

A Survey of Accounting Information Systems Programs in U.S. Colleges and Universities

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Abstract

This study collected data on AACSB-accredited colleges and universities in the U.S. to identify those programs that might be considered "AIS." The study included minors, tracks, concentrations, and other formal educational opportunities touching on information systems within the context of an accounting program of study. The reported results include information on 35 graduate and 8 undergraduate programs, the types of degrees offered, and course content required in those programs.

Introduction

For some time now, observers have noted a shift in the accounting field towards what is loosely referred to as "systems." Since the 1970s, (or even before), there have been calls for accountants to have more knowledge of "systems." The Accounting Education Change Commission (1990) specifically included a need for enhanced knowledge and understanding of accounting systems in their recommendations to accounting educators.

The problem with this shift is that the term "systems" means different things to different people. To some, "systems" means computer tools such as programming and database packages, while to others, it means the conceptual framework of designing computerized information systems, with or without technical training in productivity tools. Still others con-

sider "systems" to be a holistic approach to business functions, combining the areas of marketing, production, logistics, finance, and strategic planning into a synergistic whole, studying the business entity as a single unit, or "system."

Some schools have decided to meet the need for more systems by redesigning their accounting curriculum to have a more holistic business analysis approach, while at the same time interjecting more technological tools into the accounting courses (Hardy, *et al.* 1993). Others have met the need by creating a separate program of study within the accounting degree, known as an "AIS program" (Fordham *et al.* 1997).

Given the variety of definitions of "accounting systems," what can an accounting student expect when he or she decides to take a recommendation to enter an AIS program? And more important for educators who are consider-

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ing whether or not to offer an “AIS program” within their accounting curriculum, what does an AIS curriculum look like? Does an AIS degree require programming expertise? Will it provide knowledge of networking or telecommunications? Is the material taught from an accounting perspective by accounting faculty, or merely as a collection of information systems courses in a computer science or business department?

This study attempts to identify those AACSB-accredited U.S. institutions offering an “AIS program,” and then inquires as to the composition of each curriculum. Course offerings, both required and elective, are gathered in an attempt to draw a generalized picture on the state of AIS education in the U.S. today.

Research Methodology

To begin the study, the research team compiled a list of questions frequently asked about AIS programs. These questions originate most often from students considering AIS as a career, or from faculty at other institutions that are considering the addition or development of an AIS program. From this list, the team next developed an instrument to facilitate compilation of information from AIS programs. The team initially considered the possibility of mailing a survey to every school indicating the existence of an AIS program; however, upon reflection, historical response rates to mailed surveys coupled with the perceived small number of schools administering an AIS program led the team to discard the mail survey methodology in favor of a more comprehensive data collection technique.

The team compiled a population of all AACSB-accredited 4-year institutions of higher learning in the United States as reported in Hasselback (1998). The Hasselback list was checked against the AACSB list for completeness. The population includes all schools holding business accreditation, without regard to whether the school also held separate accreditation of their accounting program. There were 350 schools in

this population (AACSB 1998).

To identify those schools with AIS programs, the team obtained copies of the accounting portion of the college catalog for each institution offering a degree or major in accounting. Those catalog pages were carefully searched for mention of a program, track, emphasis, or specialty relating to systems or AIS. Where available, both the undergraduate and graduate catalogs were obtained and searched. The catalog copies were obtained from the microfiche *National Collection of College Catalogs – 1997-98 Final Edition* compiled by Career Guidance Foundation (1998). The pages from the catalog that describe course offerings were also photocopied. Where needed, course descriptions and supplemental information on the AIS program were obtained by review of the school’s Internet site and telephone contact with the school.

