COMPUTER INFORMATION SYSTEMS (BAS)

Degree: Bachelor of Applied Science
Major: Computer Information Systems
Program Code: 3167

About This Major . . .

The Bachelor of Applied Science in Computer Information Systems combines the technical skills and business proficiency necessary for success in today's business world. A unique program, the BAS allows students who have already earned an associate of applied science degree to build upon their technical specialties with Essential Learning courses and junior and senior level computer information systems courses. This allows associate degree holders to gain a 4-year degree in approximately four additional full-time semesters, depending upon prior coursework.

Computer Information Systems courses to be taken include coursework in project management, systems analysis and design, database administration, networking, electronic commerce, productivity tools, decision support, systems development and implementation including programming and information systems theory. BAS students will be technically and academically prepared for leadership positions within the information technology functional areas in their chosen industries.

Prospective students not holding an associate of applied science degree can begin their college career at CMU in a chosen field of study with a 2-year degree and then progress to a 4-year degree using the BAS. This degree will provide students upward mobility in their area of employment as they move into supervision/management positions.

Important information for this program:

- To be admitted to the BAS degree, an applicant must possess an AAS degree from an accredited school in computer information systems, computer programming, electronic engineering technology, information technology, network technology, telecommunications, or related area such as computer aided design or graphics design. Any exceptions to this must be approved in advance by the department BAS advisor and the academic department head. All students must meet with the BAS advisor to plan and schedule all classes.
- Requests for more than 6 hours of internship must be approved by the advisor.

For more information on what you can do with this major, visit Career Services' What to Do with a Major? resource.

All CMU baccalaureate graduates are expected to demonstrate proficiency in specialized knowledge/applied learning, quantitative fluency, communication fluency, critical thinking, personal and social responsibility, and information literacy. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

a. Apply business knowledge and skills in appropriate business contexts. (Specialized Knowledge/Applied Learning)
b. Analyze business issues critically utilizing quantitative research methodologies. (Quantitative Fluency)
c. Analyze business issues critically utilizing qualitative research methodologies. (Critical Thinking)
d. Utilize relevant and critically evaluated information in the process of communicating clearly, appropriately, and accurately to the audience in writing. (Communication Fluency, Information Literacy, Specialized Knowledge/Applied Learning)
e. Utilize relevant and critically evaluated information in the process of communicating clearly, appropriately, and accurately to the audience orally. (Communication Fluency, Information Literacy, Specialized Knowledge/Applied Learning)
f. Differentiate various functions of teams within organizations. (Specialized Knowledge/Applied Learning)
g. Demonstrate behaviors consistent with effective teamwork. (Specialized Knowledge/Applied Learning)
h. Analyze an issue within an ethical framework. (Personal and Social Responsibility)
i. Recommend a solution based on an ethical framework. (Critical Thinking)
j. Engage in a local, regional, national, and/or international activity that positively impacts society. (Personal and Social Responsibility)

Requirements

Each section below contains details about the requirements for this program. Select a header to expand the information/requirements for that particular section of the program's requirements.

To print or save an overview of this program's information, including the program description, learning outcomes, requirements, suggested course sequencing (if applicable), and advising and graduation information, scroll to the bottom of the left-hand navigation menu and select "Print Options." This will give you the options to either "Send Page to Printer" or "Download PDF of This Page." The "Download PDF of This Page" option prepares a much more concise presentation of all program information. The PDF is also printable and may be preferable due to its brevity.

Institutional Degree Requirements

The following institutional degree requirements apply to all CMU Bachelor of Applied Science (BAS) degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 120 semester hours minimum.
- Students must complete a minimum of 30 of the last 60 hours of credit at CMU, with at least 15 semester hours in major discipline courses numbered 300 or higher.
- 33 upper-division credits.
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 30 semester credit hours for a baccalaureate degree. A maximum of 15 of the 30 credits may be for cooperative education, internships, and practica.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Degree Requirements. The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate.

Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.

- See "Requirements for Undergraduate Degrees and Certificates" in the catalog for a complete list of graduation requirements.

Essential Learning Requirements

(31 semester hours)

See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

Code	Title	Semester Credit Hours
English [1]		
ENGL 111	English Composition I-GTCO1	3
ENGL 112	English Composition II-GTCO2	3
Mathematics [1]		
MATH 113	College Algebra-GTMA1 (or higher) [2]	3
History		
Select one History course		3
Humanities		
Select one Humanities course		3
Social and Behavioral Sciences		
Select one Social and Behavioral Sciences course		3
Select one Social and Behavioral Sciences course		3
Fine Arts		
Select one Fine Arts course		3
Natural Sciences		
Select one Natural Sciences course		3
Select one Natural Sciences course with a lab		4
Total Semester Credit Hours		**31**

[1] Must receive a grade of "C" or better and must be complete by the time the student has 60 semester hours.

[2] This is a 4 credit course. 3 credits apply to the Essential Learning requirements and 1 credit applies to general elective credit.

Other Lower Division Requirements

Code	Title	Semester Credit Hours
Wellness Requirement		
KINE 100	Health and Wellness	1
Select one Activity course		1
Essential Learning Capstone [1]		
ESSL 290	Maverick Milestone	3
ESSL 200	Essential Speech	1
Total Semester Credit Hours		**6**

[1] Essential Learning Capstone must be taken after completion of the Essential Learning English and Mathematics requirements, and when a student has earned between 45 and 75 hours.

Program Specific Degree Requirements

(75-76 semester hours, must earn a grade of "C" or better in each course

Code	Title	Semester Credit Hours
Required Courses		
CISB 205	Advanced Business Software	3
Select one of the following courses:		3-4
CISB 206	Introduction to Business Application Programming	
CSCI 111	CS1: Foundations of Computer Science	
Other Object-Oriented Programming Course approved by advisor		
CISB 210	Fundamentals of Information Systems	3
CISB 241	Introduction to Business Analysis	3
or STAT 241	Introduction to Business Analysis	
CISB 309	Enterprise Systems	3
CISB 315	Information Systems Infrastructure	3
CISB 331	Advanced Business Programming	3
CISB 410	Project Management	3
CISB 442	Systems Analysis and Design	3
CISB 451	Database Administration	3
CISB 470	Management of Information Systems	3
CISB 471	Advanced Information Systems	3
CISB 341	Quantitative Decision Making	3
Core Courses		
36 Semester Hours taken as part of a state approved Associate of Applied Science degree		36
Total Semester Credit Hours		**75-76**

General Electives

(7-8 semester hours)

Code	Title	Semester Credit Hours
MATH 113	College Algebra-GTMA1	1
Select additional electives [1]		6-7
Total Semester Credit Hours		**7-8**

[1] All college level courses appearing on final transcript, not listed above to bring total semester hours to 120. 7-8 semester hours, 6 semester hours must be upper division.

Advising and Graduation
Advising Process and DegreeWorks

Documentation on the pages related to this program is intended for informational purposes to help determine what courses and associated requirements are needed to earn a degree. Some courses are critical to complete in specific semesters while others may be moved around.

Meeting with an academic advisor is essential in planning courses and developing a suggested course sequencing. It is ultimately the student's responsibility to understand and fulfill the requirements for her/his intended degree(s).

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar's Office to evaluate progress towards a degree and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audits on a regular basis and should discuss questions or concerns with their advisors or academic department heads. Discrepancies in requirements should be reported to the Registrar's Office.

Graduation Process

Students must complete the following in the first two months of the semester prior to completing their degree requirements:

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the "Intent to Graduate" form to the Registrar's Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found on the Graduation web page.

If a student's petition for graduation is denied, it will be their responsibility to apply for graduation in a subsequent semester. A student's "Intent to Graduate" does not automatically move to a later graduation date.