

We Are Honor Bound

National Academies of Sciences, Engineering, and Medicine
Roundtable on Systemic Change in Undergraduate STEM Education
March 2024

Steven Davis | *KiiNockKooMii* (First Thunder)

Kul Wicasa Oyate (Lower Brule Sioux) | *Ampskapi Pikuni* (Blackfeet)

Assistant Dean of the Honors College | Director Honor Bound Program



We acknowledge, with reverence and respect, that many peoples have ancestral ties to the lands now occupied by Montana State University (MSU), whose relationships date back to time immemorial and whose connection to this place persists to this day...

*“Upon suffering beyond suffering; the Red Nation shall rise again, and it shall be a blessing for a sick world. A world filled with broken promises, selfishness and separations. A world longing for light again. **I see a time of seven generations** when all the colors of mankind will gather under the sacred Tree of Life and the whole Earth will become one circle again...*

Tǎšaúnke Witkó (Crazy Horse),
Oglala Lakota Leader (1840-1877)



*Seven generations ago,
our ancestors came to
the treaty tables as
sovereign nations to
negotiate for peace in
exchange for promises
of education,
healthcare, and general
welfare for their
descendants*



*Land-grant universities were built not just on Indigenous land, but **with** Indigenous land.*

<https://montanafreepress.org/2024/03/08/land-grant-universities>

<https://grist.org/project/equity/land-grant-universities-indigenous-lands-fossil-fuels/>

<https://www.hcn.org/issues/52.4/indigenous-affairs-education-land-grab-universities> (<https://www.landgrabu.org/>)

Choosing Promise: Transformational Learning



- **GOAL 1.1: Broaden access for underrepresented populations and increase academic success for all students through excellence in undergraduate education.**

As the state's land-grant university, Montana State invites participation in exceptional higher education, widens participation of under-represented student populations, and improves student success outcomes overall.





7th Generation Presidential Scholarship



Inaugural Cohort – Class of 2025



2nd Cohort – Class of 2026



3rd Cohort – Class of 2027



Paths to Student Well-being



Honoring Our Ancestors In Shaping Our Future





*Systemic, generational
problems such as the
grand challenges of the
21st century require an
interdisciplinary,
interconnected,
intergenerational
problem-solving approach
that will ultimately
transform our university,
communities, and nation*

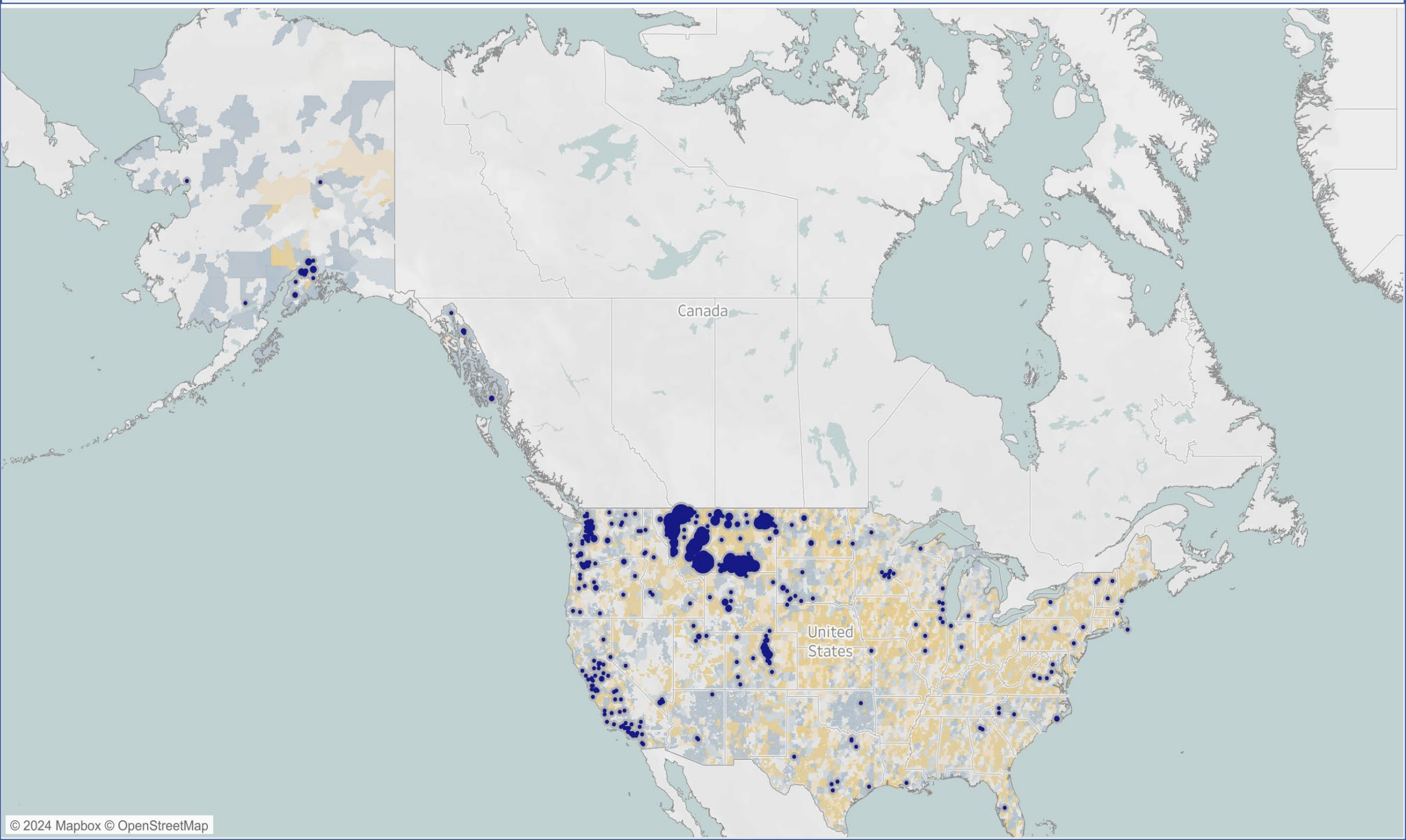
“...in that day there will be those among the Lakota who will carry knowledge and understanding of unity among all living things... I salute the light within your eyes where the whole universe dwells. For when you are at that center within you, and I am at that place within me, we shall be one...”

