**Curriculum**

Curriculum Review Process

The MSAIT program coordinator and graduate faculty in the Accounting and CIS&QM departments are responsible for developing improvements in the MSAIT program. There have been several changes recommended by the faculty over the years. These changes went through the university curriculum change process (Section F. Graduate Program Improvement in CBAPPS 2.08 Graduate Programs in the McCoy College of Business Administration) to be implemented.

Curriculum Requirements

|  | | |
| --- | --- | --- |
| **Code** | **Title** | **Hours** |
| Required Courses | |  |
| ACC 5361 | Accounting Analysis for Managerial Decision Making | 3 |
| ACC 5375 | Business Information Consulting | 3 |
| FIN 5352 | Financial Management | 3 |
| CIS 5355 | Database Management Systems | 3 |
| CIS 5358 | Agile Project Management for Business Professionals | 3 |
| CIS 5368 | Information Security | 3 |
| CIS 5371 | Accounting Information Systems and Controls | 3 |
| Prescribed Electives | |  |
| Choose 15 hours from the following: 1 | | 15 |
| [ACC 5352](http://mycatalog.txstate.edu/search/?P=ACC%205352) | Financial Statement Reporting and Analysis |  |
| [ACC 5355](http://mycatalog.txstate.edu/search/?P=ACC%205355) | IT Auditing |  |
| [ACC 5362](http://mycatalog.txstate.edu/search/?P=ACC%205362) | Cost and Managerial Accounting Theory |  |
| [ACC 5373](http://mycatalog.txstate.edu/search/?P=ACC%205373) | Fraud Detection and Prevention |  |
| [CIS 5318](http://mycatalog.txstate.edu/search/?P=CIS%205318) | Information Technology in the Digital Economy |  |
| [CIS 5357](http://mycatalog.txstate.edu/search/?P=CIS%205357) | Computing for Data Analytics |  |
| [CIS 5360](http://mycatalog.txstate.edu/search/?P=CIS%205360) | E-Commerce: Strategies, Technologies, and Applications |  |
| [CIS 5364](http://mycatalog.txstate.edu/search/?P=CIS%205364) | Data Warehousing |  |
| [CIS 5370](http://mycatalog.txstate.edu/search/?P=CIS%205370) | Enterprise Resource Planning and Business Intelligence |  |
| [CIS 5378](http://mycatalog.txstate.edu/search/?P=CIS%205378) | Information Security Policies and Compliance |  |
| [CIS 5395](http://mycatalog.txstate.edu/search/?P=CIS%205395) | Internship in Computer Information Systems |  |
| [QMST 5332](http://mycatalog.txstate.edu/search/?P=QMST%205332) | Optimization |  |
| [QMST 5334](http://mycatalog.txstate.edu/search/?P=QMST%205334) | Statistical Methods for Business |  |
| [QMST 5335](http://mycatalog.txstate.edu/search/?P=QMST%205335) | Forecasting and Simulation |  |
| [QMST 5336](http://mycatalog.txstate.edu/search/?P=QMST%205336) | Analytics |  |
| Total Hours | | 36 |

|  |  |
| --- | --- |
| 1 | At least one but not more than two of the five must be an Accounting course. |

Curriculum learning experiences relevant to:

* Business theories and practices
* Database: Development of relational database and use of SQL queries.
* Security: Analysis, design, development, implementation, and maintenance of information security systems.
* Project management: Agile project management with Scrum.
* Accounting information system: Data transfer/transaction cycles, information technology/business information systems assessments, design of internal controls to satisfy regulation and policy requirements.
* Business consulting: Skills of a Sr. Consultant in a Big "4" firm.
* Engagement with business practitioners
* Guest speakers in class and at professional development events allows for students to engage with practitioners.
* The student chapter of the Information Systems Audit and Control Association (ISACA) supports students as a part of the MSAIT program.
* Internships (such as students with Rush Enterprises and Frost Bank) also give students the opportunity to engage in business activity outside of the classroom.
* Cultural norms
* Security: Coverage of legal, ethical, professional, and personnel issues.
* Project management: Coverage of human, cultural, and international issues as well as their impact on the organization.
* Life long learning
  + ISACA is a global association that provides IT professionals with knowledge, credentials, training and community in audit, governance, risk, privacy and cybersecurity. It provides life-long learning opportunities. The MSAIT students organize the Texas State student chapter of ISACA and participate in the activities provided by the student chapter and the professional chapter in Austin.
* Societal impact
  + We will look for opportunities to include learning experiences related to societal impact.

Information technology

The curriculum has incorporated many current and emerging information technologies. In addition to traditional Microsoft Excel, the faculty use database management systems (such as MS SQL Server, MySQL), R for statistical computing and graphics, SCRUM for project management, SAP for enterprise resource planning, and IDEA data analysis tools for information systems control to teach courses in the MSAIT program.

**Assurance of Learning**

Process for review of learning goals

A review of the learning goals is a part of the process that develops improvements in the MSAIT program.

* The learning outcomes are (1) information technology skills, (2) analytical and critical thinking skills, (3) written and oral communication skills, and (4) teamwork.
* The instructors of CIS 5355, CIS 5358, CIS 5368, and ACC5375 report their assessment results and make action plans to improve the students’ learning.
* The program coordinator reviews the assessment results and the action plans.
* Based on the annual learning outcome assessment, the faculty or the coordinator can recommend changes of the curriculum. The curriculum changes, which must go through the university curriculum change process, must include the review of the program’s learning goals.

