

# BBA in Information Systems and Business Analytics

The state of Enterprise software platforms today posits 90 % of enterprise platforms are at end of life. Every enterprise needs to undergo expensive digital transformation. Documented examples ADP, CVS. Southwest airlines. Our IS majors are entering an area of unprecedented professional career advantage over other majors. Our graduates will obtain understanding and skills in the application of information technology as a solution to various business problems. In addition to demonstrated knowledge in the design, development, implementation, and maintenance of information systems to support business operations, our graduates will acquire working knowledge in foundations of business education including accounting, economics, finance, marketing, entrepreneurship, and strategic management.

Possible career paths for students pursuing this academic program are multidimensional: Cyber Security, ML, AI, PM, database administration, Business analyst. There is also a cross-over with accounting, OSCM, and finance.

## Marketable Skills

The main skillsets for our graduates include verbal and written communication; problem-solving and decision making; critical thinking; team collaboration; and interpersonal relationship. These skills are developed through the activities the students undertake during their education in our program such as professional development activities, group projects and presentations, student organization participation, and internships, case studies, and community involvement.

1. Communication: Reach mutual understanding through effective exchange of information, ideas, and feelings
2. Critical thinking: Analyze and evaluate issues in order to solve problems and develop informed opinions
3. Problem-solving: Find solutions to difficult or complex issues

The graduating students also develop skills on leadership, project management, strategic use of information technology, and security of business systems.

## Degree Plan

Required Credits: 120

Code	Title	Hours
<b>Business Designated Core (All courses require a C or better.)</b>		
Complete the Business Designated Core requirements. (p. 2)		
<b>University Core Curriculum</b>		
Complete the University Core Curriculum requirements. (p. 2)		42
<b>Business Core</b>		
Required Courses:		
Lower-Division		
Courses in this section require a C or better		
ACCT 2301	Principles of Accounting I <sup>C</sup>	3
ACCT 2302	Principles of Accounting II <sup>C</sup>	3
ECON 2304	Principles of Microeconomics <sup>C</sup>	3
QMB 2301	Business Stats & Analytics I <sup>C</sup>	3
Math Elective:		
Select one of the following:		3-4
MATH 1411	Calculus I <sup>C</sup>	
MATH 2301	Math for Social Sciences II <sup>C</sup>	
Upper-Division		
Courses not requiring a C or better		
BLAW 3301	Legal Environment of Business	3
BUSN 3304	Global Business Environment	3
or BUSN 3305	Global Busn Environ-Study Away	
ISBA 3305	Foundations of Info Sys & BA	3
FIN 3310	Business Finance	3
MGMT 3303	Intro-Mgmt/Organizational Beha	3

MGMT 4300	Strategic Management	3
MKT 3300	Principles of Marketing	3
OSCM 3321	Production/Operations Mgmt	3
QMB 3301	Business Stats & Analytics II	3
<b>Info Systems and Business Analytics Major</b>		
Information Systems and Business Analytics Core Requirements		
ISBA 3315	Busi Analytics Applications	3
ISBA 3330	Analytic Programming Tools	3
ISBA 3350	Sys. Anal. & Des. for Bus. Ana	3
ISBA 4301	Busi Intel and Decis Modeling	3
ISBA 4365	Database Management	3
ISBA 4385	Info Sec. & Cybers. Analytics	3
Select two of the following:		6
ACCT 3320	Accounting Systems	
ACCT 4335	Business Intelligence	
ISBA 3301	Intro to Data Process & Prog	
ISBA 3340	Org Impact-Information Tech	
ISBA 4370	Data Comm. & Network Manag.	
ISBA 4396	Intern. in Info Sys & Busn An.	
ISBA 4398	Independent Study (CIS)	
ISBA 4399	Current Top. in Bus Anal. & IS	
Select twelve hours business minor or certificate		12
<b>Total Hours</b>		<b>120-121</b>

C Course requires a C or better

## Business Designated Core

Although the UTEP choice is larger, these choices satisfy the requirements of both the core and the major.

All courses listed within this degree require a grade of C or better for successful completion.

