California State Polytechnic University, Pomona
Degree Curriculum Sheet

Plan (Major) **BUSINESS ADMINISTRATION**
Subplan/Option **Computer Information Systems**

Catalog Year **2016 - 2017**
Minimum Units Required **180**

Name
Student ID

Required Core Courses

Required of all business majors. A 2.0 cumulative GPA is required in core courses including subplan courses for the major in order to receive a degree in the major.
ACC 207/207A - Financial Accounting for Decision Making (4/1)
ACC 208/208A - Managerial Accounting for Decision Making (4/1)
CIS 310 - Management Information Systems (4)
FRL 201 - Legal Environment of Business Transactions (4)
FRL 300 - Managerial Finance I (3)
FRL 301 - Managerial Finance II (3)
IBM 301 - Principles of Marketing Management (4)
MHR 301 - Principles of Management (4)
MHR 318 - Organizational Behavior (4)
TOM 301 - Operations Management (4)
TOM 302 - Managerial Statistics (4)
BUS 495 - Strategic Management (4)

Total Units 48

Required Subplan/Option Core Courses

CIS 231 - Fundamentals of Computer Information Systems (4)
CIS 234 - Object-oriented Programming with Java (4)
CIS 304 - Intermediate Java Programming for Business (4)
CIS 305 - Database Design and Development (4)
CIS 307 - Business Telecommunications (4)
CIS 311 - Interactive and Responsive Web Development (4)
CIS 315 - Introduction to Systems Analysis and Design (4)
CIS 466 - Systems Development Project (4)

Total Units 32

Elective Subplan/Option Core Courses

Career Emphasis in CIS
The Computer Information Systems (CIS) Department has established two career emphases in the major: Applications Development and Information Security and Forensics. Every CIS major must select one of these career emphases and take four emphasis elective courses in order to graduate with a major in CIS. Consultation on emphasis selection is available through the CIS Department Advisor.

See Elective Subplan/Option Core Courses list on the back of Curriculum Sheet.

Total Units 16

Required Support Courses

CIS 101 - Introduction to Personal Computing (4) [1]
STA 120 - Statistics with Applications (4) (B4)
MAT 125 - Introductory Calculus for Business (4) (B4)
EC 201 - Principles of Economics (4) (D2)
EC 202 - Principles of Economics (4) (D2)

Total Units 16-20

[1]Computer Proficiency must be demonstrated by satisfying one of the following three alternatives: 1) CIS 101, 2) Computer Proficiency Skills Test in Word, Excel, Access, and PowerPoint, or 3) an approved college course. There are no units associated with the Computer Proficiency Skills Test. If the test is passed, then unrestricted electives in subplan/option selected may be increased by 4 units.

Unrestricted Electives

Select a sufficient number of courses from "Required Support", "GE", and "Unrestricted Electives" so that the total is at least 84 units.

The number of unrestricted elective units depends on whether or not STA 120 or MAT 125, and EC 201 or EC 202 are used for General Education (see curriculum sheet for the subplan). If STA 120 or MAT 125 is used for General Education, unrestricted electives will be increased by four units. If EC 201 or EC 202 is used for General Education, unrestricted electives will be increased by four units.

Total Units 0-8

Interdisciplinary General Education

See Interdisciplinary General Education Courses on the back of the Curriculum Sheet.

Total Units 32

General Education Requirements

Area A Communication & Critical Thinking (12 units)
  1. Oral Communication
  2. Written Communication
  3. Critical Thinking
Area B Mathematics & Natural Sciences (16 units)
  1. Physical Science
  2. Biological Science
  3. Laboratory Activity
  4. Math/Quantitative Reasoning
  5. Science & Technology Synthesis
Area C Humanities (16 units)
  1. Visual and Performing Arts
  2. Philosophy and Civilization
  3. Literature and Foreign Language
  4. Humanities Synthesis
Area D Social Sciences (20 units)
  1. U.S. History, Constitution, American Ideals
      a. United States History
      b. Introduction to American Government
  2. History, Economics and Political Science
  3. Sociology, Anthropology, Ethnic & Gender Studies
  4. Social Science Synthesis
Area E Lifelong Understanding & Self Development (4 units)

Total Units 68

American Institutions Courses that satisfy this requirement may also satisfy GE Area D1	8

American Cultural Perspectives Requirement Refer to the University Catalog General Education Program section for a list of courses that satisfy this requirement. Course may also satisfy major, minor, GE, or unrestricted elective requirements.	4

All persons who receive undergraduate degrees from Cal Poly Pomona must pass the Graduation Writing Test (GWT). The test must be taken by the quarter following completion of 120 units for undergraduates.

Elective Subplan/Option Core Courses

Prerequisites for CIS Career Emphasis Courses
Students must have earned a grade of "C" (2.0) or better in each of the
courses listed below before registering for any career emphasis course.
The courses are: CIS 231 , CIS 234, CIS 304, CIS 305, CIS 307, CIS
311, and CIS 315.

CIS Career Emphasis Courses
After identifying a career emphasis, a CIS major student needs to select four
emphasis courses.

Applications Development Career Emphasis
CIS 338 - Client/Server Applications Development (4)
CIS 421 - Multimedia Applications on the Web (4)
CIS 424 - Advanced Java Programming for Business (4)
CIS 425 - Mobile Development for Business (4)
CIS 451 - E-commerce Application Development (4)
CIS 491 - Secure Web Applications (4)

Information Security and Forensics Career Emphasis
CIS 347 - Telecommunications Networks (4)
CIS 433 - Information Systems Auditing (4)
CIS 467 - Network Security (4)
CIS 471 - Internet Security (4)
CIS 481 - Computer Forensics (4)
CIS 491 - Secure Web Applications (4)

Total Units 16

Interdisciplinary General Education

An alternate pattern for partial fulfillment of GE Areas A, C, D, and E available for students is the Interdisciplinary General Education (IGE) program. Students should see an advisor for specific GE coursework required by their major. Students must be exempt from or score at least 147 on the EPT to qualify for IGE. Please refer to the University Catalog General Education Program section for additional information.

How IGE fulfills General Education Requirements:

Year	Completion of IGE Courses	Satisfies GE Requirements
Freshman	IGE 120, IGE 121, IGE 122	A2 as well as any 2 courses from C1-C3
Sophomore	IGE 220, IGE 221, IGE 222	D1 (8 units) and D3
Junior	IGE 223, IGE 224	D2 and Area E

Total Units 32