Since it was the researchers’ intent to study AIS programs from the perspective of accounting students and faculty, only the *accounting* programs’ pages were searched. Institutions whose AIS programs are not mentioned in the accounting section of the catalog may not have been included in this study.¹

To allow for differences in terminology, the team adopted a broad definition of “AIS program.” Schools were selected for inclusion in this study if their catalog’s accounting pages mentioned any form of a specialty in systems, including a major, a minor, a track, a concentration, an emphasis, or a specialization.² Further, institutions were selected without regard to whether the wording used was “AIS,” “systems,” “information systems,” “information technology,” “computer systems,” or any of a host of other permutations that could be construed as relating to the AIS field. The primary criterion was that the systems-related program had to appear under the “accounting” section of the catalog.³

Accounting programs are always in a

state of flux as faculty continuously strive to improve their curriculum. At any given point in time, numerous schools are considering changes to their curriculum, while others are adding or deleting programs (including AIS programs).⁴ Thus, a benchmark date needed to be selected. The researchers decided to perform the study on programs as they existed for the 1997-98 academic year, which is the most recent year that college catalogs were available for essentially all institutions in the population.

Forty-eight (48) schools were identified as having a program that met the researchers' broad definition of an AIS program. For each of these schools, a researcher completed a questionnaire, obtaining data from the catalog pages, the program's web pages, and most often, by a telephone interview with a representative from the AIS program at the institution itself. Data collection was conducted during the fall of 1998 and winter of 1999. To ensure comparability, information was recorded on each program as it existed in the 1997-98 academic year.

Results

General Character of AIS Programs

Almost all AIS programs are in the form of specialties, tracks, concentrations, or similar sub-programs within a more traditional accounting degree. Generally, undergraduate AIS programs require a student to complete a normal accounting program of study, perhaps eliminating one, or at most two, of the traditional accounting courses, but adding three to six courses in computer tools and systems analysis, and perhaps technology. Thus, AIS students at the undergraduate level usually have accumulated more than the minimum number of credit hours required for a traditional accounting bachelor's degree at their institution. Minors in AIS generally require six to eight more courses, whereas a typical concentration or emphasis requires only three or four specialty courses beyond a normal bachelors accounting degree.

At the graduate level, AIS programs typically are also a track or area of emphasis within a graduate degree program, but do not require additional coursework beyond the 30-hours of major content normally completed for a masters-level degree. The higher number of graduate programs in AIS might be attributable to students' desires to obtain formal recognition for coursework taken beyond that required for a normal accounting bachelor's degree. As the 150-hour rule encourages students to go beyond normal bachelor's degrees, it is logical that specialty tracks would be incorporated into graduate degree programs.

Of the 350 AACSB-accredited schools, 48 had programs. Of these 48, program information was obtained on 43 AIS programs: 8 undergraduate and 35 graduate. Table 1 is a detailed list of the 48 schools offering an AIS program. That table also indicates whether the institution offers the AIS program at the undergraduate level, the graduate level, or both, and shows the status of the 150-hour rule for the state in which the institution is located. Thirty-nine (81%) of the 48 schools offer an AIS program at the graduate level, while thirteen (27%) of the 48 schools offer an AIS program at the undergraduate level. These numbers include the four schools that offer both undergraduate and graduate AIS programs.

Table 2 provides more detail about the type of AIS programs offered. The analysis is based on the wording used in the catalog or web pages to describe the AIS program, coupled with additional clarification provided by the representative of the school during the telephone interview. Interestingly, only three of the undergraduate AIS programs actually offer a "degree in AIS." The most popular form of AIS undergraduate program is a concentration, track, specialty, or some other type of sub-program within a normal accounting degree program of study. Almost half of the AIS programs define themselves in this manner.

Table 1
Universities Maintaining An AIS Program According to the University's 1997-1998 Catalog¹ n=48