Learning goals

1. Students will use information technology skills in decision making at a level expected of a master's student for practice in accounting and information technology. Students will learn to use information technology (IT) and be able to apply IT in analysis.
2. 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.
3. Students will conceptualize a complex issue into a coherent 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
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.

How often are learning goals reviewed

The learning goals are reviewed annually.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Learning Goal | Performance Target | How Assessed | Where Assessed | When Assessed | Results | Improvement Identify whether process (P) or Curriculum (C) (Date changes were made) |
| Direct Measures | | | | | | | |
| 1 | \*See Below | \*\* See Below | CIS 5355  CIS 5368 | Every long semester | Failed to meet  Met | \*\*\* See Below |
| 2 | \*See Below | \*\* See Below | CIS 5355  ACC 5375 | Every long semester | Failed to meet  Met | \*\*\* See Below |
| 3 | \*See Below | \*\* See Below | CIS 5368  ACC 5375 | Every long semester | Failed to meet  Met | \*\*\* See Below |
| 4 | \*See Below | \*\* See Below | CIS 5358  CIS 5355 | Every long semester | Failed to meet  Met | \*\*\* See Below |
| Indirect Measures | | | | | | | |
|  | | | | | | |
|  |  |  |  |  |  |  |

Currently the program does not use indirect measures as part of its curriculum or assessment review. However, as part of the next curriculum review process a discussion will be held on prospective indirect measures to obtain and use as part of the review processes. Potential indirect measure to consider will include the college graduate salary survey, the university graduate alumni survey, and others.

**\* The standards of performance are:**

* Scores of 80 % correct or better will indicate that the student meets expectations
* Scores less than 80% correct will indicate that the student fails to meet expectations.

It is expected, by each professor, that 80% of students enrolled in the course during the academic year will meet the standards on each learning outcome.

**\*\* How learning outcomes are assessed:**

Outcome 1

* CIS 5355 (Database Management Systems) and CIS 5368 (Information Security) will use exam-embedded questions. It is expected that 80% of the students will answer 85% or more questions correctly.
* 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 IT and be able to apply IT in analysis as defined by the rubric.

Outcome 2

* CIS 5355 (Database Management Systems) 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.
* 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 3

* 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.
* 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 4

* In CIS 5358 (Agile Project Management), 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.
* 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.

**\*\*\* MSAIT program evidence of improvement for 2019-2020:**

Outcome 3

For ACC 5375 (Business Consulting), there has been improvement. After the instructor placed emphasis on quiz preparation, results in the classes of the AY 2019-2020 slightly exceeded performance in previous classes.

Outcome 4

There has been improvement, from 95% to 100% of teamwork quality in the project groups of CIS 5358.

Faculty involvement in the process

Faculty that teach a particular core MSAIT class reviews the assessment results and makes any necessary adjustments.

**Learner Development**

Admission requirements

The MSAIT Admissions Committee takes a holistic approach when reviewing applications. If an applicant has a below average last 60 hours GPA, they will look for something to offset it, like an above average GMAT/GRE, or work experience.

Advising

The program coordinator is responsible for advising MSAIT students. Due to course restrictions, most students must visit with the advisor before registering for classes.

Student intervention process

If a student’s GPA falls below 3.0, they are automatically put on academic probation by the Graduate College. The Graduate College requires that they student’s GPA equal or exceed 3.0 by the end of the next semester. When this occurs, the graduate academic advisor meets with the student to design a plan to get the student back on track. In some cases, this may require retaking one or more courses. In other cases, it may be the student takes fewer hours. In all cases, it is made clear to the student what they must do to avoid academic suspension and return to good academic standing. The Associate Dean for Graduate Programs generally reviews each probationary student’s plan.

When was the program last updated?

Fall 2018

What changes were made?

After a program review, the MSAIT program completed a transition from the Department of Accounting to the Department of Computer Information Systems and Quantitative Methods in Fall 2018. The graduate faculty the Department of Accounting to the Department of Computer Information Systems and Quantitative Methods worked to strengthen course offerings in the theory, organization, and process of managing accounting/financial information for corporations, government, and nonprofit organizations. As a result, ACC 5362, ACC 5371, and CIS 5370 were removed from the core and the following courses were added: FIN 5352, ACC 5361, CIS 5358, and CIS 5371.

Describe where changes to the curriculum were due to the AoL process.

If the measured learning outcomes are not met in a particular class, the faculty will propose changes to be made. For example, during the fall semester of 2017, CIS 5368 (Information Security) used exam-embedded questions to assess students’ learning of information technology skills. The results did not meet the expectation; then, the instructor of CIS 5368 made a plan to revise presentations to stress key concepts.

What curricular changes are planned for the future?

We plan to continuously enhance the program to serve needs of the job market in STEM. We will continue curriculum development and follow the technology innovation by corporations (such as Microsoft, SAP, and Google) and open-source communities (such as R and Python).

How does the program take action when learners have not met competency goals?

Generally, this has not been an issue. All goals are assessed in two or more core MSAIT courses. In the few cases where it has occurred, the faculty teaching the courses where the goals were not met will review the issue and corrective action is taken. This may be in the form of revising how the material is taught or a revision in the assessment method.