...four days before his assassination in 1877, seven generations ago. . .

Tǎšaúnke Witkó (Crazy Horse),
Oglala Lakota Leader (1840-1877)



American Indian/Alaska Native Students - Home of Origin



* Hover mouse over dot to see town name and number of students. Use mouse wheel or tools in upper left hand corner of map to zoom in or move base map.

Year (Fall Sem Enrollment)

- 2016
- 2017
- 2018
- 2019
- 2020
- 2021
- 2022

Count of Students

- 1
- 10
- 20
- 30
- 35

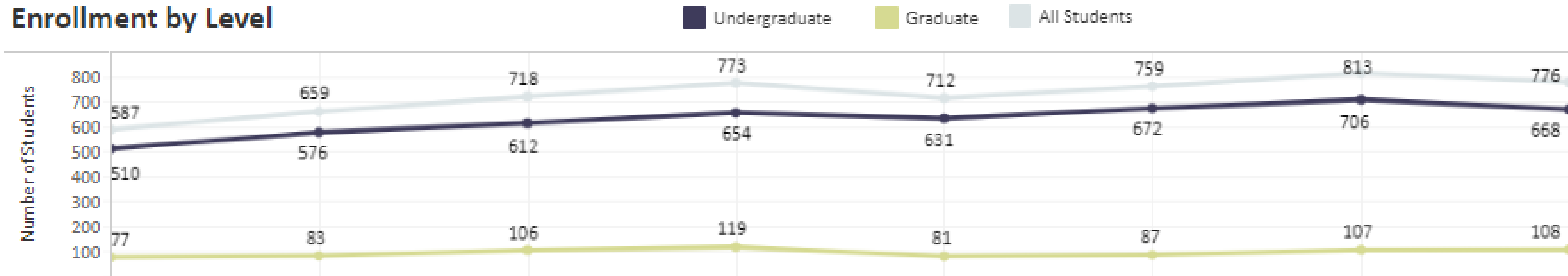
2018 American Indian and ..

