

Degree: Business Analytics, B.S.: Information System and Supply Chain Analytics Concentration 24-25				
Requirement Area	Course	Course Title	Prerequisites	Units
First Semester (FALL)				
A1 or A3		Oral Communication or Critical Thinking		3
A2		Written Communication		3
LD Major Core	CS 100	Programming for Everyone		3
B4/LD Major Core	MATH 130	Calculus I	One from the following: Satisfactory score of 78 or higher on Mathematics Placement Exam, MATH 120 or MATH 125 (either course with grade C- or better).	4
Elective				2
				Total:
Second Semester (SPRING)				
A1 or A3		Oral Communication or Critical Thinking		3
C1 or C2		Arts or Humanities		3
Elective				3
D1-2/Code 1	ECON 101, ES 120, HIST 110, POSC 101, or equivalent	Social Sciences and US-1-2		3
LD Major Elective				3
				Total:
Third Semester (FALL)				
D1-2/Code 2	ES 121, HIST 111, POSC 102, or equivalent	Social Sciences and US-3		3
Second Composition		College Writing II	Completion of GE area A2	3
B1/B3		Physical Science/Laboratory Science		3
F				3
C1 or C2		Arts or Humanities		3
				Total:
Fourth Semester (SPRING)				
UWR		Ethnic Studies		3
B2/B3		Life Science/Laboratory Science		3
Add'l C1 or C2		Arts or Humanities		3
LD Major Core	CS/MATH 211	Discrete Structures	MATH 130 with grade C- or better	3
E		Lifelong Learning and Self-Development		3
				Total:
Fifth Semester (FALL)				
UC-C	UD Arts or Humanities			3
UD Major Core	BAN 310	Data Analysis with Python I	MATH 130 and CS 100 (or CS 101)	3
UD Major Core	BAN 315	Data Analysis with Python II	BAN 310	3
UD Major Core	MKTG 305	Business Communication	Junior standing	3
Concentration				3
				Total:
Sixth Semester (SPRING)				
UD-B/UD Major Core/S	BAN 320	Optimization and Simulation for Business Applications	CS 100 or CS 101	3
UD Major Core	BAN 331	Database Management and SQL	BAN 310 or ITM 300	3
UD Major Core	BAN 340	Machine Learning for Business Applications	BAN 315	3
UD Major Core	BAN 350	Data Wrangling and Data Pipeline	BAN 310	3
Concentration				3
				Total:
Seventh Semester (FALL)				
Concentration	MKTG 310	Marketing Research	MKTG 300	3
UD Major Core/SI	BAN 441	Business Data Visualization and Reporting	BAN 310 or ITM 300	3
UD Major Core	BAN 449	Big Data Technology and Business Applications	BAN 315 or ITM 330	3
Concentration		Concentration Elective		3
Concentration		Concentration Elective		3
				Total:
Eighth Semester (SPRING)				
UD-D (with Div if needed)	UD Social Science (with Diversity Overlay if needed)			3
Concentration		Concentration Elective		3
Concentration		Concentration Elective		3
Major Capstone	BAN 499	Capstone Seminar	BAN 340 and BAN 441	3
UD Free Elective				3
				Total:
Total Units:				120

CSUEB General Breadth and Graduation Requirement Checklist	
Area A (9 units): Communication in the English Language & Critical Thinking (Must earn passing grade of C-/CR or better)	
<input type="checkbox"/> A1. COMM 100 or 104, MLL 111	
<input type="checkbox"/> A2. ENGL 101, 102, or 104	
<input type="checkbox"/> A3. PHIL 100	
Area B (9 units): Scientific Inquiry & Quantitative Reasoning	
<input type="checkbox"/> B1. Physical Science	
<input type="checkbox"/> B2. Life Science	
<input type="checkbox"/> B3. Laboratory Activity	
<input type="checkbox"/> B4. Quantitative Reasoning (Must earn passing grade of C-/CR or better.)	
Area C (9 units): Arts & Humanities - Minimum of three different disciplines as designated by course prefix (e.g., ART, THEA, MUS)	
<input type="checkbox"/> C1. Arts	
<input type="checkbox"/> C2. Humanities	
<input type="checkbox"/> *Additional Lower-division Area C Course in Arts (C1) or Humanities (C2)	
Area D (6 units): Social Sciences - Minimum of three different disciplines as designated by course prefix (e.g., ANTH, ECON, POSC)	
<input type="checkbox"/> D1.	
<input type="checkbox"/> D2.	
Area E (3 units): Lifelong Learning and Self-Development	
<input type="checkbox"/> E.	
Area F (3 units): Ethnic Studies	
<input type="checkbox"/> F.	
Second Composition: Requires completion of GE A2 with a C-/CR or better. Must be completed before attaining junior standing.	
<input type="checkbox"/> Second Composition	
U.S. Code (American Institutions Requirement) - Two courses (6 units) covering three U.S. Code Requirements of US-1 (U.S. History), US-2 (U.S. Constitution), and US-3 (California State & Local Government).	
<input type="checkbox"/> Code 1.	
<input type="checkbox"/> Code 2.	
Upper Division GE Requirements (9 units): Should be taken after completion of A1, A2, A3, and B4 with a C- (CR)	
<input type="checkbox"/> UD-B. Upper-division Science Inquiry and Quantitative Reasoning	
<input type="checkbox"/> UD-C. Upper-division Arts OR Humanities	
<input type="checkbox"/> UD-D. Upper-division Social Sciences	
Overlay Requirements (9 units): Courses may be upper or lower division, and GE or major	
<input type="checkbox"/> Diversity (Div)	
<input type="checkbox"/> Social Justice (SJ)	
<input type="checkbox"/> Sustainability (S)	
Information System and Supply Chain Analytics Concentration	
Take the following two (2) courses for 6 units:	
ITM 336 - Information Systems Development and Management Units: 3	
MGMT 364 - Global Supply Chain Management Units: 3 ; Breadth Area: Diversity Elective Courses (12 units)	
Select four (4) courses for 12 units from the following:	
CS 461 - Artificial Intelligence Units: 3	
ITM 338 - Cloud Computing and Ecommerce Units: 3	
ITM 446 - Information Security Units: 3	
MGMT 365 - Enterprise Resource Planning and Control Units: 3	
MGMT 450 - Project Management Units: 3	
MGMT 455 - AI Enabled Supply Chain and Logistics Analytics Units: 3	
MGMT 460 - Healthcare Analytics Units: 3	
MGMT 465 - Supply Chain Forecasting with Machine Learning Units: 3	

Note: No changes to, or from, the credit/no credit pattern are permitted after the Grade Type Change period. There are no exceptions to this rule. Courses in a student's major department, regardless of course prefix, may not be taken "CR/NC," unless that is the only grading pattern in the course.

Updated: 4/1/2024