

# IS2020 Model Curriculum: Understanding the Curricular Gaps for ACBSP Accredited Programs

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## Abstract

Previously, IS2020 has been compared to IS programs at AACSB and ABET accredited institutions; however little research has been conducted solely for ACBSP accredited IS programs. The process of evaluating curricula was relatively straightforward with previous model curricula such as IS2002 and to some degree with IS2010. The introduction of IS2020 and its use of competency realms presents unique challenges when performing program comparisons. Further, the necessary gathering of detailed program requirements and course descriptions from non-standardized university websites is labor intensive. The authors successfully developed a process to gather detailed IS program components for ACBSP accredited IS programs; however, analyzing program details was fraught with challenges. The disparity in program design, inconsistent catalog data, and the lack of individual course details presents issues that require a conversation with the broader discipline. This work in progress outlines the details for the data collection and mapping process for ACBSP accredited IS programs and the issues raised in comparing program data to IS2020.

**Keywords:** information systems curriculum, ACBSP, IS2020, program evaluation, program transparency

## 1. INTRODUCTION

The release of the IS2020 Competency Model has brought about a wave of questions from department chairs and faculty to understand the differences between their current curricula and the new competency model (ACM/AIS, 2020). While recent research has been advanced by Janicki and Cummings (2022) to better understand American Assembly of Collegiate

Schools of Business (AACSB) accredited programs and previous research was completed regarding ABET accredited programs, little research has been explored regarding model curricula and Accreditation Council for Business Schools and Programs (ACBSP) accredited business schools. ACBSP accredited programs prioritize teaching and are often smaller in size than AACSB programs. Performing a search of Academic Search Complete, Business Source

Elite, and ERIC for peer-reviewed articles between 2006 and 2022 yielded only one result from the Journal of Information Systems Education. This work compared IS programs at AACSB and ACBSP schools to the IS2002 Model Curricula (Lifer, Parsons, & Miller, 2009). As the IS2020 Competency Model is now being reviewed by program chairs and deans, it is important to understand where programs can be modified to increase the rate of adoption of IS2020. While the competency model areas of foundations, data, technology, development, organizational domain, and integration provide a helpful framework, at the end of the day, program chairs want to know how to design a set of required and elective courses to meet the needs of their student population. This work in progress seeks to perform the gap analysis between ACBSP accredited IS programs and IS2020 so that program chairs and faculty are better informed to adjust their curricula.

Work has been completed to gather information from all ACBSP accredited programs (n = 82) including name of major (e.g., IS, MIS, CIS, BIS, etc.), Carnegie classification, and student population. In addition, program descriptions and requirements, course names and descriptions have been compiled for analysis. The purpose of this work in progress is to 1) share our current methodology for collecting and organizing data; 2) raise awareness to the computing education community about the difficult conceptual issues related to moving forward with evaluating program adoption of IS2020; and 3) solicit input on possible solutions to these issues.

## 2. METHODOLOGY AND DATA COLLECTION

An initial list of programs was gathered by using the search function from the ACBSP website (<https://acbspsearch.org/>). The search was limited to institutions within the United States. To catch different iterations of computing-related programs in business schools, the search string "Information" was used to capture programs titled "Information Systems", "Management Information Systems", "Computer Information Systems", "Business Information Systems", and "Information Technology." Additional fields were added to include Carnegie Control (Public, Private not-for-profit, Private for-profit), and student population (as of 2000). See Table 1 for a complete listing of captured fields.

Before beginning an in-depth analysis of each IS-accredited program, details for each program were gathered by visiting each program's website to obtain information such as description of

major, required, and elective courses, and course descriptions (see the Table 2).

Institution Name
Location (Address, City, State)
Degrees Offered
Name of Major
Carnegie Control
Student Population (as of 2000)
Additional Notes

**Table 1. ACBSP IS-related Program Detail**

School Name
Program Name/Type
Hyperlink to Program webpage
Major Description
Program Course Titles
Required Major Course Descriptions
General Education Course Listings (if located)
Major Specific Electives (if located)

**Table 2. ACBSP IS Program Detail**

From each school's website, information was copied from either the program page itself or an online school bulletin. In all instances, the most recent bulletin was used, so some are dated for either the previous year or current year depending on what was available on the website. Information was compiled into a separate Word document for each school, listing the program name and type as well as the school's name, a hyperlink to the school/program website, major description, overall major course listings, and required major course descriptions. If general education courses for either the college as a whole or the specific school could be located, they were included. If program/major-specific electives could be located, they were included. The format for each write-up is identical. All major descriptions are written in plain text for searching purposes.

However, during this process there were several factors which affected the data collection process that must be noted. When researching schools with multiple campuses or online options, only one write-up was created to avoid data duplication. Moreover, some schools had closed officially, underwent a school/program name change, or dropped the major completely.

These alterations were documented in the spreadsheet mentioned above (Table 1) where duplicate/nonexistent schools were deleted, and school/program names were updated, respectively. If a program was altered from what was previously listed on the ACBSP website, then it was included if it was a) an-IS based program

and b) housed in the college's school of business. Additionally, the spreadsheet contained all degree types, consisting of either BS/BBA/BA, depending on the respective school's classification of each program.

### 3. DATA EXAMINATION RESULTS – CONTENT AREAS VS. COURSE EXAMPLES

Upon examination of the data, the authors recognized several conflicting items across programs that require collaboration from the IS community to reach consensus on definitions

Previous research has found that the curriculum at schools generally fell into 2 camps: IS2010 type programs or IS2002 type programs (Reynolds, 2016). Even though these two models were vastly different in some areas, they had the common theme of using course containers to provide examples for schools to follow. IS2020 specifically avoided doing this for several reasons elaborated in the document. Neither of these approaches is a particular hinderance to developing/revising courses. However, if you are comparing programs external to the school (e.g., other schools, parents, industry employers), the course container model makes it somewhat easier to accurately compare a school's program with a model curriculum.

In the case of this study, the authors realized that, after collecting the extensive database of ACBSP IS program details, there wasn't the ability to look at courses and compare them to content areas without having a syllabus for each course (and in some cases, those are not detailed enough to check against the bulleted list in each content area in IS2020). Previous models had a "course" description and key words that made it a little easier to identify matches between the model and a given school's curriculum. It is conceivable that a comparison between keywords could be done between each competency realm's keywords and either their existence in a course title or course description.

While IS2020 may have given each school a more flexible guide to creating a curriculum, it seems to be an asymmetric process. It is nearly impossible to go from the courses (catalog titles and descriptions) backwards to match the model curriculum if you are not in that specific program and do not have access to every course syllabus. IS2020 seems to be meant for one-to-one evaluation, not for program transparency between institutions. This limits the value to the other constituents of IS programs who want to be able to evaluate specific

characteristics/differences between programs. In trying to make it so not every program is a cookie-cutter copy, IS2020 has taken away the ability for outsiders to make a comparative content decision.

### 4. FUTURE WORK

In spite of the aforementioned issues, there is the potential for valuable information resulting from further analysis. The research assistant gathered a treasure trove of data rich with detail that an opportunity exists to conduct a deep dive into program design to better understand the alignment (or lack thereof) between existing programs and IS2020. The authors recognize that this work requires input from the computing educator community so that the proposed study can be completed.

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