University	Undergraduate (UG) or Graduate (Grad) Program	150-hour State Status as of 10/27/98
Arizona State University	Grad	No
Auburn University	Grad	Yes
Bowling Green State University	Grad	Eff. 1/1/00
Brigham Young University	Grad	Yes
California State University @ Chico	Grad	No
California State University @ Los Angeles	Grad	No
Central Michigan University	UG	Eff. 7/1/03
Cleveland State University	Grad	Eff. 1/1/00
University of Colorado @ Colorado Springs	UG	Eff. 1/2/02
Colorado State University	UG	Eff. 1/2/02
Eastern Michigan University	UG, Grad	7/1/03
Florida Atlantic University	Grad	Yes
Florida International University	Grad	Yes
Florida State University	Grad	Yes
Georgia State University	Grad	Yes
Hofstra University	Grad ²	Eff. 8/1/09
University of Idaho	Grad	Eff. 7/1/00
University of Illinois	UG ²	Eff. 1/1/01
Indiana University	Grad	Eff. 1/1/00
James Madison University	UG, Grad	No
University of Kansas	UG ² , Grad	Yes
University of Massachusetts	UG ²	Eff. 7/1/02
University of Memphis	Grad	Yes
Michigan State University	Grad	Eff. 7/1/03
Middle Tennessee State	Grad	Yes
Mississippi State University	Grad	Yes
University of Missouri @ Kansas City	Grad	Eff. 6/30/99
Murray State University	UG ²	Eff. 1/1/00
University of Nebraska @ Omaha	Grad	Yes
University of New Orleans	Grad	Yes
University of North Carolina at Wilmington	Grad	Eff. 1/1/01
Northern Illinois University	Grad	Eff. 1/1/01
Ohio University	Grad ²	Eff. 1/1/00
University of Rochester	Grad	Eff. 8/1/09
University of South Florida	Grad	Yes
Southern Illinois University	Grad	Eff. 1/1/01
University of Tennessee	Grad	Yes
University of Texas @ Arlington	Grad	Yes
University of Texas @ Austin	Grad	Yes
Texas A & M University	Grad ³	Yes
University of Virginia	Grad ²	No
Virginia Poly Inst & St University	UG, Grad	No
Wayne State University	Grad	Eff. 7/1/03
Weber State University	Grad	Yes
Western Michigan University	UG	Eff. 7/1/03
Western Washington University	UG ²	7/1/00
University of Wisconsin @ Eau Claire	Grad ^{2,4}	1/1/01

(1) "AIS program" includes: AIS concentration, track, option, emphasis, focus, specialty, and double major in Accounting and Information Systems and AIS major. (2) Nine schools report an AIS program of some type in their 1997-98 catalog, but do not provide specifics of the curriculum. These schools are reported here and in Table 2 for completeness, but are not included in Tables 3, 4, or 5. (3) Texas A&M's professional program may be chosen by the student in the junior year of the BBA. This path allows for earning a BBA in accounting and MS in MIS (simultaneously awarded). (4) University of Wisconsin at Eau Claire offers a 150-hour BBA/Certificate program that allows a student to choose an auditing and systems 150-hour concentration. This program was therefore classified as graduate only.

Table 2
Type of AIS Program Offered

<i>Panel A: Undergraduate Programs (n=13)</i>		
<u>Type of Program</u>	<u>Number of Programs</u>	<u>Percent</u>
BS, BBA, BA Accounting Degree with Concentration, Track, Specialty, Option, Emphasis, or Focus in AIS	6	46.1
BS, BBA, BA Accounting Degree with CIS/IS/CS Specialty or Option ¹	3	23.1
Double Major in Accounting and CS (joint degree)	1	7.7
BS, BBA, BA in AIS	3	23.1
Total	13	100.0
<i>Panel B: Graduate Programs (n=39)</i>		
<u>Type of Program</u>	<u>Number of Programs</u>	<u>Percent</u>
MBA Degree with Concentration, Track, Specialty, Option in AIS	2	5.1
MSA, MPA, MS, MAcc Degree with Concentration, Track, Specialty, Option, Emphasis, or Focus in AIS	31	79.5
Master of Accounting and Information Systems ²	4	10.2
Masters of Accountancy and Financial Information Systems	1	2.6
MS in AIS	1	2.6
Total	39	100.0

(1) Specialties not specifically identified as AIS include computer information systems, information systems, and computer science. (2) Includes one program designated as Master of Science in Accounting specializing in Information Systems and one program designed as Master of Science in Management Information Systems (courses dominated primarily in the accounting department).

