# School of Computer Information Systems Annual Report

## 2016 - 2017

### I. Unit Data

#### a. School of CIS Faculty

- i. Brian Hairston serves as an Associate Professor and the Academic Dean of the School of CIS. Mr. Hairston holds a Bachelor's of Science in Computer Information Systems from the University of Arkansas at Monticello, and a Masters of Information Systems from the University of Arkansas. Mr. Hairston serves as Dean, and is responsible for course scheduling, unit personnel, development of unit goals and strategy, and leadership of the unit. Beginning in July 2016 and continuing through today, Mr. Hairston began receiving a stipend for additional responsibility of serving as Project Manager for the EAB software installation, and as University Advocate for Student Success. Courses taught include:
  - a. CIS4253 CIS Security
  - b. CIS198V Introduction to Linux
- ii. Lori Selby serves as an Associate Professor in the School of CIS. Mrs. Selby holds a Bachelors of Business Administration from Baylor University, and a Masters of Business Administration with an emphasis in Computer Information Systems from the University of Arkansas. As a tenured faculty member, Mrs. Selby has a teaching load of twelve hours per semester, with her primary focus on introducing students to the building blocks of programming, and how to develop and use these programming skills. Beginning in July 2016, Mrs. Selby began receiving a stipend for additional responsibilities within the academic unit in conjunction with Mr. Hairston's role on the EAB/Student Success Project. Courses taught include:
  - a. CIS2223 Microcomputer Applications
  - b. CIS2203 Programming Logic and Design
  - c. CIS3423 COBOL
  - d. CIS3553 Advanced COBOL
  - e. CIS4263 Ethics in Information Technology
  - f. CIS460V Internship in CIS
- iii. Angela Marsh serves as an Associate Professor in the School of CIS. Mrs. Marsh holds a Bachelor's of Science in Education from Henderson State University, a Master's of Science in Education from Arkansas Tech University, and a Master's of Science in Information Systems from Arkansas State University. As a tenured faculty member, Mrs. Marsh has a teaching load of twelve hours per semester.

Her primary course responsibilities focus mainly on junior and senior level coursework, preparing students for jobs in the IT industry. She teaches the CIS capstone course, and the two prerequisites for that course, dealing with the development lifecycle of a computer system, how to design, solicit user input, code, test, and document the system. These skills and techniques are exactly what students accepting a programming position will be required to demonstrate. Courses taught include:

- a. CIS2223 Microcomputer Applications
- b. CIS3523 Systems Analysis and Design
- c. CIS4623 Database Management Systems
- d. CIS4634 Software Application Development Project
- iv. Terri Cossey serves as an Instructor in the School of CIS. Mrs. Cossey holds a Bachelor of Business Administration & Computer Information Systems from Northeast Louisiana University, and a Masters of Business Administration from UALR. As an Instructor, Ms. Cossey has a teaching load of fifteen hours per semester. Her primary teaching responsibilities include introducing students to computer networking, programming Mobile Application Technology, and the usage of business applications. Ms. Cossey is also instrumental in planning of student-focused unit events including the School of CIS annual Christmas buffet, Alumni Day, CIS Awards Reception, and CIS Senior Reception, and leads the selection process on textbooks for courses taught by multiple faculty including CIS2223 Microcomputer Applications. Courses taught include:
  - a. CIS2223 Microcomputer Applications
  - b. CIS3103 Advanced Microcomputer Applications
  - c. CIS3463 Programming Mobile Applications
  - d. CIS4503 Data Communications and Networking
  - e. GB3043 Business Communications (taught as overload for School of Business as needed)
- v. Lynn Harris serves as an Instructor in the School of CIS. Ms. Harris holds a Bachelor's of Science in Business Administration from the University of Arkansas at Monticello, and a Masters of Business Administration from the University of Central Arkansas. As an Instructor, Ms. Harris has a teaching load of fifteen hours per semester, but receives a three-hour release time for her responsibilities as Administrator over the School of CIS's teaching servers. As part of this responsibility, Ms. Harris creates accounts for all students enrolling in CIS courses on World Wide Web programming development, and Database Management Systems. She installs software, modifies permissions, resolves access issues, and troubleshoots other problems that may arise. Her primary teaching responsibilities include welcoming students into the program in the first required CIS course, CIS1193 PC Hardware/Software Maintenance. She also teaches other freshmen and sophomore level courses and a junior level programming course. She also serves as the sponsor for Chi lota Sigma, the CIS

student organization, and helps direct community service opportunities that the organization engages students in. Courses taught include:

