

Note: Enter "NA" wherever data are not applicable or not available for the program under review.

#### **Program Characteristics**

Academic Program Name: Management Information Systems (MIS)

Degree: Bachelor of Business Administration (B.B.A.)

Program CIP Code: 52.1201

School and Department: Wright School of Business

Time frame for this review: 2014/2015 - 2018/2019

Date of last internal review: June 2016

Current date program reviewed for this report: December 2019

#### **Program Goal Statement and Student Learning Outcomes**

### Program goal statement:

The Bachelor of Business Administration in Management Information System degree program will prepare graduates to meet the challenges of a career in management information systems. Career areas include computer programming, systems analysis and design, database administration, network and security, and end-user computing support. Careers in MIS are found in business, industry, and government.

#### Program outcomes:

- 1. Students will demonstrate a basic knowledge of business as well as competencies within the functional areas of business.
- 2. Students will find employment in fields related to management information systems.

#### Student learning outcomes:

- 1. Students will demonstrate knowledge and skills in fundamental computer programming.
- 2. Students will demonstrate fundamental knowledge and skills in communication technologies.
- 3. Students will demonstrate knowledge and skills in fundamental database management systems.
- 4. Students will demonstrate knowledge and skills in fundamental principles and techniques of systems analysis and design.
- 5. Students will demonstrate knowledge and skills in fundamental vocabulary and resources for management of information systems.



#### **Brief Assessment of Previous Program Review**

Outcome of previous program review (brief narrative statement).

The previous program review documented a viable program that had increased 10% over the review period and had seen more than a 32% increase in full-time enrollment. Additionally, the program saw strong growth in female and minority enrollments, especially for African American and Hispanic students. The review reflects the challenges of recruiting and retaining qualified MIS faculty and ongoing financial pressure to support other programs. The number of full-time faculty decreased by 50%, with a 67% decrease in doctoral faculty. The combination of an increasing enrollment and decreasing faculty members led to insufficient course availability and negligible electives. Lack of course availability and turmoil in maintaining a qualified faculty group contributed to a disappointing trend in the number of students graduating with a BBA in MIS. Despite the difficulties in retaining qualified faculty members, students successfully achieved program outcomes in all upper-level MIS courses. Additionally, job placement rates for the graduates were good and continuing to improve. Management Information Systems was one of the first two baccalaureate degrees requested by the community in 1998. At the time of the previous review, students with an MIS degree continued to be a recruiting priority for local businesses with the program expected to continue to make a significant contribution to the economic vitality of the Northwest Georgia region.

What improvements have occurred since the last program review or assessment?

The most important improvement in the last review cycle, consistent with the previous review's action plan, is the success in hiring new faculty members and stabilizing the MIS faculty group. The Dean and MIS group conducted external searches and made two hires, one in Fall 2017 at the assistant professor level with a PhD from Baylor University (i.e., Scholarly Academic) and the other in Spring 2019 with a master's degree to replace the master's-level associate professor who retired at the end of Fall 2018. The three existing MIS faculty members know each other well and collaborate effectively and efficiently to improve the MIS program. Now that the MIS group contains two faculty members holding doctorates and meeting research targets, AACSB scholarly academic (SA) classification requirements are met. Further, both required and elective courses for the MIS program are offered regularly in a pattern published on the DSC website to ensure predictable program progression.

Two other important program improvements are the cultivation of closer partnerships with local companies and increased hands-on experience with commercial-grade systems. Partnerships with companies that offer internship and career opportunities for students ensure that an MIS program remains relevant and provides knowledge and skills attractive to employers. The full professor hired in Fall 2015 made company partnerships a high priority and began initiating contact with IT leaders during her first semester at Dalton State. Further, the professor and Associate Dean D'Itri became members of the STEM Advisory Board organized by the Dean Griffus of the School of Science, Technology, and Mathematics. The efforts have resulted in ongoing dialog with various partners regarding curriculum, classroom speakers, internships, and career paths. The MIS group discusses all significant curriculum and course content changes with industry partners, resulting in confidence that the changes are important to students' preparation for the job market.