Code	Title	Hours
<b>Mathematics</b>		
Select one of the following:		
MATH 1411	Calculus I (Required for Risk Management Concentration)	
MATH 1320	Math for Social Sciences I	
MATH 1508	Precalculus	
<b>Social and Behavioral Sciences</b>		
Required:		
ECON 2303	Principles of Macroeconomics	3
<b>The following additional courses are also recommended:</b>		
COMM 1302	Business/Profession Comm	
MATH 1320	Math for Social Sciences I	
PHIL 2306	Ethics	

## University Core Curriculum

The department may make specific suggestions for courses which are most applicable towards your major.

All courses require a C or better

**I. Communication (six hours)**

Code	Title	Hours
Courses in this category focus on developing ideas and expressing them clearly, considering the effect of the message, fostering understanding, and building the skills needed to communicate persuasively. Courses involve the command of oral, aural, written, and visual literacy skills that enable people to exchange messages appropriate to the subject, occasion, and audience.		
Select six hours of the following: 6		
For students whose secondary education was in English:		
COMM 1611	Written and Oral Communication	
ENGL 1313	Writing About Literature	
RWS 1301	Rhetoric & Composition I	
RWS 1302	Rhetoric & Composition 2	
RWS 1601	Rhetoric, Composition & Comm	
For students whose secondary education was not in English:		
ESOL 1311	Expos Engl Compos-Spkr Esl	
ESOL 1312	Res & Crit Writng Spkr Esl	
<b>Total Hours</b>		<b>6</b>

**II. American History (six hours)**

Code	Title	Hours
Courses in this category focus on the consideration of past events and ideas relative to the United States, with the option of including Texas History for a portion of this component area. Courses involve the interaction among individuals, communities, states, the nation, and the world, considering how these interactions have contributed to the development of the United States and its global role.		
HIST 1301	History of U.S. to 1865	3
HIST 1302	History of U.S. Since 1865	3
<b>Total Hours</b>		<b>6</b>

**III. Language, Philosophy & Culture (three hours)**

Code	Title	Hours
Courses in this category focus on how ideas, values, beliefs, and other aspects of culture express and affect human experience. Courses involve the exploration of ideas that foster aesthetic and intellectual creation in order to understand the human condition across cultures.		
Select one of the following: 3		
AFST 2300	Intro-African Amer Studies	
CHIC 2302	Latina/o Presence in the U.S.	
ENGL 2311	English Literature	
ENGL 2312	English Literature	
ENGL 2313	Intro to American Fiction	
ENGL 2314	Intro to American Drama	
ENGL 2318	Intro to American Poetry	
FREN 2322	Making of the "Other" Americas	
HIST 2301	World History to 1500	
HIST 2302	World History Since 1500	
PHIL 1301	Introduction to Philosophy	
PHIL 2306	Ethics	
RS 1301	Introduct to Religious Studies	
SPAN 2340	Seeing & Naming: Conversations	
WS 2300	Introduction to Womens Studies	
WS 2350	Global Feminisms	
<b>Total Hours</b>		<b>3</b>

**IV. Mathematics (three hours)**

Code	Title	Hours
Courses in this category focus on quantitative literacy in logic, patterns, and relationships. Courses involve the understanding of key mathematical concepts and the application of appropriate quantitative tools to everyday experience.		

Select one of the following:		3
MATH 1309	College Algebra	
MATH 1310	Trigonometry and Conics	
MATH 1319	Math in the Modern World	
MATH 1320	Math for Social Sciences I	
MATH 1411	Calculus I	
MATH 1508	Precalculus <sup>1,2</sup>	
MATH 2301	Math for Social Sciences II	
STAT 1380	Statistical Literacy	
STAT 2480	Elementary Statistical Methods	

1 A higher-level course in the calculus sequence can be substituted.

2 TCCN MATH 1314 will also satisfy this requirement.

---

**Total Hours** **3**

## V. Life & Physical Sciences (six hours)

Code	Title	Hours
------	-------	-------

Courses in this category focus on describing, explaining, and predicting natural phenomena using the scientific method. Courses involve the understanding of interactions among natural phenomena and the implications of scientific principles on the physical world and on experiences.

