

Rocky Mountain College Aviation Program
B.S. in Aeronautical Science
Student Achievement Data

September 2023

Program Mission: To educate and train individuals to be professionals and leaders in the aviation industry.

Vision: To be the leader in Collegiate Aviation in the Western U.S., where our graduates are sought-after and where selective admissions and thoughtful growth insure high quality students who graduate at a rate well above that of a public university.

We Value...

- safety as our #1 priority.
- the education of the whole person and the development of independent thought—all based on a strong foundation in the liberal arts.
- being on the leading edge of educational techniques, curriculum content and technology in collegiate aviation.
- the professional development of all students and employees. We'll teach and model professionalism throughout our program and help our employees grow.
- marketability of our graduates and flight instructors.
- efficient and cost-effective flight training.

Student Learning Outcomes--Aeronautical Science Major

Students who graduate with a major in aeronautical science will be able to:

Items 1-6 below are AABI CORE Outcomes

1. Demonstrate attributes of an aviation professional, career planning, and understanding certification;
2. Demonstrate understanding of aircraft design, performance, operating characteristics, and maintenance;
3. Demonstrate understanding of aviation operations in terms of aviation safety and human factors;
4. Demonstrate understanding of national and international aviation law, regulations, and labor issues;

5. Demonstrate understanding of design and operations of airports, airspace, and the air traffic control system;

6. Demonstrate understanding of meteorology and environmental issues;

Items 7 – 17 are AABI General Outcomes

7. Apply mathematics, science, and applied sciences to aviation-related disciplines;

8. Analyze and interpret data;

9. Work effectively on multi-disciplinary and diverse teams;

10. Make professional and ethical decisions;

11. Communicate effectively, using both written and oral communication skills;

12. Engage in and recognize lifelong learning;

13. Assess contemporary issues;

14. Use the techniques, skills, and modern technology necessary for professional practice;

15. Assess the national and international aviation environment;

16. Apply pertinent knowledge in identifying and solving problems;

17. Apply knowledge of business sustainability to aviation issues;

Item 18 is AABI Program Criteria

18. Meet FAA commercial pilot standards, with instrument and multi-engine ratings, and demonstrate the ability to operate in a crew environment;

Item 19 is other criteria

19. Demonstrate knowledge and application of aerodynamic principles.

Educational Goals for the Aeronautical Science major are:

1. Educate students with a firm foundation in the liberal arts that will help them to be leaders in the aviation industry with strong skills in communication and team work.

2. Instill professionalism and ethics expected by the aviation industry.

3. Develop graduates who exhibit strong aviation technical abilities.
4. Graduate students in four years with a commercial certificate with instrument and multi-engine ratings.

Educational Goal #1

- Educate students with a firm foundation in the liberal arts that will help them to be leaders in the aviation industry with strong skills in communication and team work.

COLLECT EVIDENCE

Assessment of communication skills and teamwork are addressed in the Assessment Report for RMC Student Learning Outcomes (SLO). Communication skills are SLO 11. Evidence will be collected using a rubric in AVS 404 CRM class, a rubric in AVS 405 class, internship supervisor evaluations, senior exit survey and oral presentation in AVS 308, Aviation Safety.

Educational Goal #2

- Instill professionalism and ethics expected by the aviation industry.

COLLECT EVIDENCE

Assessment of professionalism and ethics are addressed in the Assessment Report for RMC Student Learning Outcomes. Professionalism is SLO 1 and ethics is SLO 10. Evidence will be collected using a rubric in AVS 400 on a professional interview, internship supervisor evaluations, senior exit survey. We continue to collect data of informal feedback from graduates, as was suggested to us during the AABI visit in 2014. Though not a rigorous survey, we gain a great deal of insight and encouragement from the number of graduates who are pleased with the level of professional training they received.

For ethics, we collect evidence for a rubric used in AVS 400 for a paper written by all students on a real-world ethical situation, from internship evaluations and from senior exit surveys.

Educational Goal #3

- Develop graduates who exhibit strong aviation technical abilities.

