

## General Information

<b>Academic Year:</b>	2016-2017
<b>College:</b>	Business
<b>Department:</b>	CIS & Quantitative Methods
<b>Program:</b>	Accounting and Information Technology (MS)
<b>Program Code:</b>	30.16
<b>Outcome Type:</b>	Student Learning (GR)
<b>Degree:</b>	Masters
<b>Coordinator/Contact:</b>	Dr. Ann L. Watkins, Chair
<b>Status:</b>	Data Entry Closed

## Mission Statement

The mission of the Master of Science in Accounting Information Technology (MSAIT) program is to prepare students for successful careers in the accounting and information technology professions. Students may be eligible to sit for professional certification exams, such as CPA, CISM, CITP, CIA, AFE and others. The MSAIT program emphasizes oral and written communication, information technology, and technical and research skills needed for a careers in accounting and information technology.

## Evidence of Improvement

The learning outcomes for this program were reviewed in fall 2016. It was decided that learning outcomes 1 & 2 were very similar in nature and could be assessed simultaneously (critical thinking skills could be assessed when students were required to exploring new questions and analyze complex issues from multiple perspectives and arrive at a reasoned conclusion). Students had been exceeding expectations for outcome 6, **Ethical Reasoning**, for a number of years. It was decided to focus faculty efforts in improvement of the four remaining areas of identified learning outcomes. The MSAIT program will be moving to the department of CIS & QM in fall 2017. We anticipate that there will be program changes that will impact assessment in the future.

In the academic year (AY) 2016-2017 MSAIT students were assessed on their ability to exhibit critical thinking skills when applying accounting information technology in new and unfamiliar situations, use information technology skills in decision making at a level expected of a master's student for practice and research and in a business consulting capacity, and communicate complex issues clearly. A comparison prior-year results indicate improvement in three following areas:

**Outcome 1. Students will apply analytical and critical thinking skills to evaluate information, solve problems, and make sound decisions in accounting and information technology problems. Students will synthesize and evaluate the relevance of data and demonstrate analytical and critical thinking skills in exploring new questions, analyzing complex issues from multiple perspectives and arrive at reasoned conclusions.**

For CIS 5568 (Information Security) the Learning Outcomes Assessment of 2011 forms the baseline to measure improvement. A comparison of the 2016 results with 2011 results provide evidence of improvement on this outcome using this method of assessment. There has been improvement, from 34% to 58% of students exceeding expectations, with a drop of 31% to 11% of students not meeting expectations.

**Outcome 2. Students will use information technology skills in decision making at a level expected of a master's student for practice and research in accounting and information technology used in a business consulting capacity. Students will learn to use information technology (IT) and be able to apply IT in analysis and communication.**

For CIS 5568 (Information Security) a comparison of 2016 results with 2011 results provide evidence of improvement. The overall percent of exceeding expectations increased from 21% to 66%. For ACC 5375 (Business Consulting) although the rigor of the assignment increased over last year, 100% of students met with expectations when writing a consultant's report thus demonstrating improvement on this metric. Students have demonstrated improvement in both methods used to assess this learning outcome.

## Action Plan

MSAIT students showed improvement two of the four learning outcomes. Students were meeting expectations in the other two areas of assessment, but did not show improvement over prior years. Details of specific action plans for each course used to help students meet the learning outcomes established for the MSAIT program are provided in detail for each course below.

## Outcome 1

**Category:** Student Learning Outcome

Students will apply analytical and critical thinking skills to evaluate information, solve problems, and make sound decisions in accounting and information technology problems. Students will synthesize and evaluate the relevance of data and demonstrate analytical and critical thinking skills in exploring new questions, analyzing complex issues from multiple perspectives and arrive at reasoned conclusions.

### Outcome 1 - Method 1

CIS 5355 (Database Management Systems) and CIS 5368 (Information Security) will use a rubric to evaluate a set of out-of-class individual assignments/projects. It is expected that 80% of students will meet or exceed expectations relating to a student's ability to apply accounting and information technology knowledge in new and unfamiliar circumstances as defined by the rubric. Exam-embedded questions will also be used. It is expected that 80% of the students will answer 85% or more questions correctly.