- a. CIS1193 PC Hardware/Software Maintenance
- b. CIS2223 Microcomputer Applications
- c. CIS3443 Object Oriented Programming Language
- d. CIS198V New Perspectives on the Internet
- e. CIS198V Computer Concepts
- vi. Karen Donham serves as an Instructor in the School of Computer Information Systems. Ms. Donham holds a Bachelor's of Science in Computer Information Systems from the University of Arkansas at Monticello, and a Masters of Business Administration from Arkansas State University. As an Instructor, her teaching load consists of fifteen hours per semester. Her primary teaching focus centers on programming and development of web page coding. She also serves as co-sponsor for Chi lota Sigma, the CIS student organization, and helps direct community service opportunities that the organization engages students in. She also serves as Administrator for the Microsoft Imagine Program, which allows CIS majors to install software used in their classes on their personal computers at no cost. Courses taught include:
  - a. CIS1013 Introduction to Computers
  - b. CIS2223 Microcomputer Applications
  - c. CIS3243 Intro to Java Programming
  - d. CIS3453 WWW Programming
  - e. CIS399V Computer Forensics and Cybercrime
  - f. CIS399V Cyberlaw
  - g. CIS198V Intro to Game Programming
  - h. CIS3233 Business DBMS

### b. Faculty Achievements

i. Brian Hairston had the opportunity to serve as Project Manager for the EAB software installation. This provided opportunities for research on retention, academic leadership, and student success initiatives to be tested in the School of CIS. One retention idea that the School of CIS tested during the spring 2017 semester involved advisors emailing their advisees on a regular schedule throughout the semester. Student responses were mixed, but all CIS advisees were contacted and reminded of important dates such as the drop date, and preregistration, and these emails were also used to "advertise" the department's free tutoring for all CIS courses.

### c. Faculty/Student Service Learning Projects

i. Ms. Selby oversees CIS460V Internship in CIS. Internships provide valuable real life learning opportunities for CIS majors, offer valuable networking contacts, and have led to permanent positions for UAM CIS graduates on multiple occasions. During the 2016-2017 school year, Ms. Selby supervised seven internships. These included:

- a. Ms. Caitlin Carlisle with Kaiser Permantente
- b. Ms. LaToyic Mack with a UAMS Research Study in Desha County
- c. Mr. Tyler Pamplin with UAM Information Technology
- d. Mr. Jordan Walley with Crossett Public School District Information Technology
- e. Mr. Brandon McClelland with UAM Information Technology
- f. Mr. Landon Adams with UAM Information Technology (Spring and Summer 2017)
- ii. Ms. Harris and Ms. Donham, in their role as advisors to Chi lota Sigma oversaw student canned food drives during the fall and spring semesters. The two canned food drives combined saw over 2,150 cans donated by UAM students to local food pantries. Chi lota Sigma students also participated in the Monticello-MidSOUTH Christmas gift drive in December 2016, collecting toys and gift items for children and teens who enter the foster care system during the holidays.
- iii. Ms. Donham serves as the Directory of Special Olympics Arkansas Area 12. In this role, she notifies UAM students of opportunities to volunteer with area Special Olympics events. She also plans the events, fundraises, and works with volunteers from area school districts.

### d. College or School Awards

Ms. Lori Selby was selected as the Chi Iota Sigma faculty member of the year for the 2016 – 2017 school year. CIS majors voted for Ms. Selby in an online poll through Blackboard.

- e. Grants None
- f. Partnerships/MOUs/Special Agreements None

### g. Significant Changes

- i. Until August 2016, the School of CIS had six fulltime faculty members, in addition to the Dean. Dr. Ed Conrad resigned effective August 1<sup>st</sup>, 2016, which necessitated two class cancellations, and a redistribution of several of his courses to other faculty members. Due to budget considerations and the implementation of the performance funding model, the School of CIS has chosen to leave this position vacant for the 2017-2018 school year.
- ii. Governor Hutchinson's initiative to offer coding in all public high school has already offered valuable recruiting and networking opportunities to reach more students who now will have experience programming in K-12. This will help expose more students to the opportunities that are available in the Information Technology job market.

