

RCTC PROGRAM PLAN

AVIATION PILOT

Associate of Applied Science

I. MINNESOTA TRANSFER CURRICULUM (MnTC)/

GENERAL EDUCATION REQUIREMENTS.....16 CREDITS

GOAL 1: COMMUNICATION7 CR

ENGL 1117, Reading and Writing Critically I, 4 cr

COMM 1114, Fundamentals of Public Speaking, 3 cr

GOAL 3: NATURAL SCIENCES3 CR

PHYS 1101, Elements of Physics, 3 cr

GOAL 4: MATHEMATICS/LOGICAL REASONING3 CR

MATH 1115, College Algebra, 3 cr OR

MATH 1117, Precalculus, 4 cr, OR

MATH 1127, Calculus I, 5 cr, OR

MATH 1128, Calculus II, 5 cr

GOAL 6: HUMANITIES and FINE ARTS3 CR

PHIL 2130, Business Ethics, 3 cr

II. PROGRAM CORE REQUIREMENTS.....44 CREDITS

AVIA 1100, World of Aviation, 3 cr

AVIA 1200, Private Pilot Ground, 3 cr

AVIA 1210, Private Pilot Lab, 1 cr

AVIA 1211, Private Pilot Lab II, 2 cr

AVIA 1300, Aviation Weather, 3 cr

AVIA 1310, Instrument Ground, 3 cr

AVIA 1320, Instrument Pilot Flight Lab, 2 cr

AVIA 1321, Instrument Pilot Flight Lab II, 1 cr

AVIA 2100, Air Navigation, 3 cr

AVIA 2110, Aviation Safety, 3 cr

AVIA 2115, Theory of Flight, 3 cr

AVIA 2200, Commercial Pilot Ground, 3 cr

AVIA 2250, Commercial Pilot Flight Lab, 2 cr

AVIA 2251, Commercial Pilot Flight Lab II, 2 cr

AVIA 2253, Multi-Engine Flight Lab, 2 cr

AVIA 2350, Advanced Aircraft Systems, 3 cr

AVIA 2450, Aviation Human Factors, 3 cr

AVIA 2600, Flight Instructor Ground, 2 cr

TOTAL60 CREDITS

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PROGRAM OUTCOMES:

Upon completion of the Aviation Pilot program at RCTC, students will achieve the following outcomes:

- Analyze and interpret data and apply pertinent knowledge in decision making.
- Make professional and ethical decisions.
- Communicate effectively, using both written and oral communication skills.
- Describe the professional attributes, requirements or certifications, and planning applicable to aviation careers.
- Discuss the impact of meteorology and environmental issues on aviation operations.
- Describe the principles of aircraft design, performance and operating characteristics.
- Evaluate aviation safety and the impact of human factors on safety.
- Discuss the impact of national and international aviation law, regulations and labor issues on aviation operations.
- Explain the integration of airports, airspace, and air traffic control in managing the National Airspace System.
- Operate an aircraft in simulated instrument conditions to federal standards.
- Determine factors impacting aircraft performance, including engine power output, weight and balance, airport requirements, and flight maneuvers.
- Maintain compliance with procedures and practices contained in the Federal Aviation Regulations (FAR's), Aeronautical Information Manual (AIM), and other applicable FAA publications.
- Obtain the Federal Aviation Administration (FAA) certification as a Private Pilot, Airplane Single-Engine Land.
- Obtain the Federal Aviation Administration (FAA) certification as a Commercial Pilot, Airplane Single and Multi-Engine Land with an Instrument Rating.

ADDITIONAL NOTES:

PURPOSE: The two-year Associate of Applied Science (AAS) in Aviation Pilot degree program is designed to educate students who plan a career as a pilot in commercial aviation. The program is designed to prepare students with the technical knowledge and skills required for the Federal Aviation Administration (FAA) written and practical examinations for private, instrument, commercial, multi-engine, and flight instructor certificates. Students that complete the AAS in Aviation Pilot will obtain their commercial pilot certificate with an instrument rating in both single and multi-engine aircraft and a flight instructor written exam.

Completion of this program is a path to becoming an Airline Transport Pilot (ATP). Graduates of this program are eligible for a Restricted ATP certificate at 1,250 flight hours. Those interested in continuing their aviation education can choose to transfer to Minnesota State University, Mankato for the completion of a Bachelor of Science in Aviation degree.

Revised: 2/11/2025

Implementation: Fall 2025