

CARLOS ALVAREZ COLLEGE OF BUSINESS

Mission Statement

The Carlos Alvarez College of Business is dedicated to creating and sharing knowledge that enhances the translation of theory to practice. The College combines rigor with relevance and provides innovative solutions to global business challenges.

All Carlos Alvarez College of Business graduate business programs are currently accredited by AACSB International—The Association to Advance Collegiate Schools of Business—and conform to recommended guidelines.

College-wide Programs

- M.B.A. (p. 1)
 - Executive M.B.A. (p. 1)
 - Dual M.B.A. and Master of Public Health (p. 1)
 - M.B.A. / M.D. (p. 1)
- M.S. in Business (p. 1)
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- M.S. in Data Analytics (p. 1) (moved)
- Pre-Ph.D. Pathway (p. 1)
- Graduate Certificate in Intelligence Studies (p. 7) (moved)

Department of Accounting (<https://catalog.utsa.edu/graduate/business/accounting/>)

- Master of Accountancy (<https://catalog.utsa.edu/graduate/business/accounting/#degreestext>)
- Accelerated Program in Accounting (APA) (<https://catalog.utsa.edu/graduate/business/accounting/#degreestext>)
- Doctor of Philosophy in Accounting (<https://catalog.utsa.edu/graduate/business/accounting/#degreestext>)

Department of Economics (<https://catalog.utsa.edu/graduate/business/economics/>)

- Master of Science in Economics – General Economics Concentration (<https://catalog.utsa.edu/graduate/business/economics/#degreestext>)
- Master of Science in Economics – Financial Economics Concentration (<https://catalog.utsa.edu/graduate/business/economics/#degreestext>)
- Master of Science in Economics – Business Data Analysis and Forecasting Concentration (<https://catalog.utsa.edu/graduate/business/economics/#degreestext>)
- Accelerated Program in Economics (<https://catalog.utsa.edu/graduate/business/economics/#degreestext>)

Department of Finance (<https://catalog.utsa.edu/graduate/business/finance/>)

- Master of Science in Finance (<https://catalog.utsa.edu/graduate/business/finance/#degreestext>)
- Master of Science in Finance – Real Estate Finance and Development Concentration (<https://catalog.utsa.edu/graduate/business/finance/#degreestext>)

- Doctor of Philosophy in Finance (<https://catalog.utsa.edu/graduate/business/finance/#degreestext>)
- Graduate Certificate in Real Estate Finance and Development (<https://catalog.utsa.edu/graduate/business/finance/#certificatestext>)

Department of Management (<https://catalog.utsa.edu/graduate/business/management/>)

- Doctor of Philosophy in Management and Organization Studies (<https://catalog.utsa.edu/graduate/business/management/#degreestext>)
- Graduate Certificate in Project Management (<https://catalog.utsa.edu/graduate/business/management/#certificatestext>)
- Graduate Certificate in Technology Entrepreneurship and Management (<https://catalog.utsa.edu/graduate/business/management/#certificatestext>)

Department of Marketing (<https://catalog.utsa.edu/graduate/business/marketing/>)

- Doctor of Philosophy in Marketing (<https://catalog.utsa.edu/graduate/business/marketing/#degreestext>)

Department of Operations and Analytics (<https://catalog.utsa.edu/graduate/business/operationsanalytics/>)

- Graduate Certificate in Operations and Supply Chain Management (<https://catalog.utsa.edu/graduate/business/operationsanalytics/#certificatestext>)

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Master of Business Administration Degree

The Master of Business Administration degree is designed to offer the opportunity for intensive education to qualified graduate students and is available to individuals with undergraduate degrees in the business administration areas, as well as to those with specializations outside the business field.

Students who enter the M.B.A. degree program must demonstrate proficiency with computer programs commonly used in business applications, including, but not limited to, spreadsheets, presentation, and word processing software. Special not-for-credit courses may be offered to address this need.

Program Admission Requirements

For admission to the M.B.A. program, applicants must meet University-wide graduate admission requirements. Applicants are further considered on the basis of demonstrated potential for success in graduate study in business administration as indicated by a combination of prior academic achievement, personal statement, résumé, and references.