### Outcome 1 - Method 1 - Result

#### CIS 5368 (Information Security)

##### Result:

The following results assess the overall ability of the student to successfully plan and implement security methods and procedures and are based on the performance of 19 students enrolled in CIS 5368.

Percentage of students assessed that

Exceeded Expectations	Met Expectations	Did Not Meet Expectations
58%	32%	11%

During the Fall semester of 2016, the 19 students enrolled in the CIS 5368, Information Security, were assessed by the instructor using two methods; 1) a test of multiple choice questions worth 150 points, and 2) A project of applied best practices worth 100 points. Each method result was calculated as a percent correct, points earned divided by the points worth for the item. For the overall result, the average of the two percent results was calculated. Exceeded Expectations was defined as 90% or better. Met Expectations was defined as 70% to 89%. Did Not Meet Expectations was defined as less than 70%.

The overall results had 90% of the students scoring above 70%.

##### Action Plan

Since 90% of the students met or exceeded expectations, current presentations and evaluation of the course content will continue.

### Outcome 1 - Method 2

In ACC 5375 (Business Consulting), projects will be used to assess students' ability to apply accounting and IT knowledge. The projects will be assessed using a rubric. It is expected that 80% of students will meet or exceed expectations as defined by the rubric.

### Outcome 1 - Method 2 - Result

#### ACC 5375 (Business Consulting)

##### Results:

The ability to understand consulting concepts was tested through a series of four in-class quizzes covering consulting concepts. 68% of students met expectations. The rigor of questions was increased over the previous semester and this may be why results declined over the 2015-2016 results.

##### Action Plan:

The rigor of test questions will remain the same and a greater emphasis will be placed on review of material.

### Outcome 2

#### Category: Student Learning Outcome

Students will use information technology skills in decision making at a level expected of a master's student for practice and research in accounting and information technology used in a business consulting capacity. Students will learn to use information technology (IT) and be able to apply IT in analysis and communication.

IT skills will be evaluated using the following methods:

### Outcome 2 - Method 1

CIS 5355 (Database Management Systems) and CIS 5368 (Information Security) will use a rubric to evaluate a set of out-of-class individual assignments/projects. It is expected that 80% of students will meet or exceed expectation with respect to their ability to use information technology (IT) and be able to apply IT in analysis and communication as defined by the rubric. Exam-embedded questions will also be used. It is expected that 80% of the students will answer 85% or more questions correctly.

### Outcome 2 - Method 1 - Result

#### CIS 5368 (Information Security)

##### Results:

The following results assess the overall ability of the student to successfully plan and implement security methods and procedures and reflect a combined average of two methods of assessment based on the performance of 19 students enrolled in CIS 5368.

Percentage of students assessed that

Exceeded Expectations	Met Expectations	Did Not Meet Expectations
66%	24%	11%

During the Fall semester of 2016, the 19 students enrolled in the CIS 5368, Information Security, were assessed by the instructor using two methods; 1) a test of multiple choice questions worth 150 points, and 2) an assignment worth 40 points. Each method result was calculated as a percent correct, points earned divided by the points worth for the item. For the overall result, the average of the three percent results was calculated. Exceeded Expectations was defined as 90% or better. Met Expectations was defined as 70% to 89%. Did Not Meet Expectations was defined as less than 70%.

The results of the two methods and overall results had 90% of the students scoring above a 70%.

#### **Action Plan**

Since overall 90% of the students met or exceeded expectations, current presentations and evaluation of the course content will continue.

#### **Outcome 2 - Method 2**

ACC 5375 (Business Consulting) will use term papers and projects. A rubric will be developed to assess a student's ability to apply IT in analysis and communication in the term paper and the project. It is expected that 80% of the students will use IT and apply IT in analysis and communication at the level that meets or exceeds expectations as defined by the rubric.