In conjunction with the close collaboration with industry, the MIS group has incorporated commercial-grade programming languages, software, and systems in all MIS courses at little to no cost to students. The MIS



group developed a list of important knowledge, skills, and software exposure that is regularly reviewed by industry partners. Examples include, but are not limited to, Java, Transact SQL, SAP S/4 HANA and other SAP products, SQL Server Management Studio, Visual Studio, Cisco networking and IS security labs, and Microsoft Visio.

What changes or revisions have been made to the program, its curriculum, or its program/student learning outcomes since the last program review? Please include a follow-up discussion of the previous review's action plan.

As discussed in the previous review, elective courses add important knowledge and skills that make students more attractive in the job market. Since the last program review, the MIS group added two new elective courses, MGIS 4360 (Databases for Big Data and Analytics) and MGIS 4580 (Supply Chain Management Systems), and revived a third course with new content, MGIS 4358 (Web-Based MIS). The MIS faculty regularly offer two electives each semester and have built these into the rolling two-year schedule available on the Dalton State web site.

Additionally, the MIS group made the following curriculum changes since the last program review. All changes have been approved by the school and campus curriculum committees and appear in the Dalton State College catalog.

- MGIS 3356 (Database Management Systems): MGIS 3356 was moved from the senior year (formerly MGIS 4356) in order to provide essential database understanding earlier in the students' program of study and make students more attractive for internships. Additionally, MGIS 3351 was changed from a prerequisite to a corequisite course to enhance the chance that MIS majors can take MGIS 3356 as one of their first upper-division classes.
- MGIS 4701 (Systems Analysis and Design): The group made systems analysis and design (formerly MGIS 4354) a capstone course and added the first programming course (MGIS 3352) and MGIS 3356 as prerequisites so students would have adequate knowledge to perform systems analysis and design activities.
- MGIS 4358 (Web-Based MIS): MGIS 4354 (now MGIS 4701) was removed as a prerequisite due to
  concerns about students' ability to take the elective and move through their program of study in a
  timely manner. While systems analysis and design knowledge would be desirable, the group decided
  that it was not required for successful completion of MGIS 4358. Since web application programming
  typically requires three to five languages and multiple libraries, successful completion of the first
  programming course (MGIS 3352) was added as a prerequisite in addition to the existing prerequisite
  course, MGIS 3356.

The MIS faculty revised the student learning outcomes to make them clearer and removed indirect measures of student learning (e.g., high job placement rate) previously listed as student learning outcomes.



Student Demographics						
Enrollment	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	% Change
Headcount	77	89	85	66	66	-14.3%
FTE	69	81.1	76.9	67	57.75	-16.3%
Enrolled Full-time	57	66	62	42	44	-22.8%
Enrolled Part-time	20	23	23	24	22	10.0%
Female	17	25	20	17	15	-11.8%
Male	60	64	65	49	51	-15.0%
Alaskan Native/Native American/American Indian						
Asian, Hawaiian, Other Pacific Islander	2	3	3	3	3	50.0%
Black/African-American	10	4	6	4	1	-90.0%
Hispanic	16	18	19	25	29	81.3%
Multi-racial			1	1	1	UNDEF
Undeclared	6	6	4	2		-100.0%
White	43	58	52	31	32	-25.6%

Analysis and comments on student demographics.

Overall, the Fall 2018 MIS enrollment dropped by 14.3% (headcount) and 16.3% (FTE) compared to Fall 2014. The headcount remained the same during the last two academic years (2017 and 2018) while the FTE measure dropped during the same period. The MIS headcount drop is similar to that of the Wright School of Business over the review period (see the table below¹). The MIS major's percentage of the Wright School of Business's headcount peaked in Fall 2015 and Fall 2016 and has since returned to a level similar to Fall 2014. The Wright School of Business added two new majors during the review period, Finance and Applied Economics (Fall 2015) and Logistics and Supply Chain Management (Fall 2017). It is possible that these additions contributed to a drop in MIS majors.

	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	% Change
WSOB Headcount	993	1042	997	950	870	-12.4%
MIS Headcount	77	89	85	66	66	-14.3%
	7.8%	8.5%	8.5%	6.9%	7.6%	

The percentage of full-time students has dropped over the review period from 74% (Fall 2014) to 67% (Fall 2018). This is consistent with graduating senior survey data below and anecdotal information from MIS faculty that many MIS majors, especially by their junior and senior years, are working at least part time.