The M.B.A. Programs Committee evaluates each applicant individually based on the complete package of submitted materials.

A complete application package will include:

- A completed application form.
- Transcripts from all universities attended.
- A personal statement.
- A current résumé with employment or other experience.
- At least two letters of reference.

Graduate admission test scores are no longer required. However, please note that competitive GMAT/GRE scores may help your chances of admission because, in addition to your GPA, the GMAT or GRE provides a quantitative metric for the M.B.A. Programs Committee to evaluate you as a candidate. Further, because the committee uses a holistic approach in evaluating graduate candidates, applicants should not be discouraged if their GMAT or GRE score is average or even slightly below average.

Degree Requirements

The M.B.A. program requires 36 semester credit hours of work.

A. 27 semester credit hours of required master's level business courses		27
MBA 5113	Business Foundations	
MBA 5133	Financial Accounting Concepts	
MBA 5213	Management and Behavior in Organizations	
MBA 5233	Accounting Analysis for Decision Making	
MBA 5313	Marketing Management	
MBA 5333	Financial Management	
MBA 5413	Management Science with Data Analytics	
MBA 5513	Managerial Economics	
MBA 5613	Strategic Management and Policy	
B. 9 semester credit hours of elective master's level business courses		9
Total Credit Hours		36

Degree Options

Students seeking the M.B.A. degree may select between two options to complete the required 36 semester credit hours.

Option 1: General M.B.A. Non-Thesis Option

Under Option 1, students are required to complete the 27 semester credit hours listed above and 9 semester credit hours of electives. These electives may be taken either in the College of Business or in areas outside of the College of Business as approved by the Graduate Program Committee.

Option 2: General M.B.A. Thesis Option

Under Option 2, students are required to complete the 27 semester credit hours listed above, 3 semester credit hours of electives as approved by the Graduate Program Committee, and 6 semester credit hours of Master's Thesis. See the University's requirements for a thesis in Master's Degree Regulations.

Executive Master of Business Administration

The Executive Master of Business Administration (E.M.B.A.) is a 43-credit hour version of the Master of Business Administration (M.B.A.) degree

program structured specifically for executives, professionals, and rising leaders who have significant managerial experience. This 43-credit hour, five-semester plan of study features lockstep cohort classes, weekend/ hybrid class scheduling, professional development and coaching, and an emphasis on acquiring advanced skills and knowledge needed to solve the pressing concerns of today's fast-paced economy. The E.M.B.A. is accredited by the AACSB International—The Association to Advance Collegiate Schools of Business—and conforms to its recommended guidelines.

E.M.B.A. Program Admission Requirements

Because of the special focus of the E.M.B.A. program, the application process is separate from and independent of the regular M.B.A. program. Admission decisions are not reciprocal, class size is limited, and admission decisions are made on a rolling basis until all available class positions are filled.

To be considered for admission to the E.M.B.A. program, applicants must:

- Submit a current resume documenting approximately 8 years of work experience with increasing managerial responsibility. Less experienced applicants will be considered if they can demonstrate exceptional accomplishment.
- Submit a personal statement discussing their interest in the E.M.B.A. program.
- Submit two (2) letters of professional reference.
- Submit official transcripts from all prior universities attended.
- Participate in a personal interview with the E.M.B.A. Programs Committee.

Applicants who fail to meet these requirements can be admitted conditionally upon recommendation of the E.M.B.A. Programs Committee and approval of the Dean of the Graduate School.

The GMAT or GRE is not required for admission into the E.M.B.A. program. Because of the lock-step nature of the E.M.B.A., students must complete all required courses without exception. There will be no course waivers. In addition, students who leave the program before completion for any reason are not eligible to rejoin the same cohort but may rejoin a subsequent cohort. Admission to future E.M.B.A. classes is dependent upon current academic status or successful reapplication. Acceptance in a future program is not guaranteed.

The Executive Master of Business Administration (E.M.B.A.) program offers a choice of two curriculum tracks. Students are eligible to choose a track after the first semester in the program. The **General Management** track weaves quantitative, analytical, and managerial learning threads throughout the program and covers general business courses. The **Health Professionals** track is for health professionals interested in further developing their business and leadership skills with healthcare specific courses. The offering of the **Health Professionals** track may be contingent on student enrollment.