#### **Outcome 2 - Method 2 - Result**

##### **ACC 5375 (Business Consulting)**

##### **Results:**

Berry Aviation provide a live project to test students' ability to apply accounting and IT knowledge. Students were required to evaluate and select time and expense reporting software for Berry and to present their findings in a written report. Berry Aviation is a local company that operates internationally. It provides charter, cargo, and armed forces support services. Students were only generally familiar with requirements for time and expense reporting and were unfamiliar with a company engaged in air services such as Berry. Students were provided with several examples of actual consulting proposals and two examples of a consultant's final report. Based on the Berry Aviation project students were required to write a proposal and a final report. Overall rigor was increased over last year. Again, 100% of students met the expectation.

##### **Action Plan:**

Given the rigor of the assignment increased, students demonstrated improvement over last year.

#### **Outcome 3**

**Category:** Support Service Outcome

Students will conceptualize a complex issue into a coherent, persuasive written or oral statement. To fulfill the written portion of the outcome, the student will develop well-written reports, memos, and projects that explain findings, organize ideas into a coherent train of thought, and justify a conclusion or recommendation. Students will make effective oral presentations that explain findings, organize ideas into a coherent train of thought, and justify a conclusion or recommendation.

Written and oral communication skills will be assessed using the following methods:

#### **Outcome 3 - Method 1**

CIS 5368 (Information Security) will use out-of-class individual assignments/projects. The instructor will use a rubric to evaluate the set of out-of-class assignments. It is expected that 80% of the students will meet or exceed expectations established for written and oral communication skills as defined by the rubric.

#### **Outcome 3 - Method 1 - Result**

This measure was not assessed in CIS 5368.

#### **Outcome 3 - Method 2**

Oral communication skills will be assessed through student presentations in ACC 5375 (Business Consulting). A rubric will be used for the assessment. It is expected that 80% of students will meet or exceed expectations as defined by the rubric.

#### **Outcome 3 - Method 2 - Result**

##### **ACC 5375 (Business Consulting)**

Last year's action plan was to recruit Berry Aviation to provide a live project for students so that management personnel would be available to the students to interview and assist in evaluating students' proposals and reports. Berry operates internationally and timely submission of time and expense reports is very important. Students were assessed on the degree to which software selected was appropriate and how well they communicated their research findings with respect to the software's capabilities and were able to support their decision in an oral presentation. 85% of students exhibited the ability to clearly communicate and support their proposal to the client. Students met with expectations, and were the same as the 85% achieved in 2015-2016.

##### **Action Plan:**

The Berry project worked very well. For the next year, we plan to use McCoy's Building Supply. McCoy's has been a client in the past. Time permitting, we intend to allow students to do smaller presentations early in the semester so that feedback can be provided prior to the presentation to their client.

#### Outcome 4

Students will understand the importance of group dynamics in achieving organizational goals and use the skills needed for effective teamwork. Students will demonstrate an ability to work effectively in teams.

Teamwork skills will be assessed using the following methods:

#### Outcome 4 - Method 1

In ACC 5375 (Business Consulting) students will be assigned to teams to work on a project or projects. Various aspects of effective, quality teamwork will be assessed based on a rubric. It is expected that 80% of students will meet or exceed expectations as defined by the rubric.

#### Outcome 4 - Method 1 - Result

##### ACC 5375 (Business Consulting)

##### Results:

Students were required to work in teams on a project to evaluate and select time and expense reporting software. Teams were required to make group presentations of their written proposals to the client. Assessed was the ability to communicate their analysis of the system software requirements and make an appropriate evaluation and selection of software as a team. Teams performed self evaluations of each members participation and performance. 89% of students met with expectations. This is a slight drop over last year's performance of 95%, but may reflect the challenge of working with a business model unfamiliar to them.

##### Action Plan:

The Berry project worked very well. Next year we plan to use McCoy's Building Supply. McCoy's has been a client in the past. We plan to evaluate and select corporate performance management software. Students will continue to work in teams and make their presentations as a consulting team.

#### Outcome 4 - Method 2

CIS 5355 (Data Management Systems) will use an out-of-class group projects to assess this skill, using a rubric. It is expected that 80% of students will meet or exceed expectations as defined by the rubric.

#### Outcome 4 - Method 2 - Result

This metric was not assessed in CIS 5355.

#### Outcome 5

**Category:** Support Service Outcome

The academic program will promote and realize gains in student success.