### h. Student/Alumni Achievements of Note

- i. Two CIS majors (Amber Kail and Robert Crawford) were invited to join Alpha Chi during the 2016-2017 school year.
- ii. Three CIS majors graduated with Cum Laude honors during the fall 2016 and spring 2017 semesters.

- iii. At the 2017 CIS Awards Reception, 17 graduating CIS majors were recognized, along with 31 CIS majors being recognized for Academic Achievement (GPA of 2.5-3.24), and an additional 34 CIS majors being recognized for Outstanding Scholastic Achievement (GPA of 3.25 or higher). Also, twenty-one CIS majors received Scholarship awards as selected by the CIS faculty. Please see Appendix A.
- iv. 2014 UAM CIS graduate Kody Robinson works with the Electric Cooperatives of Arkansas as a Business and Financial Systems Developer. In the past year, Mr. Robinson has had the opportunity to serve as an ambassador for Bond.ai, an artificial intelligence platform based out of New York. He also serves on the Economic Development Task Force for the City of Little Rock and was nominated to be included in IBM's Champions program during 2017. An IBM Champion is an IT professional, business leader, developer, or educator who influences and mentors others to help them make best use of IBM software, solutions, and services.
- v. 2016 UAM CIS graduate Scott Coburn was selected to interview with Cerner Corporation of Kansas City from his LinkedIn profile. Not only did Mr. Coburn land a Programmer/Analyst job with Cerner, he served as a contact for two spring 2017 UAM CIS graduates, Aeja McClanahan and Caitlin Carlisle, who both accepted positions with Cerner's Information Technology Department.
- i. Chairs/Professorships given by the college/school None.

### II. <u>HLC Program/Unit Assessment</u>

a. **Teaching and Learning** – Initiatives to support effective teaching, student engagement, and student success and persistence.

Each summer, the School of CIS does grade analysis for all CIS courses. (Appendix B) Beginning in 2013 for assessment purposes, the Unit began pulling information from four courses that are all required parts of the CIS curriculum, with the courses representing different levels of the program, to provide a snapshot of student progress as they move through the CIS curriculum. These courses are CIS 2203 Programming Logic and Design, CIS 3523 System Analysis and Design, CIS 4623 Database Management Systems, and CIS 4634 Application Software Development Project. Each course serves as the program's prerequisites for subsequent coursework that must be completed as the student advances in the program. These prerequisites are in place to require students to demonstrate acceptable grasp of the concepts before they are allowed to progress in the program. Their successful progression demonstrates evidence of their learning. Each year, the Unit reviews grade data, but this four course subset especially reveals a lot about student progression in the program.

CIS 2203 Programming Logic and Design is intended for students in their sophomore year, and provides CIS majors with exposure to programming logic and theory, problem solving

and debugging techniques, and modeling tools to demonstrate the logical flow of a program. These concepts are all independent of any particular programming language, but are intended to introduce logical concepts that translate to coding in a variety of programming languages. This course serves as the prerequisite for all upper level programming courses in the program, requiring a grade of "C" or better in order to advance to the two programming languages required in the curriculum as well as the three programming electives offered. Course content directly relates back to Student Learning Outcome (SLO) 2 and SLO 3 (See Appendix C).

Once students have completed CIS 2203 and moved on to successfully complete either CIS 3423 COBOL or CIS 3443 Object-Oriented Programming Languages with a grade of "C" or better, both of which are required classes in the CIS curriculum, the student may enroll in CIS 3523 System Analysis and Design. This course is targeted for students who have reached junior classification status, and now have programming experience, and the course teaches them how to design, implement, evaluate, and document their programs. Course content directly relates back to SLO 2, SLO 3, and SLO 5 (See Appendix C). Students must also complete this course with a grade of "C" or better to fulfill one of two prerequisites for CIS 4634 Application Software Development Project.

Students who have successfully completed CIS 3423 COBOL and CIS 3443 Object-Oriented Programming Languages are also eligible to enroll in CIS 4623 Database Management Systems, the second of the two prerequisite courses mentioned above. This course teaches students the critical concepts of database storage, a huge sector of the information technology industry. Students learn about file/data organization, access features, data structuring, database layout and design, and proper technique using Structured Query Language (SQL). Course content relates back to SLO 2 and SLO 3. (See Appendix C).