- 0 to 1
- 1 to 12
- 12 to 38
- 38 to 119
- 119 to 15,400

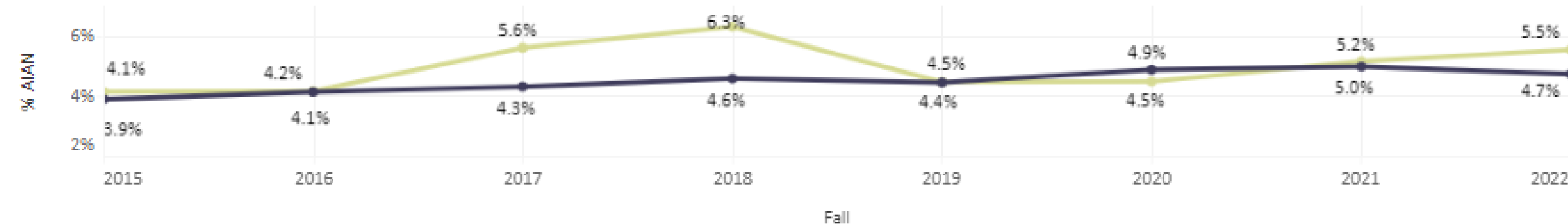
MSU AI/AN Student Enrollment

Historical Trends (Fall Terms, 2015-2022)

Enrollment by Level



% of Total Student Enrollment who identify as American Indian/Alaska Native



Montana State University

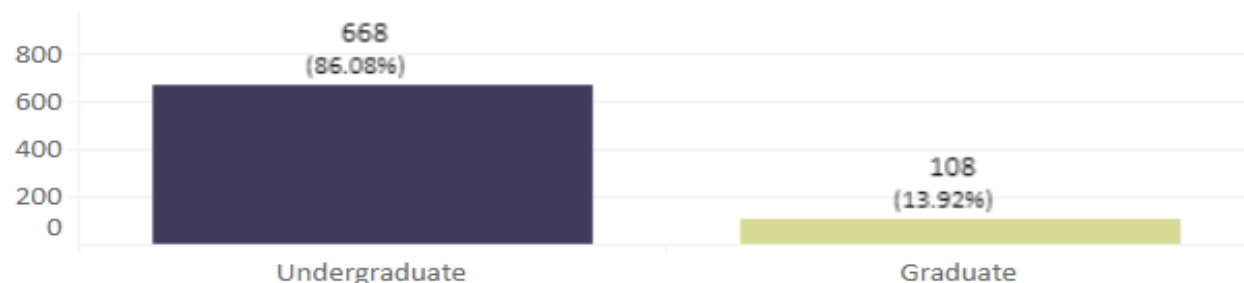
Characteristics of American Indian/Alaska Native (AIAN) Students

Date Updated: March 27, 2023

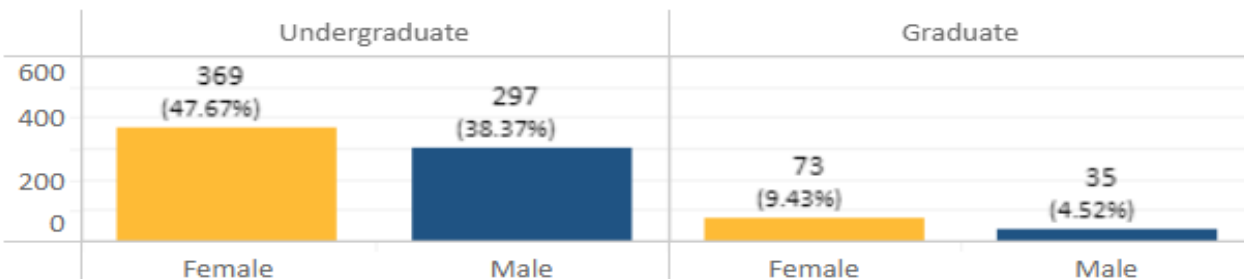


Fall 2022

Enrollment by Level



Enrollment by Gender



Full and Part Time Enrollment

		Full-Time	Part-Time	Grand Total
Undergraduate	First-Year	196	70	266
	Junior	107	11	118
	Postbaccalaureate	10		10
	Senior	132	18	150
	Sophomore	98	18	116
Graduate	Doctoral Candidates	10	30	40
	Graduate Certificate		9	9
	Master's Candidates	22	33	55
Grand Total		575	189	764

