

Western Michigan University – College of Aviation

## Program Student Learning Outcomes

### Aviation Flight Science Learning Outcomes

Students who graduate from the Aviation Flight Science program will:

- Examine technical and procedural aspects of flight operations and aircraft systems and demonstrate application of this knowledge.
- Analyze flight operations in national and international airspace systems.
- Demonstrate aeronautical knowledge, flight proficiencies, and risk management components required to obtain an F.A.A. commercial pilot certificate with single engine and multi-engine, and instrument ratings.
- Explore regulatory and legal issues which impact the industry.
- Evaluate and apply Crew Resource Management skills in a flight operations environment.

### Aviation Management and Operations Learning Outcomes

Students who graduate from the Management and Operations program will:

- Demonstrate knowledge of business principles and practices within the aviation industry.
- Apply effective written and oral communication skills within the aviation environment.
- Describe historical events, regulations, and current challenges and trends, which impact the aviation industry.
- Recognize aviation procedures based on human factors and conduct aviation operations utilizing industry best-practices safety policies.

### Aviation Technical Operations Learning Outcomes

Through a combination of classroom learning and hands-on experiences, students who graduate from the Aviation Technical Operations program will:

- Demonstrate an in-depth technical knowledge of aircraft systems and operation.
- Demonstrate appropriate skills, techniques, and accepted practices necessary for aircraft maintenance and determination of airworthiness.
- Apply cognitive reasoning skills to aircraft systems analysis and troubleshooting.
- Prepare students to successfully complete the FAA Airframe and Powerplant Mechanic exams.
- Describe regulatory and legal issues which impact the industry.