<sup>&</sup>lt;sup>1</sup> The Wright School of Business headcount data for Fall 2015-Fall 2018 is provided in <u>Dalton State College Institutional</u>
<u>Research Facts and Figures</u> reports. The Wright School of Business Associate Dean supplied the Fall 2014 Wright School of Business headcount.



Senior survey data is not available for 2015-2016 and only Fall 2016 results for 2016-2017 so these academic years are excluded from the table below. The senior survey data shows an increase in the percentage of MIS seniors working at least part time from 50% in 2014-2015 to almost 73% in 2018-2019. The change can be attributed to an increase in MIS students with part-time employment since the percentage of students working full time has remained relatively stable.

	2014-2015	2017-2018	2018-2019
# of Degrees Conferred	10	22	16
# Senior Survey Responses	8	16	11
Senior Survey Response %	80.0%	72.7%	68.8%
% Full Time	37.5%	31.3%	36.4%
% Part Time	12.5%	37.5%	36.4%
% Working Full or Part Time	50.0%	68.8%	72.7%

The percentage of male students in the MIS major has remained above 70% over the review period. The enrollment of African-American students has significantly decreased (90%), inconsistent with the campus-wide African-American student decrease of 9%. Enrollment of Hispanic students increased annually for an increase of 81.3% over the review period (compared to a campus-wide increase of 44.8%). The number of white students decreased 25.6% (compared to a campus-wide decrease of 0.6%). The Fall 2018 percentages of MIS majors by self-declared race/ethnicity are provided below. Most students in the MIS major (92.4%) identify as either Hispanic or White.

	Fall 2018 %
Alaskan Native/Native American/American Indian	0.0%
Asian, Hawaiian, Other Pacific Islander	4.5%
Black/African-American	1.5%
Hispanic	43.9%
Multi-racial	1.5%
Undeclared	0.0%
White	48.5%

<sup>&</sup>lt;sup>2</sup> Dalton State College comparative headcount data provided in <u>Dalton State College Institutional Research Facts and Figures</u> reports.



Faculty Indicators of Program Quality	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	% Change
School (not Department) faculty teaching in program (excluding Areas A through E)	0	0	1	1	1	UNDEF
Full-time program faculty	3	2	2	3	3	0%
Part-time program faculty	0	0	0	0	0	UNDEF
Total program faculty	3	2	2	3	3	0%
Percent of program classes taught by full-time program faculty	85.2	93.1	60%	80%	80%	-6.1%
Gender (full-time and part-time faculty)	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	% Change
Male	2	0	0	1	1	-50%
Female	1	2	2	2	2	100%
Race/Ethnicity (full-time and part-time faculty)	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	% Change
Alaskan Native/Native American/American Indian	0	0	0	0	0	UNDEF
Asian, Hawaiian, Other Pacific Islander	1	0	0	1	1	0%
Black/African-American	0	0	0	0	0	UNDEF
Hispanic	0	0	0	0	0	UNDEF
Multi-racial	0	0	0	0	0	UNDEF
Undeclared	0	0	0	0	0	UNDEF
White	2	2	2	2	2	0%
Tenure Status (full-time faculty)	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	% Change
Tenured	1	1	1	1	1	0%
On-tenure track	2	1	1	2	2	0%
Non-tenure track	0	0	0	0	0	UNDEF
Rank (full-time faculty)	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	% Change
Professor	0	1	1	1	1	UNDEF
Associate Professor	2	1	1	1	1	-50%
Assistant Professor	1	0	0	1	1	0%
Instructor/Senior Lecturer/Lecturer	0	0	0	0	0	UNDEF



Faculty Indicators of Program Quality							
Highest degree (full-time faculty)	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	% Change	
Doctorate	2	1	1	2	2	0%	
Specialist	0	0	0	0	0	UNDEF	
Master's	1	1	1	1	1	0%	
Bachelor's	0	0	0	0	0	UNDEF	
Associate's/Other	0	0	0	0	0	UNDEF	

Provide additional details, analysis, and comments regarding faculty indicators of program quality.

