Unmanned Aircraft Systems

Compliance with AABI Policy 3.4.2

Aviation Program Educational Objectives

The following aviation program objectives were derived by the Aviation Faculty. These objectives will serve as the basis of our assessment activities. Many of these objectives were taken from the Department’s mission statement.

The original mission of John D. Odegard was to provide the highest standard of professional aviation education at a reasonable cost to the student. The department would like this to serve as an overarching theme throughout the strategy to reach the school’s mission.

- Creating graduates that harbor excellent aviation technical abilities

  Produce future aviation professionals that possess the greatest knowledge and technical abilities possible prior to entering the aviation community.

- Strive for human excellence through the use of a liberal education

  Provide students with a well-rounded educational experience that enhances communication, teamwork, and leadership skills while fostering an appreciation for other cultures.

- Instill characteristics that will fully develop our students’ human potential

  By inspiring students to pursue life-long learning, it is our goal to prepare students with an understanding and acceptance to changes or challenges they may face in the aviation industry.

- Promote a solid foundation for the continued utilization of technology

  Due to ever changing technology demands in the aviation industry we provide a foundation of knowledge for current technology use and future applications.

- Provide skills to build and promote a culture of safety in the aerospace industry
Emphasize our vitally important role in the transfer of new information and the building of a culture of safety throughout the aviation community.

**Unmanned Aircraft Systems**

The primary mission of the Unmanned Aircraft System program is to serve the Department of Aviation, the John D. Odegard School of Aerospace Sciences, the University of North Dakota, the North Dakota State University System, and the State of North Dakota. The secondary mission of the UAS program is to propose and engage in UAS research, education, and training endeavors to enhance opportunities for students and faculty, and to ensure a perpetual state-of-the-art UAS program.

**Air Traffic Management Program Outcomes**

- Knowledge of and the ability to apply tower operations.
- Knowledge of and the ability to apply radar operations.
- Knowledge of and the ability to apply non-radar operations.
- Knowledge of emerging industry procedures and techniques.
- Knowledge and ability to apply Air Traffic Management in an integrated setting

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**UNIVERSITY OF NORTH DAKOTA STATEMENT ON ASSESSMENT**

The assessment of aviation students starts at the university level. UND’s definition of assessment is:

“Assessment is a process by which information from multiple sources is gathered and critically examined to better understand what our students are learning in relation to stated learning goals. Effective assessment results in “informed decision-making” — documenting assessment activities with clarity and in a way that demonstrates continuity and consistency and using the results of assessment to improve student learning.”

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**Assessment Learning Cycle**

[Diagram showing the assessment learning cycle]

- Define intended learning objectives
- Compare outcomes with intended objectives
- Provide learning opportunities
- Redesign program to improve learning
The Department of Aviation’s Assessment Measures

The Department of Aviation uses several methods to gather direct and indirect assessment data over the course of each academic year. Data gathered is used to improve students learning and strengthen UNDs relationships with industry to ensure students entering the industry are prepared and competitive within their respective career fields. Some methods used include:

1) Focus Groups
2) Surveys (Graduating Senior Survey, Student Surveys, and Alumni Surveys)
3) Stage Check completion Rates
4) Capstone Projects
5) Aviation Alumni Board Feedback
6) Program Review
7) Faculty Assessment and Discussion of Learning Outcomes

More specific information, along with timelines can be found in the Department of Aviation’s Assessment Plan:

Assessment Plan: Department of Aviation

Graduation Rates

<table>
<thead>
<tr>
<th>Initial Term</th>
<th>FTFT Cohort (1st Fall)</th>
<th>Fall to Fall Retention</th>
<th>4th Year Grad</th>
<th>6th Year Grad</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>9</td>
<td>78%</td>
<td>22%</td>
<td>44%</td>
</tr>
<tr>
<td>2011</td>
<td>12</td>
<td>67%</td>
<td>8%</td>
<td>50%</td>
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<tr>
<td>2012</td>
<td>28</td>
<td>89%</td>
<td>21%</td>
<td>57%</td>
</tr>
<tr>
<td>2013</td>
<td>27</td>
<td>89%</td>
<td>56%</td>
<td>56%</td>
</tr>
</tbody>
</table>

Job Placement

Graduates of UND Unmanned Aircraft Systems degree program work in a variety of fields including but not limited to government contractors, the US government, and agriculture:

UND Institutional Research conducts placements surveys:

Placement Survey