Students who have successfully completed CIS 3523 System Analysis and Design and CIS 4623 Database Management Systems are allowed to progress to CIS 4634 Application Software Development Project, the capstone course of the CIS curriculum. As the capstone course of the program, students are expected to be able to draw upon the sum of all CIS coursework they have previously completed, specifically SLO 1, SLO 2, SLO 3, and SLO 5. Students successfully completing this course will have demonstrated the ability to analyze, design, code, test, document, and present an information system of their own concept, design, and ultimate implementation from beginning to end. This course is intended to provide students the opportunity to successfully demonstrate cumulative evidence of their learning in the programming, and serve as a selling point for them during the interview process and as a reference point for their future careers.

The table below illustrates the historical results from this four course subset. The trending decline in the percentage of students failing to progress can be explained by several initiatives that the School of CIS has implemented over the past several years. (Appendix B)

School Year	Total Students	Students Failing to	Percentage Failing
		Progress	to Progress
2009-2010	125	26	20.80%
2010-2011	105	21	20.00%
2011-2012	132	27	20.45%
2012-2013	147	33	22.45%
2013-2014	125	15	12.00%
2014-2015	126	24	19.05%
2015-2016	98	10	10.20%
2016-2017	131	13	9.92%

Beginning in the fall of 2013, the School of CIS began a free tutoring program for students in our junior and senior level courses. Tutors were hired by the CIS program, and had to be recommended by the faculty teaching the class because of their own past strong performance in the class they would be tutoring. Early results were promising, and the program was expanded in 2014 to include sophomore level courses, and again in 2015 to include <u>ALL</u> CIS courses. Student participation in the program continues to grow, as the number of student hours spent tutoring has increased each year with 87.25 hours recorded during the fall 2016 and spring 2017 semesters.

Also beginning in the fall of 2013, Ms. Marsh and Ms. Cossey began emailing students who missed class a synopsis of what the class had covered in their absence. The purpose of these "touch-base" emails was to let the students know what material they'd missed, so they could catch up on the material by following up with classmates or meeting with the instructor. It was also intended to let the students know that their absence had been noticed, and hopefully they'd return to class.

Beginning in the fall of 2014, Ms. Selby began to utilize Blackboard shells for all of her courses, both online and in class. She intended to improve student learning and engagement by keeping notes for the students to review, and regularly updating the Blackboard Grade Center, so students would always know what their updated grade was in the course. After seeing positive results, other CIS faculty members followed suite in the fall 2015 semester, and in fall 2016, all CIS courses had a Blackboard shell with grades regularly updated in Grade Center.

The CIS curriculum is reviewed annually by faculty. In considering changes to the curriculum, faculty review the above referenced CIS grade data compared to historical rates, input from CIS Senior Exit survey, CIS Alumni Survey, and CIS Area Employer survey data, as well as input from recent graduates gathered during their job search process. Beginning this fall, the EAB software will provide a wealth of historical graduation data and course success rates for program discussion among faculty.

#### b. Curricular Changes

i. Addition/Modification/Deletion of degrees.

There has been no addition or deletion of degrees, although the Unit is researching the feasibility of creating an Associate's degree in Computer Information Systems.

ii. Course Addition/Deletion.

No courses deleted, and no permanent courses added, but several courses have been taught under CIS198V and CIS399V Special Topics. These seminar style courses have been developed in response to student demand, and in an effort to offer students increased electives choices. Recent Special Topics choices include

> CIS198V Computer Concepts CIS198V Introduction to Linux CIS198V Introduction to Game Programming CIS399V Cyberlaw CIS399V Computer Forensics and Cybercrime

iii. Curricular Changes that impact student success/retention

The School of CIS implemented no Curriculum Changes during the 2016-2017 school year, but have made several modifications over the past few years in response to student feedback and analysis of historical grade information. In January 2015, the School of CIS implemented a C&S change to allow students to have the choice of taking either CIS3453 World Wide Web Programming <u>OR</u> CIS3463 Programming Mobile Applications. In July 2016, the School of CIS implemented a C&S change to allow students to have the choice of taking either constraints. In July 2016, the School of CIS implemented a C&S change to allow students to have the choice of taking either ECON2203 Principles of Macroeconomics or ECON2213 Principles of Microeconomics. Both of these changes were implemented to give students greater flexibility and choice of courses in the curriculum.