Compared to the last review period, there are no significant changes in faculty indicators of program quality. Specifically, the program was able to recover and maintain three full-time faculty members after a decrease in Fall 2015 and Fall 2016. The number of faculty who identify as Asian (1) or White (2) is the same over the review period with the exception of Fall 2015 and 2016. Also, there is no change in Tenure Status (1 tenured and 2 on-tenure track) and Highest Degree (2 doctorate and 1 master's). In terms of Rank, there is a 100% increase (from 0 to 1) in the number of full professors and an 50% decrease (from 2 to 1) in associate professors. Importantly, the MIS group was able to meet the AACSB accreditation standards with two full-time faculty members (> 60%) at the doctoral level who are performing the requisite amount of research.

The MIS program has one faculty member from the School of Science, Technology, and Mathematics who teaches the two required programming courses and collaborates with MIS faculty on curriculum and other issues. While the percentage of classes taught by program faculty is 80% rather than 100%, the non-program faculty member provides significant contributions to MIS students' learning and the integration of technology course offerings across the two schools. Students in the MIS major and the School of Science, Technology, and Mathematics Technology Management major work together in a number of MGIS-designated courses required for both majors, resulting in important new understandings for students with different program perspectives.



Indicators of Measures of Quality						
Student Input	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	% Change
Mean ACT score	21.39	21.41	20.75	21.48	20.44	-4.4
Mean SAT score	463.67	487.02	491.11	473.28	464.84	0.3

If applicable to your degree program, provide any additional external quality assurance data/information or results (e.g., professional accreditation results, National Survey of Student Engagement [NSSE], market rankings, etc.)

The BBA in MIS is accredited by the AACSB as part of the BBA program. For this reason, the MIS program does not have other accreditation or market rankings for the individual program.

Compared to Fall 2014, the mean ACT score has decreased by 4.4% while the mean SAT score is approximately the same in Fall 2018 after increases in Fall 2015 and Fall 2016.



Indicators of Measures of Quality						
Student Output	2014-15	2015-16	2016-17	2017-18	2018-19	% Change
Exit scores on national/state licensure (If applicable)	NA	NA	NA	NA	NA	NA
Graduating majors' mean GPA	3.19	3.22	3.23	3.24	3.24	1.6%
Estimated employment rate of graduates	NA	87.5%	100.0%	82.4%	90.9%	NA
Number of students entering graduate/professional programs	NA	NA	NA	NA	NA	NA

Describe the extent to which students have achieved current program outcomes during this program review cycle (most recent year).

#### 1. General business knowledge program

All BBA students must pass the core business courses with at least a "C" in order to progress through their upper-division courses and graduate. This requirement helps ensure the attainment of general business knowledge by BBA-MIS students. The Wright School of Business has used the ETS Major Field Test for the Bachelor's Degree in Business to measure the attainment of general business knowledge for all students in the BBA program for a number of years, including the current review period. The ETS summary reports show analysis for all BBA students rather than by major so there are no ETS score analyses for MIS majors.

The Wright School of Business added an in-house exam in Spring 2019 in order to provide data that is more useful for assessment and continuous improvement purposes. The data can be broken out by major. In the Spring 2019 analysis, the percentage of correct responses by major ranged from 38% to 60%. Unfortunately, the MIS majors had the lowest percentage correct (38%) raising concerns about MIS students' successful achievement of the first program outcome. Analysis of Fall 2019 data has not been completed to see if the problem persists. If so, the MIS faculty will use a more detailed examination of the exam results to determine options for improvement initiatives.

#### 2. Preparation for employment in the field of management information systems

The Wright School of Business administers a senior survey during the MNGT 4701 capstone course that includes a variety of questions on student satisfaction with the BBA program as well as employment status. The table below summarizes the employment-related findings and shows that a high percentage of MIS majors obtain employment upon graduation (90.9% in 2018-2019). The employment percentages from 2014-2015 are not included because the survey responses were anonymous which led to concerns about data comparability.

Notably, beginning in 2015-2016, the MIS faculty supplemented the survey employment responses with unofficial information from LinkedIn and faculty members' personal knowledge. In total, the group located 43 students who graduated between Fall 2015 and Spring 2019, 97.7% of whom appeared to have been employed upon, or shortly after, graduation. Additionally, 86.0% show employment in MIS-related positions. These confirm the results in the table and indicate a positive measure of the quality of the MIS program's curriculum.