It is expected that most schools having both accounting and MIS degrees will allow their students to double major in both fields. Simply offering a double major in accounting and MIS was insufficient for a school to be included in this study. However, one institution placed the double-major option within the accounting pages of the school's catalog, leading the research team to suspect that school's accounting faculty considered the double major to be a legitimate field of specialty within the area of accounting. Details gathered on that program confirmed that the double major at this institution is, in fact, a considered a homogenous (joint) degree specializing in both accounting and information systems, and thus meets this study's definition of an AIS program.

Among graduate programs, Table 2 Panel "B" shows that most institutions (31, or 79.5%) describe their graduate AIS programs as a concentration, track, specialty, or some other type of sub-program within the masters of accounting degree. Four institutions (10.2%) offer a Master of Accounting and Information Systems, and one offers a Masters of Accountancy

and Financial Information Systems. Two schools offer an MBA degree with a track or option in AIS. Only one institution offers a Masters of Science in AIS.

Curriculum Content Of AIS Programs

The bulk of the information gathered in this study dealt with the composition of the AIS curriculum. This study concentrates on those courses specific to each institution's AIS program, and ignores those courses that have traditionally been considered "pure accounting" and/or are part of the institution's mainstream accounting degree.⁵

Table 3 reports the generalized titles of the courses listed as part of the AIS program at those schools offering AIS at the undergraduate level. The most common courses for inclusion are database design/development (included in 87.5% of the programs), programming (included in 75%), systems analysis and design (included in 62.5%), telecommunications/networking/data communications (included in 62.5%), and decision support systems or expert systems (included

in 50%).

Table 3 also shows whether each course is required or elective for AIS students. It is interesting to note that database design and/or programming are required by all but two of the programs, apparently highlighting the emphasis on these tools at the undergraduate level. Table 3 also shows whether the courses are taught primarily by accounting faculty (or at least within the accounting department), or whether the students must go to the MIS or computer science (or other) departments to receive instruction. None of the programming courses are taught within the accounting department, and only one institution teaches database within the accounting domain. It was interesting that, with the exception of programming and database, many courses with traditional MIS-sounding titles were in fact domained in the accounting department including Software Development, Structured Systems Development, and Advanced Systems Analysis and Design. Overall, 26% of the courses were

taught within the accounting department, while 74% were domained outside accounting.

Table 4 reports the AIS curriculum content for the 35 graduate programs.⁶ Once again, database and systems analysis and design are prominent requirements, with database being required in 34.3% of graduate programs and systems analysis and design being required in 31.4% of graduate programs. Other courses that are prominent include EDP Auditing, Advanced AIS, Information Technology, and Telecommunications. While programming courses are required in only 20% of curriculums, this low percentage may be due to programming courses being prerequisites for admission to the graduate AIS program.

Initial inspection of Tables 3 and 4 might lead to a conclusion that there are a large number of courses that are unique to one single institution. However, closer investigation of the course content (based on course description in

Table 3
Undergraduate Program Course Requirements

Course	Number of Universities (n=8)				
	Total (Percent)	Elective	Required (Percent)	Domained in Accounting	Domained Outside Accounting
Database	7 (87.5)	1	6 (75.0)	1	6
Programming:	6 (75.0)		6 (75.0)		6
Cobol	3 (37.5)		3 (37.5)		3
Other	3 (37.5)		3 (37.5)		3
Systems Analysis and Design	5 (62.5)	3	2 (25.0)		5
Telecommunications, including networking and data communications	5 (62.5)	3	2 (25.0)	1	4
Decision support systems, including expert systems	4 (50.0)	3	1 (12.5)		4
EDP Auditing	2 (25.0)		2 (25.0)	2	
Advanced AIS	2 (25.0)		2 (25.0)	2	
Information Technology	2 (25.0)		2 (25.0)	1	1
Software Development	1 (12.5)		1 (12.5)	1	
Consulting	1 (12.5)		1 (12.5)		1
Special Topics in Information Systems	1 (12.5)	1			1
Business Systems Applications	1 (12.5)	1			1
Program Design and Construction	1 (12.5)		1 (12.5)		1
Applied Data Structures	1 (12.5)	1			1
Structured Systems Development	1 (12.5)		1 (12.5)	1	
Applied Development Using Database Technology	1 (12.5)		1 (12.5)	1	
Advanced Systems Analysis & Design	1 (12.5)	1		1	
Total courses	42	14	28	11	31