#### Outcome 5 - Method 1

Student retention success will be measured by observing one year retention rates of students enrolled in the academic program from their first to second year. Data will be obtained from the university's certified enrollment records at the end of the fall semester. Rates of retention success will be expected to be at or above the university average for this level of program.

#### Outcome 5 - Method 1 - Result

The number of entering students enrolled in the academic program who returned the second year provided the data to assess retention. In this program, 3 of the 3 entering students in fall of 2015 returned for their second year in fall of 2016 for a one-year retention rate of 100.0%, exceeding the university average of 83.1% and meeting the expected target. The 2016-2017 retention rate was equal to the 100.0% retention rate in 2015-2016 showing an improvement.

#### Outcome 5 - Method 2

Student graduation success will be measured by observing the number of graduates from the academic program in during the fall, spring, and summer semesters and comparing the number of graduates to the number of students enrolled in the program. Data will be obtained from the university's certified enrollment records for the fall, spring, and summer semesters. The number of graduates is expected to be at or above the university rate of graduation for this level of program.

#### Outcome 5 - Method 2 - Result

The number of students graduating from the degree program during the 2016-2017 fall, spring, and summer semesters along with the total number of students enrolled in the program provided the data to assess student graduation success. In this program, 5 of the 18 students enrolled in the program graduated in the fall, spring, and summer semesters for a graduation percentage of 27.7 below the university master's average of 37.5% and not meeting the expected target. The percentage of graduates in 2016-2017 was above the 25.0%, of graduates in 2015-2016 showing an increase.

**Outcome 6****Category:** Support Service Outcome

The academic program will promote and realize diversity among its student population.

**Outcome 6 - Method 1**

Student gender diversity will be measured by reviewing the number and percentage of male and female students enrolled in the academic program during the fall, spring, and summer semesters. Data will be obtained from the university's certified enrollment records at the end of the fall semester. Student gender diversity will be expected to be balanced (50/50).

**Outcome 6 - Method 1 - Result**

The number of male versus female student enrolled in the academic program during the 2016 fall semester provided the gender data. In this program, 7 of the 18 students or 38.9% were female while 11 of the students or 61.1% were male providing an imbalanced gender distribution and not meeting the expected target. The percentage of female and male student in 2015-2016 was 43.8% and 56.3% respectively; thus, the male-female ratio has become less balanced in 2016-2017.

**Outcome 6 - Method 2**

Student racial and ethnic diversity will be measured by observing race and ethnicity of students enrolled in the academic program during the fall, spring, and summer semesters. Data will be obtained from the university's certified enrollment records at the end of the fall semester. Student racial and ethnic diversity will be expected to mirror percentages in the population of the state of Texas.

**Outcome 6 - Method 2 - Result**

The number students of various ethnic backgrounds enrolled in the academic program during the 2016-2017 fall semester provided the data to assess ethnic and racial diversity. In this program, 0 of the 18 students or 0.0% (compared to 0.0% in 2015-2016) were African-American; 3 of the 18 students or 16.67% (compared to 6.3% in 2015-2016) were Hispanic; 7 of the 18 students or 38.89% (compared to 50.0% in 2015-2016) were White, non-Hispanic; 0 of the 18 students or 0.0% (compared to 12.5% in 2015-2016) were of other minority or unknown backgrounds; 6 of the 18 students or 33.3% (compared to 31.3% in 2015-2016) were of non-resident International students. During 2016-2017, other Emerging Research Universities in the state of Texas had populations consisting of 9.9% African American, 31.4% Hispanic, 35.7% White, non-Hispanic, 13.3% other minority or unknown background, and 9.7% non-resident International students. Thus, the data for this program indicate students represent a racial and ethnic diversity distribution unlike that of other Texas Emerging Research Universities, also indicating that the program is not meeting the expected target. Compared to 2015-2016, the student population in 2016-2017 appears to represent a more diverse background.

**Approval History****Approval History Event**

Outcomes Approved Level 1

Outcomes Approved Level 2

Outcomes Audit Report Submitted

Results Approved Level 1

Results Approved Level 2

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