Enrollment by College of 1st Major

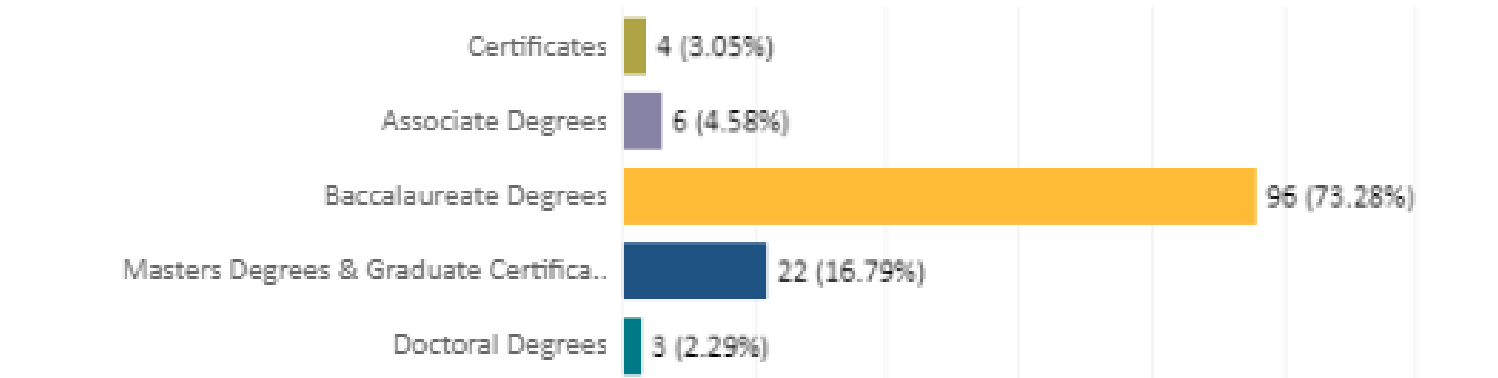
College of 1st Major	Identified as AIAN	Did Not Identify as AIAN
College of Agriculture	93 (4.6%)	1,944 (95.4%)
College of Arts & Architecture	42 (3.5%)	1,145 (96.5%)
College of Business	74 (3.8%)	1,892 (96.2%)
College of Education/HHD	115 (7.1%)	1,512 (92.9%)
College of Engineering	116 (3.4%)	3,311 (96.6%)
College of Letters & Science	160 (4.6%)	3,339 (95.4%)
College of Nursing	106 (8.4%)	1,149 (91.6%)
Gallatin College	30 (4.0%)	720 (96.0%)
Graduate School	5 (2.3%)	208 (97.7%)
University College	35 (5.0%)	670 (95.0%)
Grand Total	776 (4.7%)	15,890 (95.3%)

Average Age

Undergraduate	Graduate
21.68	36.66

Success Indicators

Degrees Awarded by Academic Level (2021-2022)



Fall to Fall Retention (Fall 2021 Cohort*)

58.6%

6-Year Graduation Rate (Fall 2016 Cohort*)

42.5%

*Full-time, First-Time, Bachelor's Degree Seeking

Degrees Awarded by College & Academic Level (2021-2022)

	Certificates	Associate Degrees	Baccalaureate Degrees	Masters Degrees & Graduate Certific..	Doctoral Degrees	Grand Total
College of Agriculture			7	3		10
College of Arts & Architecture			6	1		7
College of Business			11	1		12
College of Education/HHD			14	8		22
College of Engineering			22	1		23
College of Letters & Science			22	8	2	32
College of Nursing			14			14
Gallatin College	4	6				10
Other					1	1
Grand Total	4	6	96	22	3	131

Data Sources:

--> Student Enrollment Information: Montana State University Office of Planning and Analysis, Student Snapshot (~15th Day of Fall).

--> Degrees Awarded Information: Montana State University Office of Planning and Analysis, Graduation Information

MSU ALL Persistence (73%) & Graduation (50%)