Select one of the following:		1-4
ASTR 1107	Astronomy Lab I	
ASTR 1307	Elem Astronomy-Solar System	
ASTR 1308	Elem Astr Stars & Galaxies	
BIOL 1103	Introductory Biology Lab	
BIOL 1104	Human Biology Laboratory	
BIOL 1107	Topics in Study of Life I	
BIOL 1108	Organismal Biology Laboratory	
BIOL 1203	Introductory Biology	
BIOL 1304	Human Biology	
BIOL 1305	General Biology	
BIOL 1306	Organismal Biology	
BIOL 2111	Human Anat/Physio Lab I	
BIOL 2113	Human Anat/Physio Lab II	
BIOL 2311	Human Anat/Physiology I	
BIOL 2313	Human Anat/Physiology II	
CHEM 1105	Laboratory for CHEM 1305	
CHEM 1106	Laboratory for CHEM 1306	
CHEM 1107	Intro General Chemistry Lab	
CHEM 1108	Intro Organic & Biochem Lab	
CHEM 1305	General Chemistry	
CHEM 1306	General Chemistry	
CHEM 1307	Intro to General Chemistry	
CHEM 1308	Intro Organic & Biochemistry	
ESCI 1101	Environmental Sci. Lab	
ESCI 1102	Non-major Lab for ESCI 1301	
ESCI 1202	Intro to Environment Science 2	
ESCI 1301	Intro to Environmental Sci	
GEOG 1106	Laboratory for GEOG 1306	
GEOG 1306	Physical Geography	
GEOL 1103	Lab for GEOL 1313	
GEOL 1104	Lab for GEOL 1314	
GEOL 1111	Principles of Earth Sci - Lab	
GEOL 1112	Laboratory for Geology 1212	

GEOL 1211	Principles of Earth Sciences
GEOL 1212	Principles of Earth Science
GEOL 1230	The Blue Planet
GEOL 1231	Natural Hazards
GEOL 1313	Intro to Physical Geology
GEOL 1314	Intro to Historical Geol
HSCI 2302	Fundamentals of Nutrition
HSCI 2303	Wellness Dynamics
MICR 2330	Microorganisms and Disease
PHYS 1403	General Physics I
PHYS 1404	General Physics II
PHYS 2120	Laboratory for PHYS 2320
PHYS 2121	Laboratory for PHYS 2321
PHYS 2320	Introductory Mechanics
PHYS 2321	Introductory Electromagnetism

**Total Hours** 6

## VI. Political Science (six hours)

Code	Title	Hours
------	-------	-------

Courses in this category focus on consideration of the Constitution of the United States and the constitutions of the states, with special emphasis on that of Texas. Courses involve the analysis of governmental institutions, political behavior, civic engagement, and their political and philosophical foundations.

Required Courses:

POLS 2310	Introduction to Politics	3
POLS 2311	American Gover & Politics	3

**Total Hours** 6

## VII. Social and Behavioral Sciences (three hours)

Code	Title	Hours
------	-------	-------

Courses in this category focus on the application of empirical and scientific methods that contribute to the understanding of what makes us human. Courses involve the exploration of behavior and interactions among individuals, groups, institutions, and events, examining their impact on the individual, society, and culture.

Select one of the following: 3

ANTH 1301	Intro-Phys Anth/Archeolog
ANTH 1302	Intro-Cultural Anthropology
ANTH 1310	Cultural Geography
ANTH 2320	Intro to Linguistics
CE 2326	Econ for Engrs & Scientists
CHIC 2311	Intro to Chicano Studies
ASIA 2300	Asian American Studies
COMM 2350	Interpersonal Communication
COMM 2372	Mass Media and Society
ECON 2303	Principles of Macroeconomics
ECON 2304	Principles of Microeconomics
EDPC 1301	Introduction to Ed Psychology
EDU 1342	Action Research in Classrooms
ENGL 2320	Introduction to Linguistics
GEOG 1310	Cultural Geography
LEAD 2300	Leadership in Action
LING 2320	Introduction to Linguistics
LING 2340	Lang. Inside & Out: Sel Topics
PSYC 1301	Introduction to Psychology
SOCI 1301	Introduction to Sociology

SOCI 1310

Cultural Geography

**Total Hours****3****VIII. Creative Arts (three hours)**

Code	Title	Hours
------	-------	-------

Courses in this category focus on the appreciation and analysis of creative artifacts and works of the human imagination. Courses involve the synthesis and interpretation of artistic expression and enable critical, creative, and innovative communication about works of art.

