ACCOUNTING SYSTEMS AND ANALYTICS (BS)

Introduction

Accounting Systems and Analytics (BS)
Chair: Ian J. Redpath, JD, LLM

The Accounting Systems and Analytics program (formerly Accounting Information Systems) is part of the Richard J. Wehle School of Business (https://www.canisius.edu/academics/our-schools/richard-j-wehle-school-business/) and is accredited by the prestigious Association to Advance Collegiate Schools of Business (AACSB). As a Jesuit institution, you will also take a strong core of courses that emphasizes writing skills, logic and breadth of knowledge about the human experience. The Jesuit tradition of developing both intellect and character translates into accounting professionals who concern themselves with not only the financial health of an organization but also its professional integrity and its contribution to society as a whole.

The Accounting Systems and Analytics (ASA) Program is designed for students to gain the knowledge and skills required to bridge the gap between accounting and technology. The ASA program emphasizes student's developing in demand skills in the areas of data analytics, business process knowledge and information technology risk assessment. ASA is a unique program, started in 2002, as one of only 30 schools offering similar programs in the U.S. ASA majors are often dual majors with accounting who join the ASA program after starting at Canisius while some students major only in ASA. The ASA major skills are in demand in the market place. Some ASA graduates choose careers in technical positions such as an Information Systems Auditor for high paying jobs with public accounting firms and financial institutions. These positions typically pay higher starting salaries than the entry level accounting positions. Other graduates use their ASA knowledge to supplement their accounting skills to enhance their performance in their professional careers and improve the chances of landing their first professional position.

From its inception, the ASA program has strived to reinforce concepts with state of the art technology that expands the career opportunities of our graduates. More recently, in 2013, Canisius University joined the SAP University Alliance (http://scn.sap.com/community/uac/) which enables the college to use SAP software for instructional purposes. SAP is the worldwide leader in enterprise resource planning (ERP) software solutions. Students benefit from hands on use of SAP software throughout the ASA program. The SAP initiative was made possible through partnerships with local businesses. Additionally, as a member of the SAP University Alliances program, Canisius University offers the SAP Student Recognition Award certificate to students who satisfactorily complete a minimum of three ASA courses that include at least one-third SAP hands-on content.

Courses are taught by full-time faculty members who bring real-world knowledge to the classroom through their experiences as accounting and systems professionals. You will benefit from the department's close ties with business leaders who often provide internship opportunities, permanent jobs, and valuable advice.

Curriculum

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All undergraduate students must complete either the Canisius Core Curriculum (http://catalog.canisius.edu/undergraduate/academics/curricular-information/core-curriculum/) or the All-College Honors Curriculum (http://catalog.canisius.edu/undergraduate/academics/curricular-information/all-college-honors-program/). Many schools refer to their college-wide undergraduate requirements as "general education" requirements. We believe that the core curriculum and the honors curriculum are more than a series of required classes; they provide the basis for a Jesuit education both with content and with required knowledge and skills attributes that are central to our mission.

Free Electives

Students may graduate with a bachelor's degree with more but not less than 120 credit hours. Free electives are courses in addition to the Canisius Core Curriculum or All-College Honors Curriculum and major requirements sufficient to reach the minimum number of credits required for graduation. The number of credits required to complete a bachelor's degree may vary depending on the student's major(s) and minor(s).

Major Requirements

Code	Title	Credits
Business Core		
Required courses for all business majors (http://catalog.canisius.edu/undergraduate/wehle-school-business/business-core/)		49-51
Additional Major Requirements		
ACC 301	Intermediate Accounting I	3
ACC 303	Cost Accounting	3
ACC 307	Accounting Systems and Analytics	3
ACC 331	Data Analytics in Accounting	3
ISB 340	Database Management Systems	3
ACC 426	Information Systems Auditing	3
ACC 452	Strategic Performance Analytics	3
ENG 389	Business Communication	3
Students must take both LAW 371 and LAW 372 or MGT 370		3-6
LAW 371	Business and Commercial Law	
LAW 372	Business Organizations and Commercial Paper	
OR		
MGT 370	Managerial Environment	
Total Credits		**76-81**