	2014-2015	2015-2016	2016-2017*	2017-2018	2018-2019
# of Degrees Conferred	10	8	13	22	16
# Senior Survey Responses	8	NA	2	16	11
Senior Survey Response %	80.0%	NA	15.4%	72.7%	68.8%
Students with Job or Offer (In Survey)	3	NA	2	13	10
Students Found (Not in Survey)	NA	8	9	1	0
Students with Jobs (Not In Survey)	NA	7	9	1	0
Graduates Included	8	8	11	17	11
% Graduates Included	80.0%	100.0%	84.6%	77.3%	68.8%
% with Job or Offer	NA	87.5%	100.0%	82.4%	90.9%

<sup>\*</sup>Survey data available only for Fall 2016

Describe the extent to which students have achieved current student learning outcomes during this program review cycle (most recent year).

Results of the most recent assessments of student learning outcomes in required MIS courses are listed in the table below. Previous years' results can be found in Weave.

Stu	ident Learning Outcome	Target	Assessment
1.	Students will demonstrate knowledge and skills in fundamental computer programming. (Spring 2019)	Students in MGIS 3353 (Management Applications Programming II) completed three programming assignments covering object-oriented concepts, design techniques, and development of Java programs.	Targets Met: At least 80% of students scored an 80 or higher on each assignment.
		The target was that at least 80% of students would earn a score of 80 or higher on each assignment.	
2.	Students will demonstrate fundamental knowledge and skills in communication technologies. (Spring 2016)	Students enrolled in MGIS 3354 (Telecommunications Management) completed homework assignments, exams and a project. The homework provided technology practice while the exams covered telecommunications theory. The project required students to design and analyze a telecommunications network.	Targets Met: The student results exceeded target levels for all three assessments with 80 or higher on homework, 80 or higher on exams, and 80 or higher on the final project.
		The targets were as follows.	



		Ph.	
		Homework assignments: At least 75% of students will earn a score of 80 or higher on all homework assignments.	
		Exams: At least 75% of all students will have an exam average of 80 or higher.	
		Project: At least 75% of students score an 80 or higher.	
3.	Students will demonstrate knowledge and skills in fundamental database management systems. (Fall 2019)	The achievement of students enrolled in MGIS 3356 (Database Management Systems) on the third learning outcome was measured using a final exam on database concepts, two hands-on SQL competency exams, and a database design and implementation project.  The targets were as follows.  Final Exam: At least 65% of students will earn a score of 70 or higher on the final exam. The target, while relatively low, is based on prior performance and represents an improvement.	Mixed Success:  Final Exam: Target not met. Only 56% of students scored 70 or higher.  Competency Exams: Target met on the first exam (76% scored 80 or higher) but not the second (only 68% scored 80 or higher).  Project: Target met with 76% of student scored at least 80.  The instructor developed action plans to address the issues identified in the assessments.  Action plan details can be found in Weave.
		Competency Exams: At least 70% of students will score an 80 or higher on each competency exam.  Project: At least 70% of students will score an 80 or higher.	
4.	Students will demonstrate knowledge and skills in fundamental principles and techniques of systems analysis and design. (Spring 2019)	The achievement of students enrolled in MGIS 4701 (Systems Analysis & Design) on the fourth learning outcome was measured using a final exam on concepts and three projects.  The targets were as follows.	Mixed Success:  Final Exam: Target not met. Only 63.6% of students scored 70 or higher.  Business Process Analysis Project: Target met with 86.4% of students scoring an 80 or higher.
		Final Exam: At least 65% of students will earn a score of 70 or	System Alternatives Analysis Project: Target not met. Only



	higher on the final exam The target, while relatively low, is based on prior performance and represents an improvement The target, while relatively low, is based on prior performance and represents an improvement.  Business Process Analysis Project: At least 85% of students will score an 80 or higher on the project.  System Alternatives Analysis Project: At least 70% of students score an 80 or higher on the project.  Agile Team Project: At least 85% of students will score an 80 or higher on the project.	45.5% of students scored an 80 or higher.  Agile Team Project: Target met with 86.4% of students scoring an 80 or higher.  The instructor developed action plans to address the issues identified in the assessments.  Action plan details can be found in Weave.
5. Students will demonstrate knowledge and skills in fundamental vocabulary resources for managem information. (Spring 20	(Principles of Management Information Systems) completed a variety of activities that were	Mixed Success:  1st Reading Assignment: Target not met. The class average is 39/60.  2nd Reading Assignment: Target met with a class average of 46/50.  3rd Reading Assignment: Target met with a class average of 47/50.  1st Apply Your Knowledge Projects: Target not met. The class average is 190/300.  2nd Apply Your Knowledge Projects: Target not met. The class average is 430/600.  The instructor developed several action plans that are detailed in Weave.