Because we have examining authority, we are particularly sensitive to check ride pass rates, and set a goal of keeping rates for both practical tests and written tests above 85% in each syllabi.

COLLECT EVIDENCE

This is largely about check ride pass rates and is address in Appendix 4 SLOs Assessment Report, SLO 18. We analyze pass rates for both airplane practical tests and written FAA tests. We gather evidence for first time pass rates for each flight course and each FAA written exam. We also gather evidence from AVS 404 CRM instructor and senior exit survey.

ANALYZE EVIDENCE

2019-2020

100% of graduating seniors have passed all 4 required check rides. First time pass rates:

Private: 83%

Instrument: 67%

Commercial: 64%

Multi Engine: 80%

Written Test Pass Rate:

Private: 97%

Instrument: 96%

Commercial: 100%

2020-2021

100% of graduating seniors have passed all 4 required check rides. First time pass rates:

Private: 94%

Instrument: 91%

Commercial: 80%

Multi Engine: 100%

Written Test Pass Rate:

Private: 96%

Instrument: 100%

Commercial: 100%

2021-2022

100% of graduating seniors have passed all 4 required check rides. First time pass rates:

Private: 56%

Instrument: 64%

Commercial: 86%

Multi Engine: 89%

Written Test Pass Rate:

Private: 83%

Instrument: 100%

Commercial: 97%

2022-2023

100% of graduating seniors have passed all 4 required check rides. First time pass rates:

Private: 82%

Instrument: 60%

Commercial: 81%

Multi Engine: 92%

Written Test Pass Rate:

Private: 88%

Instrument: 98%

Commercial: 98%

Educational Goal #4

- Graduate students in four years with a commercial certificate with instrument and multi-engine ratings.

COLLECT EVIDENCE

We will continue to document graduation rates and number of students who start out in aeronautical science and switch to aviation management. If we in fact do not allow some students to ever fly because of the competitive nature of getting a flight slot, those students will not count against our retention rates.

Program assessment measures employed include:

- End of year surveys from all students
- Exit surveys from each graduating senior
- Formal survey of graduates, conducted approximately every four years
- Informal survey of graduates, conducted in an on-going manner
- Surveys and evaluations from internship supervisors
- Evaluations from outsider aviation professionals who conduct mock interviews with each graduating senior as part of AVS 400 class
- Data from Safety Program, including student inputs to SHORT reports and tracking safety reports
- Feedback on student performance in AVS 405 course, Air Transportation Management, a senior capstone course
- Feedback on student performance in individual required courses directly relating to specific outcomes, such as Aviation Law, and ethics

Graduation and retention rates

	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>5-year average</u>
Freshmen retention from previous year in Aviation Program	72%	61%	59%	69%	66%	65%
Freshmen retention from previous year, remained at RMC, includes changed major	80%	70%	61%	69%	77%	71%
Aviation program 4-year grad rate	65%	55%	34%	59%	56%	54%
Employment in	92%	100%	95%	100%	92%	96%

Aviation industry
this grad year

Number of Graduates

Aeronautical Science	18	15	10	20	24	17
Aviation Management	5	3	3	5	4	4

Employment for Aeronautical Science Graduates last 5 years

SkyWest Airlines
Horizon Airlines
Republic Airlines
PSA Airlines
Endeavor Airlines
Alpine Air
Mesa Airlines
Go Jets
Cape Air
Commuter Air
Neptune Aviation
U.S. Navy pilot
U.S. Marine Corps pilot
U.S. Army Guard helicopter pilot
Billings Flying Service
Richland Aviation
Ryan Air, AK
NetJets
Williams Aerial and Mapping, pilot
Edwards Jet Center, air ambulance
Rampart Air
Rocky Mountain College Flight Operations, leadership position
Landcare Aviation, aerial survey pilot
Choice Aviation
CAE Oxford flight training
Gavin Flying Service
Red Rock Aviation, Mesa, AZ
Alliance Flight Training
Overland Aviation flight instruction
Cloud Catcher Aviation, flight instruction
Venture North Aviation, flight instruction