In July 2016, the School of CIS removed the previously required BS Identity requirement, and added CIS2223 Microcomputer Applications back into the curriculum. This course was removed from curriculum requirements in 2012, but faculty noted that junior and senior level students did not possess the expected mastery of productivity software packages that was expected when the course was removed from the curriculum in 2012. To help improve this basic computer skill, Microcomputer Applications was returned to the curriculum.

In August 2017, the School of CIS has proposed a prerequisite modification on CIS4623 Database Management Systems, removing the requirement of CIS3423 COBOL AND CIS3443 Object Oriented Programming and adding CIS3553 Advanced COBOL. The unit wants students to have had some programming experience before taking the course, but for scheduling purposes during their junior and senior years, needs to make the change. This proposal would be effective in January 2018, if approved.

#### c. Faculty Professional Development

- The continual and rapid evolution of the IT industry necessitates faculty to continually update their knowledge, the software used to teach in class, and to make the best use of all possible delivery methods.
  - After reviewing several workshops and webinars provided by EAB, Mr. Hairston emphasized hands on experience for students during the fall 2016 and spring 2017 semesters. In my CIS4253 Security course, students walk the campus, looking for unsecured wireless networks, and probe them to see if they're accessible, download and run several types of PC scanners to review operating system and application level security, and have to use a hypothetical budget to gather factually accurate quotes to build a security architecture for a hypothetical employer's network. In my CIS198V Introduction to Linux class, students build and customize their own virtual Linux system, learning how to use VMWare to build virtual machines, install and configure the operating system, and create and manage user accounts, processes, and file systems.
  - 2. Ms. Selby has made several changes to her teaching methods based of recent professional development. After viewing a webinar titled "Student Success Teaching Computing Online: The Adventures of engaging students OUTSIDE the classroom" in October 2016, she implemented changes in how her Blackboard shells were organized, subdividing into PowerPoints, Review Questions, Quiz, and Program Examples to refer to. She also provided Help Guides on how to do basic Blackboard tasks such as download Firefox, uploading files for student who didn't have experience with online courses. After instructional meetings with Blackboard representatives, Ms. Selby began including video captures emphasizing and explaining difficult concepts in each unit of material. She also began posting Announcements reminding students of upcoming due dates in case they forgot to check the Blackboard calendar.
  - 3. In the past year, Ms. Marsh has made several changes to her delivery and teaching methods. After attending Dr. Aaron Thompson speak at UAM's 2016 Professional Development week, she decided to incorporate resume building and development into her CIS2223 Microcomputer Applications course. Students submitted, and revised resumes based on her feedback, to help them understand what employers would be looking for once they graduated. From attendance at EAB Student Success Committee meetings, she decided to add attendance points to students' grade to stress the importance of coming

to class. Student can track their attendance grade all through the semester on Blackboard Grade Center.

- 4. Ms. Cossey taught CIS3463 Programming Mobile Applications for the first time during the fall 2016 semester. In preparation for this course, she reviewed 19 instructional videos and how-to's for the best practices regarding programming in Android Studio. She also met with the former instructor of the course for suggestions and tips, and researched articles on self-driving cars for her CIS4503 Data Communications and Networking course because of a strong student interest level in the technical details of the subject.
- 5. As a result of attending Dr. Aaron Thompson's presentation during UAM's 2016 Faculty Development Week, Ms. Harris began giving students a small amount of bonus points in her CIS1193 PC Hardware/Software Maintenance course for stopping by her office. The majority of these students are freshmen, and she wanted to begin to develop a relationship with them, discuss the course, and answer advising questions. She also attended webinars on student retention, and increasing student engagement in online courses.
- 6. After attending a Blackboard webinar called "Ask Me Anything: Online Student Tell All", Ms. Donham adopted several personalization touches to her online classes to increase student engagement. Some of these things included using the student's name when grading their work, opening up multiple sections of assignments at the beginning of the semester so students who chose to work ahead could do so, and proactively monitoring students who miss online assignment deadlines instead of waiting for the student to contact her.