2 <sup>nd</sup> Apply Your Knowledge Projects: The class average is above 480/600.	



#### **Indicators of Measures of Quality**

If available, provide additional information and/or results of other indicators of quality related to student output such as completer satisfaction surveys, employer satisfaction surveys, stakeholder satisfaction surveys, completion and continuation rates, attrition rates, starting salaries of graduates, etc.

Below we provide two other indicators of quality related to student output. They are salary range (mean) and the percentage of graduates who plan to pursue additional business degree/certifications. The data are from the alumni surveys administered following 15 graduation terms (Spring 2014 through Fall 2018). As required by AACSB, the Wright School of Business's accrediting body, the alumni surveys are administered three months after graduation. For comparison purposes, we also list the corresponding results of other Wright School of Business (WSOB) majors. It is worth noting that some graduates may have knowledge of their salary and future plans but choose not to disclose them. The table results, therefore, have no indication of statistical significance but present a rough idea of the promising career prospects for MIS majors compared to other WSOB majors.

	# of respondents (n)	Salary range (average value based on individuals who provided the information)	Plan to pursue additional business degree or certifications (%)
MIS	65	\$50,000-\$59,999	18.5
All other WSOB majors	537	\$39,531-\$49,374	14.2

Describe efforts undertaken to achieve and maintain curricular alignment within the program and currency to the discipline.

The MIS faculty meet frequently, both formally and informally, to discuss course content and alignment. Additionally, they consult with industry partners regularly to keep the content current and relevant to entry-level positions. More details are provided in the discussion on pages 2-3. The MIS faculty also monitor possible opportunities to expand the offerings for MIS students. For example, MIS faculty attended a Georgia FinTech Academy meeting in March 2019 and subsequently wrote a grant to participate in a system-wide collaboration to make FinTech content available across USG campuses. The result is an approved FinTech minor at Dalton State College plus approved FinTech courses taught online via the USG eCampus.

#### **Indicators of Measures of Viability**

Internal Demand for the Program	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	% Change
Number of students enrolled in the degree program	77	89	85	66	66	-14.2%
Number of students who applied to the program (if applicable)	NA	NA	NA	NA	NA	NA
Number of students admitted to the program (if applicable)	NA	NA	NA	NA	NA	NA
Percent of classes taught by full-time faculty	85.2	93.1	60%	80%	80%	-6.1%



Describe additional details as deemed appropriate.

The above data is presented and discussed on pages 4-7. The data do not depict any significant challenges to program viability.



Indicators of Measures of Productivity							
Graduation	2014-15	2015-16	2016-17	2017-18	2018-19	% Change	
Number of degrees conferred	10	8	13	22	16	60.0%	
Total student credit hours earned	120	118	133	116	127	5.8%	

Describe any institutional-specific factors impacting time to degree.

Overall, the increase in degrees conferred is consistent with the increased MIS headcount in the 2015-2016 and 2016-2017 academic years (see the table on page 4). The MIS program requires 122-123 credit hours, so the 127 credit hours in 2018-2019 represents an increase relative to the required hours of 3.3% and 4.1%, indicating that students are managing to stay on track with the major requirements. Some of the increase may also be attributed to students in the MIS program choosing to add a minor such as Business Analytics that adds value to their MIS degrees. Depending on the electives MIS students choose in their program, a minor may add one or more courses to their credit hours.

The Wright School of Business has dedicated sufficient resources so that the MIS program is offering all required courses as scheduled and two elective options each semester according to the two-year schedule posted on the Dalton State College web site. Students in the MIS program often work full- or part-time and many have family obligations. The Wright School of Business offers online, hybrid, and evening classes in order to help students finish in a timely manner. Additionally, the MIS faculty work closely with individual student advisees to help them navigate the program of study and juggle external work and personal conflicts.