Class	Size	1 Year Graduation	2 Year Continuation	2 Year Graduation	3 Year Continuation	3 Year Graduation	4 Year Continuation	4 Year Graduation	5 Year Continuation	5 Year Graduation	6 Year Continuation	6 Year Graduation	7 Year Continuation	7 Year Graduation	8 Year Continuation	8 Year Graduation	9 Year Continuation	9 Year Graduation	10 Year Continuation	10 Year Graduation	11 Year Continuation
2012	2,645	0.0%	71.5%	0.0%	60.6%	0.6%	56.7%	20.8%	32.1%	42.6%	10.8%	48.6%	5.1%	51.5%	2.2%	52.6%	1.0%	53.2%	0.5%	53.3%	0.4%
2013	2,850	0.0%	71.4%	0.0%	62.3%	0.8%	57.0%	22.5%	32.6%	42.7%	11.4%	49.9%	4.5%	52.3%	2.4%	53.3%	1.5%	53.9%	0.6%	54.1%	0.5%
2014	2,845	0.0%	73.0%	0.0%	62.8%	1.1%	58.7%	25.5%	30.4%	45.1%	10.1%	50.9%	4.4%	53.4%	2.3%	54.3%	1.0%	54.7%	0.9%		
2015	2,927	0.0%	73.3%	0.0%	63.2%	1.0%	57.4%	26.3%	28.0%	44.7%	9.7%	49.6%	3.9%	51.3%	1.5%	52.0%	1.5%				
2016	3,369	0.0%	73.5%	0.1%	64.0%	0.9%	59.1%	29.7%	27.2%	47.3%	8.5%	51.5%	3.8%	53.6%	1.9%						
2017	3,216	0.0%	74.3%	0.0%	64.4%	1.5%	58.6%	30.1%	26.1%	48.1%	7.5%	52.8%	3.3%								
2018	3,240	0.0%	73.5%	0.0%	63.1%	2.4%	56.4%	30.6%	25.0%	46.4%	8.3%										
2019	3,233	0.0%	74.8%	0.0%	64.7%	2.2%	58.5%	33.1%	23.5%												
2020	3,107	0.0%	72.1%	0.0%	63.1%	2.5%	58.0%														
2021	3,688	0.0%	72.9%	0.0%	64.1%																
2022	3,568	0.0%	75.6%																		
2023	3,456																				
Grand Total	38,144	0.0%	73.4%	0.0%	63.3%	1.5%	57.9%	27.6%	27.9%	45.4%	9.4%	50.6%	4.1%	52.5%	2.1%	53.0%	1.3%	54.0%	0.6%	53.7%	0.4%

Student:

Select Admit Year Display:
2,012 2,023

Select Degree:
4 year Bachelor

Select Student Type:
First-Time

Select Time Status:
(All)

Select College:
(All)

Select Honors:
(All)

Demographics:

Select Gender:
(All)

Select Residency:
(All)

Select IPEDS Race:
(All)

Select African American:
(All)

Select American Indian:
(All)

Select Asian:
(All)

Select Hispanic:
(All)

Select Pacific Islander:
(All)

Select White:
(All)

Financial:

Select Pell Award Status:
(All)

Other:

Select First Generation Status:
(All)

Select Rurality Status:
(All)

Select Montana AA High School Status:
(All)

MSU AI/AN Persistence (61%) & Graduation (33%)

	Class Size	1 Year Graduation	2 Year Continuation	2 Year Graduation	3 Year Continuation	3 Year Graduation	4 Year Continuation	4 Year Graduation	5 Year Continuation	5 Year Graduation	6 Year Continuation	6 Year Graduation	7 Year Continuation	7 Year Graduation	8 Year Continuation	8 Year Graduation	9 Year Continuation	9 Year Graduation	10 Year Continuation	10 Year Graduation	11 Year Continuation
2012	93	0.0%	51.6%	0.0%	35.5%	0.0%	35.5%	10.8%	21.5%	21.5%	9.7%	25.8%	6.5%	31.2%	3.2%	31.2%	1.1%	32.3%	1.1%	32.3%	0.0%
2013	104	0.0%	54.8%	0.0%	43.3%	0.0%	39.4%	12.5%	22.1%	23.1%	6.7%	27.9%	2.9%	29.8%	4.8%	30.8%	2.9%	32.7%	0.0%	32.7%	0.0%
2014	119	0.0%	48.7%	0.0%	42.9%	0.0%	41.2%	11.8%	26.9%	26.9%	9.2%	31.9%	4.2%	34.5%	2.5%	37.0%	0.8%	37.0%	1.7%		
2015	129	0.0%	70.5%	0.0%	57.4%	0.0%	51.2%	13.2%	34.1%	31.8%	14.0%	38.0%	7.0%	41.1%	3.1%	42.6%	2.3%				
2016	163	0.0%	66.3%	0.6%	47.9%	1.2%	46.0%	20.2%	25.2%	33.7%	6.7%	35.6%	3.1%	38.7%	2.5%						
2017	138	0.0%	66.7%	0.0%	47.8%	2.9%	41.3%	15.9%	26.1%	31.9%	7.2%	34.8%	3.6%								
2018	158	0.0%	59.5%	0.0%	51.9%	0.6%	44.3%	18.4%	25.3%	29.7%	12.0%										
2019	138	0.0%	65.2%	0.0%	51.4%	0.7%	46.4%	20.3%	22.5%												
2020	160	0.0%	62.5%	0.0%	48.8%	1.3%	48.1%														
2021	182	0.0%	52.2%	0.0%	41.8%																
2022	177	0.0%	66.7%																		
2023	185																				
Grand Total	1,746	0.0%	60.9%	0.1%	47.3%	0.8%	44.3%	15.9%	25.6%	29.1%	9.4%	33.0%	4.4%	35.7%	3.1%	36.0%	1.8%	34.2%	0.9%	32.5%	0.0%