Select one of the following:

**3**

ART 1300	Art Appreciation	
ARTH 1305	History of Art I	
ARTH 1306	History of Art II	
CHIC 1311	Chicana/o Fine Arts Appreciat	
DANC 1304	Introduction to Dance	
FILM 1390	Intro-Art of Motion Pict.	
MUSL 1324	Music Appreciation	
MUSL 1327	Jazz to Rock	
MUSL 2321	Music, Culture, and Society	
THEA 1313	Introduction to Theatre	

**Total Hours****3****IX. Component Area Option (six hours)**

Code	Title	Hours
------	-------	-------

a. A minimum of 3 SCH must meet the definition and corresponding Core Objectives specified in one of the foundational component areas. b. As an option for up to 3 semester credit hours of the Component Area Option, an institution may select course(s) that: (i) Meet(s) the definition specified for one or more of the foundational component areas; and (ii) Include(s) a minimum of three Core Objectives, including Critical Thinking Skills, Communication Skills, and one of the remaining Core Objectives of the institution's choice.

BUSN 1301	Intro to Global Business	
COMM 1301	Public Speaking	
COMM 1302	Business/Profession Comm	
CS 1310	Intro-Computational Thinking	
CS 1320	Computer Programming Sci/Engr	
EL 1301	Eng Innovation and Leadership	
ENGR 1302	Engineering Design Experience	
ENGR 1303	Applied Engineering Analysis	
LEAD 1300	Introduction to Leadership	
SCI 1301	Inquiry in Math & Science	
SPLP 1312	Comm. Var. Across the Lifespan	
UNIV 1301	Seminar/Critical Inquiry	

**Total Hours****0****4-Year Sample Degree Plan**

Code	Title	Hours
------	-------	-------

**BBA INFORMATION SYSTEMS AND BUSINESS ANALYTICS****FRESHMAN****Fall**

BUSN 1301	Intro to Global Business	3
RWS 1301	Rhetoric & Composition I	3
MATH 1320	Math for Social Sciences I	3
University Core Class		3
University Core Class		3

**Spring**

ACCT 2301	Principles of Accounting I	3
ECON 2303	Principles of Macroeconomics	3

RWS 1302	Rhetoric & Composition 2	3
University Core Class		3
University Core Class		3
<b>SOPHOMORE</b>		
<b>Fall</b>		
ACCT 2302	Principles of Accounting II	3
ECON 2304	Principles of Microeconomics	3
University Core Class		3
University Core Class		3
University Core Class		3
<b>Spring</b>		
MATH 2301	Math for Social Sciences II	3
QMB 2301	Business Stats & Analytics I	3
BLAW 3301	Legal Environment of Business	3
University Core Class		3
University Core Class		3
<b>JUNIOR</b>		
<b>Fall</b>		
MGMT 3303	Intro-Mgmt/Organizational Beha	3
FIN 3310	Business Finance	3
ISBA 3305	Foundations of Info Sys & BA	3
BUSN 3304	Global Business Environment	3
or BUSN 3305	Global Busn Environ-Study Away	
Minor		3
<b>Spring</b>		
QMB 3301	Business Stats & Analytics II	3
MKT 3300	Principles of Marketing	3
ISBA 3330	Analytic Programming Tools	3
ISBA 3315	Busi Analytics Applications	3
ISBA 3350	Sys. Anal. & Des. for Bus. Ana	3
<b>SENIOR</b>		
<b>Fall</b>		
OSCM 3321	Production/Operations Mgmt	3
ISBA 4385	Info Sec. & Cybers. Analytics	3
ISBA 4301	Busi Intel and Decis Modeling	3
Minor		3
Minor		3
<b>Spring</b>		
MGMT 4300	Strategic Management	3
ISBA 4365	Database Management	3
ISBA Elective		3
ISBA Elective		3
Minor		3
<b>Total Hours</b>		<b>120</b>