Table 4
Graduate Program Course Requirements

Primary Course Content	Number of Universities (n=35)				
	Total (Per- cent)	Elective	Required	Domained in Accounting	Domained Out- side Accounting
Database	21 (60.0)	9	12 (34.3)	4	17
Systems Analysis and Design	20 (57.1)	9	11 (31.4)	8	12
EDP Auditing	16 (45.7)	5	11 (31.4)	13	3
Advanced AIS	11 (31.4)	1	10 (28.6)	11	
Information Technology	10 (28.6)	4	6 (17.1)	2	8
Telecommunications, including net- working and data communications	10 (28.6)	4	6 (17.1)	1	9
Decision support systems, including expert systems	9 (25.7)	3	6 (17.1)	2	7
Programming:	8 (22.9)	1	7 (20.0)		
Cobol	1 (2.9)		1 (2.9)		1
Visual Basic	3 (8.6)		3 (8.6)	2	1
C, C++	3 (8.6)		3 (8.6)		3
Other	1 (2.9)	1			1
Advanced Database	4 (11.4)	2	2 (5.7)		4
Computerized Accounting Systems	3 (8.6)	1	2 (5.7)	3	
Consulting	3 (8.6)		3 (8.6)	3	
Advanced Decision Support Systems, including expert systems	3 (8.6)	3			3
Management Information Systems	3 (8.6)	1	2 (5.7)	1	2
Electronic commerce	3 (8.6)	2	1 (2.9)	1	2
Business Information Systems Devel- opment	3 (8.6)	2	1 (2.9)		3
Operational Auditing	2 (5.7)	1	1 (2.9)	2	
Legal Environment of Systems	2 (5.7)	1	1 (2.9)		2
Information Resource Management	2 (5.7)	1	1 (2.9)		2
Seminar: Internet Information Access	2 (5.7)	2		2	
SAP I	2 (5.7)		2 (5.7)	1	1
Microcomputers in AIS	1 (2.9)	1		1	
Management Control Systems	1 (2.9)		1 (2.9)	1	
Strategic Information Systems Man- agement	1 (2.9)		1 (2.9)		1
Structured Systems Analysis	1 (2.9)	1			1
Structured Systems Design	1 (2.9)	1			1
Data Center Administration	1 (2.9)	1			1
Systems Development Practicum	1 (2.9)	1			1
Current Problems in Business Infor- mation Systems	1 (2.9)		1 (2.9)		1
Computerized Assisted Auditing Techniques and Advanced AIS Auditing	1 (2.9)		1 (2.9)	1	
Information Systems Analysis	1 (2.9)	1			1
Business Process Analysis and Design	1 (2.9)		1 (2.9)		1
Accounting System Theory	1 (2.9)		1 (2.9)	1	
Integrative Accounting Seminar	1 (2.9)		1 (2.9)	1	
Contemporary Issues in AIS	1 (2.9)		1 (2.9)	1	
Advanced Systems Analysis and De- sign	1 (2.9)		1 (2.9)	1	
System Issues and Policies	1 (2.9)		1 (2.9)	1	
SAP II	1 (2.9)	1			1
Managing Information	1 (2.9)		1 (2.9)		1
Quantitative Modeling	1 (2.9)	1			1