Student:

Select Admit Year Display:
2,012 2,023

Select Degree:
4 year Bachelor

Select Student Type:
First-Time

Select Time Status:
(All)

Select College:
(All)

Select Honors:
(All)

Demographics:

Select Gender:
(All)

Select Residency:
(All)

Select IPEDS Race:
(All)

Select African American:
(All)

Select American Indian:
Yes

Select Asian:
(All)

Select Hispanic:
(All)

Select Pacific Islander:
(All)

Select White:
(All)

Financial:

Select Pell Award Status:
(All)

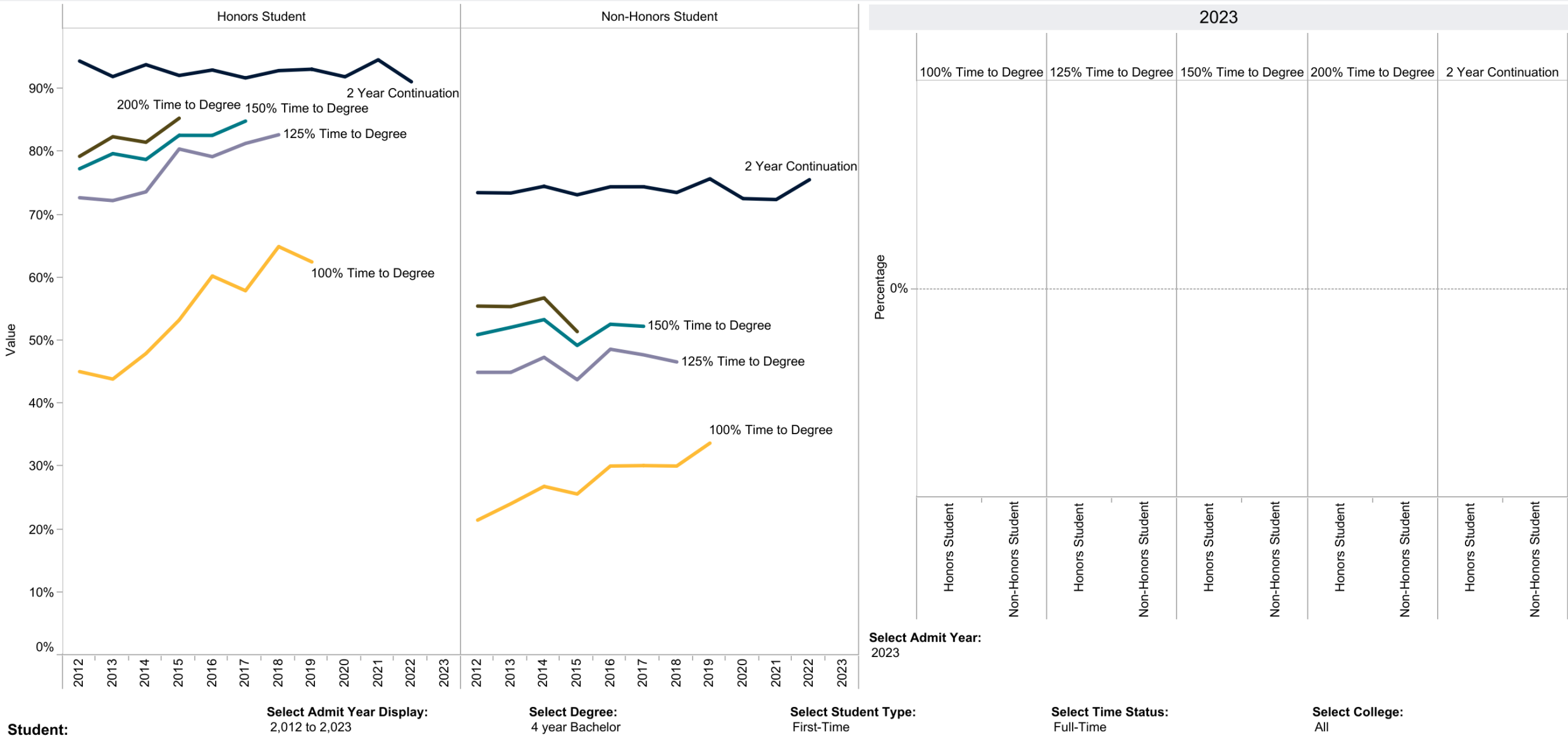
Other:

Select First Generation Status:
(All)

Select Rurality Status:
(All)

Select Montana AA High School Status:
(All)

Degree: 4 year Bachelor Student Type: First-Time Time Status: Full-Time College: All



Honors AI/AN Persistence (87%) Graduation (70%)

	Class Size	1 Year Graduation	2 Year Continuation	2 Year Graduation	3 Year Continuation	3 Year Graduation	4 Year Continuation	4 Year Graduation	5 Year Continuation	5 Year Graduation	6 Year Continuation	6 Year Graduation	7 Year Continuation	7 Year Graduation	8 Year Continuation	8 Year Graduation	9 Year Continuation	9 Year Graduation	10 Year Continuation	10 Year Graduation	11 Year Continuation
2012	5	0.0%	100.0%	0.0%	60.0%	0.0%	40.0%	40.0%	0.0%	40.0%	0.0%	40.0%	0.0%	40.0%	20.0%	40.0%	0.0%	40.0%	0.0%	40.0%	0.0%
2013	6	0.0%	83.3%	0.0%	83.3%	0.0%	83.3%	33.3%	33.3%	50.0%	33.3%	83.3%	0.0%	83.3%	0.0%	83.3%	0.0%	83.3%	0.0%	83.3%	0.0%
2014	10	0.0%	70.0%	0.0%	80.0%	0.0%	80.0%	30.0%	40.0%	50.0%	20.0%	60.0%	10.0%	70.0%	10.0%	80.0%	0.0%	80.0%	0.0%		
2015	12	0.0%	100.0%	0.0%	91.7%	0.0%	83.3%	41.7%	41.7%	91.7%	0.0%	91.7%	0.0%	91.7%	0.0%	91.7%	0.0%				
2016	16	0.0%	100.0%	0.0%	68.8%	0.0%	68.8%	43.8%	25.0%	56.3%	0.0%	56.3%	0.0%	56.3%	6.3%						
2017	16	0.0%	87.5%	0.0%	81.3%	18.8%	56.3%	56.3%	25.0%	68.8%	6.3%	75.0%	0.0%								
2018	10	0.0%	70.0%	0.0%	70.0%	0.0%	60.0%	60.0%	0.0%	60.0%	0.0%										
2019	10	0.0%	90.0%	0.0%	80.0%	0.0%	70.0%	40.0%	30.0%												
2020	5	0.0%	80.0%	0.0%	80.0%	0.0%	60.0%														
2021	14	0.0%	92.9%	0.0%	71.4%																
2022	19	0.0%	78.9%																		
2023	31																				
Grand Total	154	0.0%	87.0%	0.0%	76.9%	3.3%	67.8%	44.7%	25.9%	62.7%	6.7%	69.2%	1.5%	69.4%	6.1%	78.8%	0.0%	71.4%	0.0%	63.6%	0.0%

Student:

Select Admit Year Display:

2,012 2,023

Select Degree:

4 year Bachelor

Select Student Type:

First-Time

Select Time Status:

(All)

Select College:

(All)

Select Honors:

Honors Student

Demographics:

Select Gender:

(All)

Select Residency:

(All)

Select IPEDS Race:

(All)

Select African American:

(All)

Select American Indian:

Yes

Select Asian:

(All)

Select Hispanic:

(All)

Select Pacific Islander:

(All)

Select White:

(All)

Financial:

Select Pell Award Status:

(All)

Other:

Select First Generation Status:

(All)

Select Ruralty Status:

(All)

Select Montana AA High School Status:

(All)



Honors Admit Years 2020-2023 Enrollment, Persistence, Graduation

First-Time, Full-Time, Four-Year Degree Seeking

5 students self-identified AI/AN in 2020

14 students self-identified AI/AN in 2021

19 students self-identified AI/AN in 2022

31 students self-identified AI/AN in 2023

50+ applicants self-identified AI/AN in 2024