### III. Program Productivity and Program Viability

a. As of August 2017, the current enrollment numbers for the School of CIS are as follows

Academic Level	Number	Percentage
Freshmen	32	33.68%
Sophomore	26	27.37%
Junior	20	21.05%
Senior	16	16.84%
Advanced Certificate in CIS	1	1.05%
Total	95	

Year	Bachelors of Science in CIS	Advanced Certificate in CIS
2013-2014	18	0
2014-2015	15	1
2015-2016	14	1
2016-2017	15	0
Four Year Total	62	2

i. Credentials Awarded by Year within the School of CIS

#### ii. Progression broken down by Credit Hours

Year	15 hours	30 hours	45 hours	60 hours	90 hours
2014	10	10	10	15	15
2015	11	18	8	15	16
2016	8	10	14	21	14
2017	10	11	8	21	23

CIS majors have been fairly consistent for several years, and CIS faculty are aware of the 15 to Finish initiative, and promote to students the importance of timely degree completion.

#### iii. Gateway Course Success Rate

The School of CIS does not offer any of the listed Gateway courses, but the University Gateway Course Results can be found in Appendix D.

iv. **Completion Success** – Number of Graduates with a Bachelor's of Science in Computer Information Systems by year

School Year	Number of Graduates
2012-2013	13
2013-2014	18
2014-2015	17
2015-2016	14
2016-2017	15

In analyzing graduation rate information, using the University's historical data using EAB, I was able to determine that 173 students enrolled at UAM between the fall 2009 and fall 2012 semesters and declared CIS as a major. Please find the 4 year, 6 year, and 8 year graduation rates for this group below. In each of the terms, the School of CIS outpaced the Institutional Graduation Rate. Also, only 5.8% of the students declaring CIS as a major, then electing to change their major went on to complete their Bachelor's degree while at UAM.

Time to Graduation	Total CIS Enrollees from fall 2009-fall	Graduated with BS in CIS	Graduated with another UAM degree (changed	Institutional Graduation Rate	Difference between CIS grad. Rate and
	2012		major)		institutional
4 years	173	15.6%	2.3%	13.7%	+4.2%
6 years	173	27.2%	5.2%	21.8%	+10.6%
8 years	173	28.9%	5.8%	22.8%	+11.9%

By far the biggest negative impact on School of CIS graduation rates occurs during the student's first year of college. As mentioned above, for this analysis, 173 students enrolled at UAM between fall 2009 and fall 2012. Of that 173, 82 students (47.4%) or almost half earned seventeen credits or less in their first year of college, and their eight-year graduation rate is less than 10%. Over this time period, no CIS major who earned less than twelve hours in their first year has gone on to graduate. University-wide, the number are equally dismal for this group of students. The School of CIS has implemented several retention programs in an effort to retain more of these first year students, and is continuing to monitor graduation/progression data.

Number of Credits Earned during 1 <sup>st</sup>	Number of Students	Graduated with BS in CIS by percentage	Graduated from UAM with a Bachelors other than CIS	Institutional Total
year		(%)	by % (Changed Major)	
0-2	11	0%	0%	.2%
3-5	15	0%	0%	.4%
6-11	24	0%	0%	1.4%
12-17	32	9.4%	3.1%	9.1%
18-23	16	31.2%	0%	19%
24-29	41	46.3%	4.9%	44.7%
30-36	31	67.7%	19.4%	62.9%
37+	3	66.7%	33.3%	70.3%

### v. Students Changing Majors in unit

Referencing the graduation data in the two tables above, it's evident that some students who declare CIS as a major, then change to other majors do graduate, but the graduation rates are historically poorer than CIS departmental graduation rates and university-wide graduation rates. In reviewing the data on students who change their major to CIS during this same time period, the overwhelming majority are students with no previous major, followed by students who declared General Studies as their major. The average GPA at the time of the major change for these 116 undeclared students is 2.08, just above the threshold for academic suspension. This is a significant factor in the 24.14% graduation rate for these students.

Previous	Number of	Average GPA at	Graduation %
School/Unit	Students	Time of Major	with BS in CIS
		Change	
None	116	2.08	24.14%
General Studies	18	2.72	44.44%
Social &	9	2.34	22.22%
Behavioral			
Nursing	6	2.57	66.67%
Math & Natural	6	2.27	0%
Sciences			
Business	4	2.93	50%
Arts & Humanities	4	2.76	75%
Education	3	2.15	33.33%
Forestry &	2	2.92	50%
Natural Resources			