Information Systems & Ethics	1 (2.9)		1 (2.9)	1	
AIS - II (pre-advanced AIS)	1 (2.9)		1 (2.9)	1	
Software Development	1 (2.9)		1 (2.9)	1	
Information Center Functions	1 (2.9)		1 (2.9)	1	
Systems Implementation	1 (2.9)		1 (2.9)	1	
Strategic Information Planning	1 (2.9)		1 (2.9)	1	
Multi-user Accounting	1 (2.9)		1 (2.9)	1	
Advanced Programming	1 (2.9)	1			1
Computer Security and Privacy	1 (2.9)		1 (2.9)	1	
Information Systems Assurance	1 (2.9)		1 (2.9)	1	
Information Systems Infrastructure	1 (2.9)		1 (2.9)		1
Applications Prototyping with Objects	1 (2.9)		1 (2.9)		1
Object-Oriented Specification	1 (2.9)		1 (2.9)		1
Analysis, Planning & Design (3rd course at one school)	1 (2.9)	1			1
Total courses	170	62	108	73	97

the catalog, web pages, or information provided in the telephone interview) reveals that many courses are similar in content and coverage across institutions. Table 5 is an abridgement of Tables 3 and 4, showing the major content of the courses rather than generalized course titles for the most-frequently included courses.

Comparing Tables 3 with Tables 4 and 5, it is readily apparent there is more diversity in the graduate programs than there is in the undergraduate AIS programs. This might be attributable to the variety of specialties at the graduate level, or it might be attributed to the increased emphasis on strategic issues. Whereas most undergraduate programs share a similar curriculum for their AIS students (programming, database, systems analysis and design, and telecommunications), no such similarity exists among graduate programs. Interestingly, a majority of undergraduate programs require database and programming, while there is no identifiable course that is required by a majority of graduate AIS programs. Additionally, while Table 4 reports 31.4% of universities and colleges include an Advanced AIS course, Table 5 shows that this percent is actually higher (40%) when courses are classified by content. Other increases are noted in Database, which increased from 60% to 66% and EDP Auditing, which increased from 45.7% to 49%. Also of interest is the Business

Analysis/Consulting category. This course appears to be mainly taught at the graduate level as a capstone course.

AIS Compared To Traditional Accounting

Not all schools were willing or able to furnish information on comparisons between the regular accounting majors and those in an AIS program. However, those schools that did provide data indicated that students completing an AIS program landed jobs with significantly higher average starting salaries (ranging from \$0 to as much as \$50,000) higher than the regular accounting majors. Because there are great disparities between institutions in terms of their graduates' backgrounds, geographic location, experience levels, and other factors which might impact salary comparisons and serve as confounding effects, salary comparisons are not tabulated for presentation.

Anecdotal evidence was gathered about employment opportunities for AIS graduates. Again, due to wide variations between schools in terms of location, major employers, content of the AIS program, etc., any tabulated or summarized data might be misleading. However, it can be noted that AIS graduates at both the bachelors and masters levels are finding ample job opportunities in public accounting, industry, and gov-

Table 5
Typical Courses Found in AIS Programs Based on Course Content Rather Than Course Title

<i>Panel A: Undergraduate Programs</i>		
Course	Number (Percent, rounded) of Universities that Include this Course	Number (Percent, rounded) of Universities that Require this Course
Relational Database Concepts, Design, Development Tools	8 (100)	6 (75)
Systems Analysis and Design	5 (63)	3 (38)
Programming Tools (procedural or object-oriented)	5 (63)	5 (63)
TelecommunicationsData Communications, networking	5 (63)	2 (25)
Decision Support Systems Decision science, expert systems	4 (50)	1 (13)
<i>Panel B: Graduate Programs</i>		
Course	Number (Percent) of Universities that Include this Course	Number (Percent) of Universities that Require this Course
Database and SAP	23 (66)	14 (40)
Systems Analysis and Design, Structured Analysis, Systems Development/Implementation, Software Development concepts	20 (57)	10 (29)
EDP and Operational Auditing	17 (49)	12 (34)
Advanced AIS	14 (40)	13 (37)
General Information Technology	11 (31)	6 (17)
Telecommunications, including networking and data communications	10 (29)	6 (17)
Decision support systems, including expert systems	9 (26)	6 (17)
Programming	7 (20)	6 (17)
Business Analysis, Consulting	4 (11)	4 (11)

ernment. Anecdotal evidence suggests that while consulting and business analysis are the most commonly-heard employment opportunities for AIS graduates, there is no single field which attracts a majority of AIS students. Graduates of AIS programs are finding jobs in traditional auditing, systems development, technology training, systems evaluation/EDP audit, governmental audit and contract services, and even law enforcement (white-collar crime units).

