64%	4.00	In-Person
Faculty 6	Fall	2023	XXXX	6##-652	3.43	3.43	7	29%	4.00	In-Person
Faculty 7	Spring	2024	XXXX	6##-600	Combined with section 701	Combined with section 701	Combined with section 701	Combined with section 701	Combined with section 701	In-Person
Faculty 8	Spring	2024	XXXX	6##-600	5.00	5.00	2	13%	3.9	In-Person
Faculty 9	Spring	2024	XXXX	6##-651	5.00	4.08	36	76	4.00	In-Person
Faculty 10	Spring	2024	XXXX	6##-00	4.00	4.17	6	25%	3.90	In-Person
<b>Averages</b>					<b>3.88</b>	<b>3.93</b>	<b>10.1</b>	<b>40.7%</b>	<b>3.45</b>	

Faculty	Semester	Yr	Department	Course Number	Question #13 - Course (Average)	Question #14 - Instructor (Average)	# Responses	% Responses	Faculty GPA	DE/ In-person
Faculty 1	Fall	2023	XXXX	6##-700	3.71	4.14	7	28%	3.96	DE
Faculty 2	Fall	2023	XXXX	6##-700	4.09	3.77	22	62%	3.88	DE
Faculty 3	Fall	2023	XXXX	6##-700	4.00	3.88	8	32%	3.52	DE
Faculty 4	Fall	2023	XXXX	6##-700	4.33	4.25	24	68%	3.81	DE
Faculty 5	Fall	2023	XXXX	6##-700	3.93	4.0	14	40%	4.00	DE
Faculty 6	Fall	2023	XXXX	6##-701	4.33	4.0	6	24%	4.00	DE
Faculty 7	Spring	2024	XXXX	6##-701	3.80	3.72	60*	85%	3.98	DE
Faculty 8	Spring	2024	XXXX	6##-700	4.00	4.00	2	22%	4.00	DE
Faculty 9	Spring	2024	XXXX	6##-700	5.00	4.12	28	82%	4.00	DE
Faculty 11	Spring	2024	XXXX	6##-700	4.75	4.09	7	61%	3.79	DE
Faculty 10	Spring	2024	XXXX	6##-700	4.14	4.43	7	29%	3.88	DE
<b>Averages</b>					<b>4.18</b>	<b>4.03</b>	<b>12.72</b>	<b>48%</b>	<b>3.89</b>	

A comparison of course evaluation scores between MS Analytics Distance Education students and In-Person students reveals DE students to have slightly higher, more positive scores than In-Person students. Scores still show minimal variance.

**Other Longitudinal Scores:**

In addition, we analyzed scores for all students (DE and In-person students) on this year and previous year’s Capstone technical competence AAC&U rubric measures.

Our expected target on Capstone projects for all students regardless of format:

<b>Expected target:</b>	<b>95% scoring 3 or above</b>
	<b>100% scoring 2 or above</b>

The scores for all students (DE and In-person) across all categories indicate mastery of topics and learning objectives for all students regardless of format.

### Class of 2024 Rubric

Student	Interpretation	Representation	Calculation	Application/Analysis	Assumptions	Communication
Student 1	4	4	4	4	4	4
Student 2	3	3	3	3	3	4
Student 3	4	4	4	4	4	4
Student 4	3	3	3	3	3	3
Student 5	4	4	4	4	4	4
Student 6	4	4	4	4	4	4
Student 7	3	3	3	3	3	3
Student 8	4	4	4	4	4	4
Student 9	4	4	4	4	4	4
Student 10	4	4	4	4	4	4
Student 11	4	4	4	4	4	4
Student 12	4	4	4	4	4	4
Student 13	4	4	4	4	4	4
Student 14	4	4	4	3	4	4
Student 15	4	4	4	4	4	4
Student 16	3	4	4	4	3	4
Student 17	3	3	3	3	2	3
Student 18	3	3	3	3	3	2
Student 19	3	3	3	4	4	4
Student 20	4	4	4	4	4	4
Student 21	3	3	3	4	4	4
Student 22	4	4	4	4	4	4
Student 23	3	3	3	3	3	2

