



## Annual Assessment Update

<http://www.caspercollege.edu/assessment/index.html>

**Purpose:** The purpose of the *Program Annual Assessment Update* is to provide information about progress in assessment efforts for each program within your department. Only one report is requested of each department, as this update will accommodate multiple degree plans. (You can still submit separate reports if you prefer.) The report will be made available <http://www.caspercollege.edu/assessment/index.html>. It is recommended that your department use your assessment update and results to *celebrate achievements of student learning* as well as to *identify potential areas for future curriculum improvement*.

Please email this completed form as an attachment to [kthatcher@caspercollege.edu](mailto:kthatcher@caspercollege.edu).

### CONTACT INFO:

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|-------------------------------------|---|
| 1. Degree Program(s) reported here: | Robotics Technology AAS<br>Certificate: Robotics Technology |
| 2. Department:                      | Robotics Department   |
| 3. School:                          | Business and Industry                                       |
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| 6. Date Submitted:                  | February 9, 2011  |
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### ASSESSMENT UPDATE:

**Instructions:** Please answer the following **five** questions to the best of your ability for each degree program offered within your department or *you may use the table provided on the next page*.

- Summarize your **assessment activities** during the past year for each degree program. (*e.g. faculty discussions, new survey design, data collection, revised assessment plans or learning outcomes, etc.*).

*During the 2009-2010 academic year, there was some change to the Robotics assessment plan. The data collected by the Robotics Matrix was modified to represent more accurate data about the Robotics program.*

- Describe specific **assessment findings** related to the **learning outcomes** assessed for each degree program, including any pertinent context surrounding the findings. Please include the **learning outcomes themselves**. (*e.g. 77% of students performed at the "proficient" level of competency in problem solving, which is where we aimed to be this year using a new scoring rubric...*)
  - Please attach any tables, graphics, or charts to the end of this report.

## **Robotics Technology Program**

Data for the assessment plan will be collected and analyzed on a yearly basis and used to modify and improve the courses and equipment needs in the robotics program.

### A. Employment Statistics:

Goal A: 80% of students who graduate from the robotics programs are able to find employment in the robotics field, a related field, or are pursuing an advanced degree.

2009 – 2010	Robotics Graduates:	1
	Employed Graduates:	1

#### Employment analysis:

- a. 100% (1student) of the graduates were employed in a robotics related field.

### B. Employer Survey:

Goal A: 80% of employers responding to a survey are satisfied with the knowledge and skills of the graduates of the robotics programs.

A satisfactory result for this survey is a score of good or excellent. During the 2009-2010 academic year, there was no employer survey, because there were no previous graduates from the Robotics program. Also, there was no employer survey of the Robotics Advisory members, because an Advisory Board had not been organized.

### C. Robotics Technology Departmental Matrix, 2009-2010:

Goal B: 70% of the graduates of the robotics programs will obtain a satisfactory rating on the robotics matrix. A satisfactory result for this survey is a score of good or excellent.

#### Analysis of the Matrix Data for the Robotics Program:

1. The results of the Robotics Matrix indicates that **75%** of the robotic students for the 2010 – 2011 school year were rated as satisfactory (good or excellent) on their knowledge of robotics and their skills in robotics.

2. It also indicates that there is room for improvement in both the knowledge and skills areas for the robotics students, with 17% of the robotic students with an unsatisfactory rating.
3. The withdrawal rate is 8%, which is about average for this program.
  - These results indicate that the Robotics Department should do more to retain students in the robotics program. Also, the Robotics Department needs to improve its recruiting efforts to bring in more entry level students.

Data Matrix for the Robotics Program:

Knowledge and Skills	Course and Indicator	Very Poor	Average	Good	Excellent	Withdrawal	Total Number of Students
Knowledge of Robot Fundamentals	ROBO 1610 Final Project	1		1	6	1	9
Use of Equipment	ELTR 1515 Test 1	1	2	1	11	2	17
LabView Programming	ROBO 2580 Test 1	1			2		3
Programming a Robot Control System	ROBO 2590 Final Project		1		2		3
Knowledge of Electro-Mechanical Subsystems	ROBO 2595 Final Project				3		3

Student Subtotal	3	3	2	24	3	35
Percent	8.5%	8.5%	6%	69%	8%	100%

3. Describe how assessment **feedback** has been provided to students, faculty, and staff. (*e.g. report for faculty, executive summary for the dean, web page for students, alumni newsletter, discussion with students in class or club event, etc.*)

The faculty of the Robotics program will all receive a copy of the assessment report for their review. The assessment report will be discussed during Robotics Departmental meetings. A copy of the Robotics program assessment is sent to the Dean of the School of Business and Industry and forwarded onto the Vice President of Academic Affairs and assessment coordinator. At this time there is no feedback to students, but there will be a link on the Robotics Department web page to the online assessment report in the future.

4. In what ways have you **used assessment findings** to celebrate student achievements and/or to improve the curriculum this past year? (*e.g. prizes to students, hosting student parties, changes to curriculum, student projects, learning goals, assessment strategies, etc.*)

The assessment findings will be used to change the course curriculum and to update equipment for the courses within the Robotics program.

5. Describe any changes to your assessment plans, or any challenges or educational experiences with the **assessment process** this past year that you would like to share.

- a. Please submit any **revised/updated assessment plans** to the Assessment Office along with this report.

The assessment findings have been used to change the course curriculum for several classes within the Robotics program.