#### **Evidence of Program Viability**

Based on evidence from <u>ALL of the above</u> information, data, and analysis, discuss whether continued resources should be devoted to this program. <u>This discussion must be evidence-based</u>. Your comments should consider external factors and address questions such as the following: Are your students getting jobs? What is the job outlook for graduates? Are students prepared for the jobs they get? How is the field changing? Are program faculty members in contact with employers and getting back feedback on graduates' job performance? Do employers state or suggest a need for changes in the program?

MIS is one of the seminal BBA degrees established at Dalton State College in 1998 and remains an important recruiting priority for local businesses such as Mohawk Industries, Inc. and Shaw Industries Group, Inc. The MIS program continues to receive exceptional support from the community in the form of internships as well as access to top IT executives and other IT professionals. Local companies have indicated the desire to work even more closely with the MIS program and Wright School of Business. Over this review period, there is no significant decrease in student enrollment in view of similar fluctuations and decrease in the Wright School of Business enrollment. Additionally, MIS enrollment appears to have stabilized after the addition of new majors in the BBA degree program. As DSC has become a Hispanic-serving institution, a significant enrollment



increase of Hispanic students has occurred in the MIS major (81.3% compared to a campus-wide increase of 44.8%). If the MIS program serves Hispanic and other groups of students well by providing valuable courses with flexible schedules, sustainable enrollment growth is possible.

MIS graduates have entry-level job opportunities in a variety of areas including security, networking, database, programming, project management, systems design, and consulting. MIS graduates have a business background plus technical knowledge and skills. This combination makes them excellent candidates for moving into computer and information systems manager positions (SOC code 11-3021) after a few years. According to the Bureau of Labor Statistics,<sup>3</sup> a bachelor's degree is the typical educational preparation for these positions. Nationally, the Bureau of Labor Statistics shows that the mean annual wage of computer and information systems managers is \$152,860 per year. The number of jobs in 2018 is 414,400 and expected to have an 11% average increase over the next 10 years (2018-2028), much faster than the overall average of other fields.

The Bureau of Labor Statistics job outlook for computer and information systems managers in Georgia is similarly positive with a bachelor's degree being the typical educational level and an average salary of \$143,930. The Georgia Department of Labor lists computer and information systems managers among Georgia's "hot careers to 2026" with a 12.6% projected increase in employment (2016-2026).<sup>5</sup>

The group's investigation of MIS program graduates' employment status demonstrates a high level of employment upon graduation each year in the review period (82.4% to 100%). In addition to the senior survey, the MIS group compiled data from Linkedin and faculty members for 43 students who graduated between Fall 2015 and Spring 2019. This sample contained 42 students (97.7%) who appeared to have found employment upon, or shortly after, graduation. Additionally, 37 students (86.0%) reported employment in MIS-related positions. The analysis indicates that most MIS program graduates are obtaining information systems jobs with strong potential for advancement.

Knowing the quick rate of change in information systems knowledge and skills, the MIS faculty consult on a frequent basis with key industry partners. Their input results in changes to individual course content and the broader curriculum content and structure. Additionally, dialogue with industry provides insight on appropriate hands-on exposure to current programming languages, software, and systems.

Students often do not understand the wide variety of career paths available to them with an undergraduate degree in MIS. A potentially important mechanism for increasing enrollment in the MIS program is to educate students, especially freshmen and sophomores, about the career potential provided by a BBA degree in MIS.

<sup>&</sup>lt;sup>3</sup> U. S. Bureau of Labor Statistics Occupational Outlook Handbook, Computer and Information Systems Managers

<sup>&</sup>lt;sup>4</sup> Georgia Department of Labor Current Hot Careers

<sup>&</sup>lt;sup>5</sup> Georgia LaborMarket Explorer Occupational Outlooks



#### **Program Strengths and Weaknesses**

Based upon this review, what are the strengths and weaknesses of the program?

#### Strengths:

- 1. The MIS program continues to enjoy exceptional support from the community.
- 2. Our industry partners, including Mohawk Industries, Inc., and Shaw Industries Group, Inc., continue reaching out to us to express their desire to hire Wright School of Business MIS graduates.
- 3. The MIS faculty are committed to the program and have made significant improvements over the current review period, including the addition of regularly offered electives.
- 4. The MIS faculty monitor potential opportunities for students in the MIS program. A recent example is their collaboration with the Georgia FinTech Academy to design a FinTech minor for Dalton State students that leverages eCampus FinTech courses.
- 5. The MIS faculty demonstrate a desire to keep the program current in an environment of constantly changing technology and trends by communicating frequently with industry.
- 6. Industry partner input indicates a high current and future demand for graduates with specific training in the MIS field.
- 7. A high percentage of MIS graduates are employed after graduation with a large majority in MIS-related jobs.