One finding that appeared to be unanimous across all schools contacted is that AIS majors are in short supply compared to the demand. The job openings for qualified AIS graduates, at undergraduate and graduate levels, are greater than the number of students that can be accommodated by today's AIS programs.

Limitations

This study collected data on programs

in effect for the 1997-98 academic year. It is known that many programs have already been changed or modified in the interceding months. In the telephone interviews, several schools, mentioned that they were contemplating modifications to their curricula, although no clear pattern could be identified in the planned changes. Most schools indicated that their AIS programs were re-evaluated annually due to the dynamic nature of the business and technology environment.

Further, it is expected that a small number of schools may have been missed due to their catalogs not making the publication deadline for the *National Collection of College Catalogs*, or other factors. Some schools may have had AIS programs as of 1997-98, but are not listed in this study. Additionally, some schools may have programs they consider to be AIS but which did not appear as such to the researchers studying the catalog pages.


Judgment was used in combining courses in Table 5. Other researchers may have a slightly different interpretation in combining courses by course content. In the tabular presentation of results, the researchers may have inadvertently misinterpreted or summarized dissimilar courses.

Finally care must be used when applying the results of this study. Faculty considering changes to their curriculum, or addition of an AIS track, should not misconstrue the summary of current AIS programs to be a recommendation of what AIS programs should be. Faculty should design their own programs to optimally meet their institution's educational mission and goals. The results of this study should be interpreted as a summary *report* of existing curricula, *not a recommendation* or guideline for curriculum development.

Conclusion and Implications

It must again be emphasized that the results of this study are based on AIS programs in place and functioning as of the 1997-98 academic year that were identifiable to the research team. Due to the continuous advance of information technology, programs are constantly changing, and new AIS programs are being developed each year. However, it is hoped that having a snapshot or baseline from which to compare will help to document the perceived shift towards information systems specialty tracks in accounting programs. Further, the data herein should provide a useful starting point of inquiry for institutions considering adding, modifying, or adapting programs addressing AIS.

The number of AIS-program courses taught in MIS or other non-accounting domains is fairly large. This research reveals that 74% of undergraduate AIS program courses and 57% of graduate AIS program courses in this study are domained outside accounting. The question should be asked, are these courses adequately relating their material to accounting, or are we

expecting accounting students to be able to bring that information back into the accounting realm on their own? Additionally, AIS programs may face a shortage of talent, both in advisory capacity for curriculum design, as well as in teaching. Perhaps more attention needs to be directed to producing educators who can adequately connect the fields of accounting and systems. 

Endnotes

1. For example, an institution with both a traditional accounting program and an AIS program may list its AIS program as a track in the MIS department. The information on the AIS program would therefore be found under the MIS degree section of their catalog. If that institution did not cross-reference or otherwise mention the AIS program in the section describing the Accounting degree, then that school's AIS program could have been overlooked and not included in this study.
2. Some schools require their accounting majors to complete additional systems courses beyond the traditional foundation course. However, if these schools did not refer to a *specialty* of some type in systems, they were excluded from the study.
3. A school was not included if it merely had a separate MIS degree that was not described within the accounting program's pages.
4. For example, several new AIS programs were identified, including Bowling Green State University, Baylor University, Bentley College, College of William and Mary, Texas Tech University, and University at Albany-SUNY. Other schools such as Pace University are moving their AIS programs from the undergraduate to the graduate level.
5. Since the model AICPA curriculum recommends one course in systems for all accounting graduates, the researchers ignored each university's baseline systems course.

6. The courses are listed without regard to whether the individual offerings are taught at the undergraduate or graduate level. For example, a program that requires a 400-level course in the graduate program curriculum is included in Table 4.

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