### IV. <u>Affordability</u>

### a. Credits at Completion

School Year	Number of	120 hours (On 121-132 hours (C		133-150 hours (On
	Graduates	Schedule)	Schedule +10%)	Schedule +25%)
2012-2013	13	3	7	1
2013-2014	18	2	10	4
2014-2015	17	1	12	2
2015-2016	14	0	8	2
2016-2017	15	3	7	2

In looking at student time to degree, a couple of factors jump out. A majority of students fall into the on-time+10%, however 9 out of these 44 students in the +10% group graduated with 121 hours, which would be a significant shift into the "On Schedule" group. Going forward advisors will need to be sensitive to the difference between 120 and 121 hours at completion, and the School of CIS may need to consider the creation of 1 or 2 credit hour courses to insure students land directly on 120 hours. Several mitigating factors also appear to contribute, with several students having double majors declared, and virtually all students who changed to CIS from a previous major who complete their degree finish with more than 120 hours.

### b. Time to Degree

Year	On Time	On Time +25%	On Time +50%	Over
2015	4	1	0	0
2016	3	2	0	0
2017	3	2	1	0

This was the data I received from the University regarding time to degree. As shown in sections above, it only reflects between 20% & 30% of the actual total annual CIS graduates over this time period – I'm not sure why the data only picks up some of the graduates.

### c. Graduates

- i. Special Honors of Graduates/Alumni Three 2016-2017 CIS graduates with Cum Laude honors.
- ii. Available Employment Data

The School of CIS last conducted an in depth alumni contact drive during the spring 2015 semester. Ms. Angela Marsh attempted to contact 131 UAM CIS alumni from the 2007 graduating class through the 2014 graduating class. Her results, seen in Appendix E show that 115 of the 131 alumni were employed at the time of the survey. Of the 115 employed CIS alumni, 78% were in a career in the Information Technology field, or a career related to the Information Technology field.

iii. Available graduate program enrollment data – Of 46 CIS graduates over the past three years, three attended/are attending graduate school, I was not able to confirm if they have/have not completed their programs of study.

### v. Enrollment/Program Viability

Faculty	Summer	SSCH-	Fall	SSCH	Spring	SSCH	Summer	SSCH	Faculty
	II 2016	Summer	2016	Fall	2017	Spring	I 2017	Summer	SSCH
	Hours	II 2016	Hours	2016	Hours	2017	Hours	I 2017	Totals
Loe,			3.00	54.00	3.00	36.00			90.00
Tonya									
Cossey,	6.00	57.00	15.00	216.00	18.00	315.00			588.00
Terri									
Hairston,			3.00	36.00	3.00	33.00			69.00
Brian									
Donham,	3.00	21.00	18.00	282.00	15.00	249.00	3.00	24.00	576.00
Karen									
Harris,			15.00	228.00	15.00	252.00	6.00	9.00	489.00
Christine									
Wallis,			3.00	51.00	3.00	66.00			117.00
Kimberly									
Marsh,			13.00	154.00	13.00	179.00			333.00
Angela									
Selby,			15.00	195.00	15.00	249.00	6.00	30.00	474.00
Lori									

### a. Student Semester Credit Hour (SSCH) by faculty member

### b. Identify Potential Program Growth areas and plans for implementation

The Dean of the School of CIS visited and spoke to two area school districts during the 2016 – 2017 school year, but there is much potential for growth in the School of CIS related to Governor Hutchinson's program requiring coding be taught in all Arkansas high schools. School of CIS representatives will visit at least 4 area high schools during the next year.

c. Number of Majors/Minors by Discipline

Year	Freshmen	Sophomore	Junior	Senior
2014-2015	41	24	27	14
2015-2016	33	29	20	12
2016-2017	32	26	20	16
Average	35.33	26.33	22.33	14

Historically, other than a very large freshmen class during the fall 2014 semester, CIS majors by classification has been very consistent. As mentioned earlier in the report, the largest amount of attrition, both in the department, and University-wide occurs during the freshmen year. The second largest loss of students occurs between the junior and senior level years, as some students are unable to complete the junior and senior level portions of the CIS curriculum, and ultimately choose to change their majors.

- d. Explanation of Significant Program Enrollment Changes in the past year. No significant enrollment changes in the past year.
- e. Plans/Strategies for low enrollment programs The School of CIS's enrollment figures and SSCH have been consistent and are not considered to be a low enrollment program.
- f. List of programs approved as cognates
  - i. None at this time.