#### Weaknesses and concerns:

- 1. There is little information on MIS graduates and alumni in terms of their satisfaction with the program and perceived achievement relative to learning outcomes.
- 2. The root causes of the MIS program enrollment decline over the last five years have not yet identified. While the decline is consistent with the Wright School of Business enrollment fluctuations, there is potential for increasing enrollment, given the value of an MIS degree.
- 3. Staffing continues to be critical given a highly competitive market for faculty.



#### Recommendations for Follow-Up and/or Action Plans (if needed)

#### Issue/Concern:

The MIS group plans to focus on the following issues over the next review period.

- 1. There currently is insufficient information on program satisfaction and placement success for MIS majors.
- 2. A degree in management information systems offers attractive career potential for students, yet enrollment has not increased over the current review period.

#### Specific action(s):

The MIS faculty plan to update the existing BBA senior survey or develop a separate exit survey to obtain data from graduating MIS majors regarding their program satisfaction and perceived achievement of learning outcomes. Additionally, the MIS group will improve the data collection process for post-graduation job placement so that data are gathered systematically within a reasonable time period after graduation. Finally, the MIS faculty and Wright School of Business administrators will continue to communicate with major employers to get their perspectives on MIS students' recruitment and job performance.

The MIS group will attempt to determine overall students' perceptions of the MIS program and causes for enrollment fluctuations. Further, the group will bring in speakers in required lower- and upper-division BBA courses to broaden students' understanding of the variety and quality of career options available to MIS majors. The MIS faculty will also continue to focus on continuous improvement of MIS courses in collaboration with industry partners.

#### Expected outcomes:

- 1. Well-quantified data on MIS majors' program satisfaction and post-graduation employment
- 2. Increased MIS enrollment

#### Time frame for achievement:

Within the next five-year review period

#### Person(s) responsible:

The Dean and leadership team as well as the MIS faculty group

#### Resources needed:

Almost all large regional employers have already, or will soon, migrate from their legacy enterprise systems to commercial systems offered by SAP, Microsoft, or Oracle. For example, Mohawk Industries, Inc., and Tarkett have recently completed extensive rollouts of SAP solutions. Continued membership in the SAP University Alliances and access to hosted SAP systems for teaching purposes will provide future Dalton State College MIS



students as well as other business majors a competitive advantage due to their hands-on exposure to implementation and configuration of business processes and analytics in SAP, the market leader (by revenue) in enterprise software.

While the MIS faculty group recognizes there are limited resources, the availability of a computer lab or classroom dedicated to the MIS courses would greatly enhance the faculty's ability to teach using current technologies. The existing shared lab classrooms limit MIS faculty members' ability to teach on computers that have been set up, configured, and maintained for MIS-related teaching purposes. With limited software and tools that can be installed, the existing computers cannot meet the requirements of lab activities in several MIS courses. Examples of such requirements include Linux systems (or virtual machines) as well as network and security software and tools.



Prepared by: Signature
Dean's Approval: Signature: Date: 4/21/202
Approval of the Chair of the DSC Comprehensive Program Review Committee:  Signature: Date: 42/202
Vice President of Academic Affairs (VPAA) Categorical Summation:
Check any of the following to categorically describe action(s) the institution will take concerning this program.
Program MEETS Institution's Criteria  Program is critical to the institutional mission and will be retained.  Program is critical to the institutional mission and is growing, or a high demand field, and thus will be enhanced.
☐ Program <b>DOES NOT MEET</b> Institution's Criteria for continuation.
☐ Program will be placed on monitoring status.
☐ Program will undergo substantive curricular revisions.
☐ Program will be deactivated.
☐ Program will be voluntarily terminated.
☐ Other (Please elaborate):
VPAA Signature:
Adrian L. Epps, Ed.D.

Interim Provost and Vice President of Academic Affairs

Dalton State College