Roadmap

Typical Schedule

120 hours - BS in Business Administration (Major: Accounting Systems and Analytics)

Freshman	
Fall	**Spring**
ENG 111	ENG 112
ECO 101	PHI 101
RST 101	MAT 106 (or Arts & Science Elective if MAT 106 taken in Fall)
MAT 105 (or MAT 106)	ECO 102
BUS 101	MKT 201
Field of Knowledge 4 (History)	

Sophomore	
Fall	**Spring**
MGT 101	ACC 212
ECO 255	ECO 256
ACC 201	ACC 307
ISB 101	Field of Knowledge 3 - Arts
BUS 201	Arts & Science Elective
Field of Knowledge 6 (Science)	
Junior	
Fall	**Spring**
ACC 301	ACC 331
ACC 303	ENG 389
FIN 201	A&S Elective
Field of Knowledge 1 - Religious Studies	Field of Knowledge 2 - Philosophy[1]
Free Elective	A&S Elective
	BUS 401
Senior	
Fall	**Spring**
ISB 340	ACC 452
ACC 426	MGT 446 (college core capstone)
MGT 325	Free Elective
MGT 370	Free Elective
Free Elective	A&S Elective

[1] Ethics Required

Courses

ACC 212 Principles of Accounting II **3 Credits**
For Accounting Majors. Fundamental concepts and procedures of financial and managerial accounting with emphasis on asset funding, including debt and equity and cash flows. Accounting applications of present value concepts, introduction to budgeting and product costing. During the Spring semester the course has a mandatory 1 hour non-credit recitation section for preparation for the intermediate accounting series.
Prerequisite: minimum grade of C- in ACC 201.
Offered: every fall.

ACC 301 Intermediate Accounting I **3 Credits**
First of a two-course sequence. In-depth accounting concepts and theories pertaining to external financial reporting. Emphasis on theories surrounding asset valuations, liability and equity measurements, income determination and cash flows.
Prerequisite: minimum grade of C- in both ACC 201 & ACC 212, junior standing, & overall GPA of 2.0.
Offered: every fall.

ACC 303 Cost Accounting **3 Credits**
Preparation and analysis of data utilized by management in planning and control decisions. Inventory valuation and reporting methods. Establishment and use of standards and budgets. The department offers ACC 303PD sections. These sections have a mandatory professional development lab attached to them. Their objective is to guide students as they develop the communication and leadership skills valued by the accounting profession. The course has a mandatory 3 hour non-credit recitation section.
Prerequisite: ACC 212, junior standing, & an overall GPA of 2.0.
Offered: every fall.

ACC 307 Accounting Systems and Analytics **3 Credits**
Development, organization, and implementation of accounting and management information systems. Emphasis on data analytics, enterprise risk management..."
Prerequisite: ACC 201 & ISB 101.
Offered: every spring.

ACC 331 Data Analytics in Accounting **3 Credits**
Data analytics theories and concepts applied to accounting settings. Emphasis on business intelligence, data analytics models, data visualization, data storytelling, and descriptive, predictive, and prescriptive analytics. Students apply data analytic concepts through data storytelling and the use of analytics software.
Prerequisite: ACC 307 (may register concurrently).
Offered: every spring.

ACC 426 Information Systems Auditing **3 Credits**
Information system control design and auditing in the internet, electronic and paperless environment; management of security technology; operating and application system processing controls; prevention of unauthorized activity.
Prerequisite: minimum grade of C- in each of ACC 307 & one of the following: ACC 331, ACC 452, or ACC 425.
Offered: fall.

ACC 452 Strategic Performance Analytics **3 Credits**
Evaluating enterprise information, enterprise resource planning (ERP) system design and functionality, data integrity, use of financial and non-financial information for organizational decision-making, business process improvement and risk management.
Prerequisite: minimum grade of C- in ACC 307.
Offered: spring.

ISB 340 Database Management Systems **3 Credits**
Design and application of database management systems. Topics include structured query language (SQL), data structures, querying and report writing, database design and administration, data mining and security.
Prerequisite: ISB 101 or equivalent.
Offered: every fall.