Student 24	4	4	4	4	4	4
Student 25	4	4	4	4	4	4
Student 26	4	4	4	4	4	4
Student 27	3	4	3	3	3	4
Student 28	4	4	4	4	4	4
Student 29	3	3	3	3	3	3
Student 30	3	3	3	3	3	3
Student 31	3	3	2	3	3	2
Student 32	4	4	4	4	4	4
Student 33	3	4	4	4	4	3
Student 34	3	3	3	3	3	2
Student 35	4	4	4	4	4	4
Student 36	4	4	4	4	4	4
Student 37	3	3	3	3	3	3
Student 38	4	4	4	4	4	4
Student 39	3	3	3	2	2	3
Student 40	4	4	4	4	4	4
Student 41	2	2	2	2	2	2
Student 42	4	4	4	4	3	4
Student 43	4	4	4	4	4	4
Student 44	3	3	3	3	3	3
Student 45	4	4	4	4	4	4
Student 46	4	4	4	4	4	4

Min score 2.0	<b>Expected target:</b>	<b>95% scoring 3 or above</b>	<b>Partially Met</b>
Max score 4.0		<b>100% scoring 2 or above</b>	<b>Met</b>
<b>Average Score</b>	<b>Rubric Category</b>	<b>% Scoring 3 or above</b>	<b>% Scoring 2 or above</b>
3.52	Interpretation	97.8%	100%
3.60	Representation	97.8%	100%
3.52	Calculation	95.6%	100%
3.52	Appl/Analysis	95.6%	100%
3.48	Assumptions	93.5%	100%
3.44	Communication	89.1%	100%

**Class of 2023 Rubric**

<b>Student</b>	<b>Interpretation</b>	<b>Representation</b>	<b>Calculation</b>	<b>Application/Analysis</b>	<b>Assumptions</b>	<b>Communication</b>
Student 1	4	4	3	3	4	3
Student 2	4	4	4	4	4	3
Student 3	3	3	4	4	4	4
Student 4	4	3	4	3	4	3
Student 5	4	3	4	3	3	2
Student 6	4	3	4	4	3	4
Student 7	4	4	4	4	4	4
Student 8	3	3	3	3	3	3
Student 9	4	3	3	4	3	3
Student 10	4	4	4	4	4	4
Student 11	3	3	3	3	3	3

Student 12	4	4	4	4	4	4
Student 13	3	3	3	4	4	3
Student 14	4	4	4	4	4	4
Student 15	3	4	4	3	3	4
Student 16	3	3	3	3	3	3
Student 17	4	4	4	4	4	4
Student 18	2	2	2	2	3	3
Student 19	3	3	3	4	3	3
Student 20	3	4	3	4	3	4
Student 21	4	4	4	3	3	3
Student 22	4	4	4	4	4	4
Student 23	4	3	3	4	4	4
Student 24	3	4	3	4	3	3

Min score 2.0	<b>Expected target:</b>	<b>95% scoring 3 or above</b>	Met
Max score 4.0		<b>100% scoring 2 or above</b>	Met
<b>Average Score</b>	<b>Rubric Category</b>	<b>% Scoring 3 or above</b>	<b>% Scoring 2 or above</b>
3.52	Interpretation	95.8%	100%
3.44	Representation	95.8%	100%
3.44	Calculation	95.8%	100%
3.56	Appl/Analysis	95.8%	100%
3.48	Assumptions	95.8%	100%
3.44	Communication	95.8%	100%



## **Implications**

Yes, the MS Analytics program effectively delivers distance education. The MS Analytics' goal is to offer DE students the same opportunities as In-person students. The program leadership and faculty meet prior to the start of each semester to address the needs of the distance students and intentionally discuss ways of integrating DE students into the class discussion as much as possible. This has shown to be successful over the last year and previous years. The program will continue to offer avenues like "Advising hours" and "Lunch and hangouts" with distance students to gauge feedback from them on how to best deliver these experiences.