

## Bachelor of Science in Business Administration Option in Computer Information Systems

Name: \_\_\_\_\_

Bronco ID: \_\_\_\_\_

Catalog Year: \_\_\_\_\_

Quarter - Support courses (16-20 units)				Semester			
CIS 101	Introduction to Personal Computing	4		CIS 1010	Introduction to Personal Computing	3	
STA 120	Statistics with Applications	4		STA 1200	Statistics with Applications	3	
MAT 125	Introductory Calculus for Business	4		MAT 1250	Introductory Calculus for Business <sup>1</sup>	3	
EC 201	Principles of Economics	4		EC 2201	Principles of Microeconomics <sup>2</sup>	3	
EC 202	Principles of Economics	4		EC 2202	Principles of Macroeconomics	3	

Quarter - Core Courses (48 units)				Semester			
ACC 207 /207A	Financial Accounting for Decision Making	4/1		ACC 2070	Financial Accounting for Decision Making	3	
ACC 208 /208A	Managerial Accounting for Decision Making	4/1		ACC 2080	Managerial Accounting for Decision Making	3	
CIS 310	Management Information Systems	4		CIS 3100	Management Information Systems	3	
FRL 201	Legal Environment of Business Transactions	4		FRL 2013	The Legal Environment of Business and its Transactions	3	
FRL 300	Managerial Finance I	3		FRL 3000	Managerial Finance (Students who do not complete FRL 301 will need to take FRL 3000)	3	
FRL 301	Managerial Finance II	3					
IBM 301	Principles of Marketing Management	4		IBM 3012	Principles of Marketing Management	3	
MHR 301	Principles of Management	4		MHR 3010	Principles of Management	3	
MHR 318	Organizational Behavior	4		MHR 3020	Organizational Behavior <sup>3</sup>	3	
TOM 301	Operations Management	4		TOM 3010	Operations Management	3	
TOM 302	Managerial Statistics	4		TOM 3020	Managerial Statistics	3	
BUS 495	Strategic Management	4		BUS 4950	Strategic Management	3	

Quarter - CIS Subplan/Option Core Courses (32 Units)				Semester			
CIS 231	Fundamentals of Computer Information Systems	4			Any CIS track elective	3	
CIS 234	Object-oriented Programming with Java	4		CIS 3090	Object-Oriented Programming for Business (Students who do not complete CIS 304 will need to take CIS 3090)	3	
CIS 304	Intermediate Java Programming for Business	4					
CIS 305	Database Design and Development	4		CIS 3050	Database Design and Development	3	
CIS 307	Business Telecommunications	4		CIS 2670	IT Infrastructure	3	
CIS 311	Interactive and Responsive Web Development	4		CIS 3110	Client-side Web Development (For those who are on the non-Applications Development Career Emphasis see Note 6)	3	
CIS 315	Introduction to Systems Analysis & Design	4		CIS 3150	Systems Analysis and Design	3	
CIS 466	Systems Development Project	4		CIS 4290	IS Project Management and Development (For those who are on the non-Applications Development Career Emphasis see Note 7)	3	

Quarter - CIS Elective Subplan/Option Core Courses (16 Units). Select one career emphasis and take four emphasis elective courses.				Semester			
<b>Applications Development Career Emphasis</b>							
CIS 338	Client/Server Applications Development	4			Any CIS track elective	3	
CIS 421	Multimedia Applications on the Web	4			Any CIS track elective	3	
CIS 424	Advanced Java Programming for Business	4	CIS 4260	Server-side Web Development		3	
CIS 425	Mobile Development for Business	4	CIS 4280	Android Mobile App Programming		3	
CIS 451	E-commerce Application Development	4	CIS 4250	E-Commerce Application Development		3	
CIS 491	Secure Web Applications	4	CIS 4270	Secure Web Applications		3	
<b>Information Security and Forensics Career Emphasis</b>							
CIS 347	Telecommunication Networks	4	CIS 3470	Communication Networks		3	
CIS 433	Information Systems Auditing	4	CIS 4333	Information Systems Auditing		3	
CIS 467	Network Security	4	CIS 4670	Network Security		3	
CIS 471	Internet Security	4	CIS 4710	Information Security		3	
CIS 481	Computer Forensics	4	CIS 4810	Computer Forensics		3	
CIS 491	Secure Web Applications	4	CIS 4270	Secure Web Applications		3	
<b>Business Intelligence Career Emphasis</b>							
Students under the quarter curriculum have the option of completing the Business Intelligence Career Emphasis. CIS 3252 is a required course for this Career Emphasis.							
<b>Required</b>				CIS 3252	Business Intelligence	3	
You <b>must</b> meet the prerequisites for these courses.				CIS 3454	Data Warehousing	3	
				CIS 3650	Digital Analytics	3	
				CIS 4321	Data Mining	3	
				CIS 4567	Big Data Analytics	3	
				CIS 4680	Advanced Data Analytics	3	

Note 1: MAT 1250 counts as GE B4, requires a grade of C or better.

Note 2: EC 2201 counts as GE D3.

Note 3: MHR 3020 counts as GE D4.

Note 4: If a student earns a grade lower than 'C' two times, in any CIS core course, they will be required to transfer into another option.

Note 5: 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.

Note 6: For those who are in the non-Applications Development Career Emphasis, you may take CIS 3252 Business Intelligence instead of CIS 3110 (CIS 311). Once you are in CIS 3252, please stop by the CIS Department in Building 164, Room 1022 to fill out the General Academic Petition.

Note 7: For those who are in the non-Applications Development Career Emphasis, you may replace CIS 4290 (CIS 466) with another Career Emphasis Course. Once you are in the Career Emphasis course to replace CIS 4290 (CIS 466), please stop by the CIS Department in Building 164, Room 1022 to fill out the General Academic Petition.