Code	Title	Credit Hours
A. Common courses required for both tracks:		31
ACC 5003	Financial Accounting Concepts	
FIN 5023	Financial Management	
GBA 6973	Special Topics in General Business Administration	

MGT 5043	Management and Behavior in Organizations
MGT 5093	Leadership
MGT 5633	Effective Negotiating
MGT 5903	Strategic Management and Policy
MGT 6971	Special Problems
MKT 5023	Marketing Management
MS 5013	Data Analytics for Managers
MS 5023	Decision Analytics for Managers

B. EMBA Tracks. Students must choose one of the two tracks below: 12

General Management Track

ACC 5023	Accounting Analysis for Decision Making
ECO 5023	Managerial Economics and Business Strategy
FIN 5823	Corporate Restructuring
MGT 5253	Ethics and Globalization

Health Professionals Track

ACC 6783	Accounting for Healthcare Organizations (replaces ACC 5023)
BLW 6553	Legal, Ethical, and Social Issues of Healthcare Management (replaces MGT 5253)
ECO 6543	Healthcare Economics and Policy (replaces ECO 5023)
MGT 6133	Organizational and Managerial Issues in Healthcare Delivery (replaces FIN 5823)

Total Credit Hours

43

Dual Master of Business Administration Degree and Master of Public Health Degree Program

This integrated dual degree program is designed to offer the opportunity for qualified graduate students to study both business administration and public health at the graduate level. It will assist students who enter with a wide range of work experience in their quest for advanced leadership and managerial or administrative roles within a variety of healthcare and public health organization types. The Master of Business Administration (M.B.A.) degree is offered through the UT San Antonio Carlos Alvarez College of Business, and the Master of Public Health (M.P.H.) degree is offered through The University of Texas School of Public Health (UTSPH) with courses available at its San Antonio Regional Campus.

Applicants will be admitted to the M.B.A. and M.P.H. degree programs independently, according to the admission schedule and policies of each institution. Applicants must submit all admission materials to each Admission office independently and on time. Admission to the integrated dual degree program may occur after a student has already matriculated in the M.B.A., M.P.H., or both degree programs, as long as the student is still within the first half of each program.

Each student is responsible for payment of tuition and fees at each institution at which the student is enrolled.

Required Courses

Students choosing the dual degree program must complete the 36 semester credit hours of M.B.A. coursework and the 45 semester credit hours of M.P.H. coursework. However, under this integrated dual-degree

program, up to 12 semester credit hours of M.B.A. coursework can be applied to the M.P.H. requirements, and up to 12 semester credit hours of M.P.H. coursework can be applied to the M.B.A. requirements. These shared-credit courses substantially reduce the total time required for students to complete the programs, when compared with taking each of the two degree programs separately.

Students should refer to The University of Texas School of Public Health catalog (<https://uthscsa.edu/public-health/academics/mpg-overview/>) for M.P.H. program admission and degree requirements.

Master of Business Administration / Doctor of Medicine Program

The Master of Business Administration (M.B.A.) / Doctor of Medicine (M.D.) program is a 36-credit hour version of the M.B.A. degree program structured specifically for those pursuing an M.D. at the University of Texas Health Science Center at San Antonio (UTHSC), UTHSC faculty, or UTHSC medical residents.

M.B.A. / M.D. Program Admission Requirements

To be considered for admission to the M.B.A. / M.D. program, applicants must submit:

- A completed application form.
- Transcripts from all universities attended.
- A letter of nomination from the UTHSC program director.

The GMAT or GRE is not required for admission into the M.B.A. / M.D. program.

Master of Science Degree in Business

The Master of Science in Business (M.S.B.) is tailored for students with wide-ranging educational backgrounds and designed specifically for students without a business background. The curriculum is designed to offer business skills and knowledge to qualified students meeting the admission requirements. Students with business degrees are also accepted into the program; however, they are encouraged to consider other specialized master's programs or the M.B.A. program, where they can further explore deepening their business interests. The program, including admission, is supervised by the Graduate Program Committee in M.S.B. General requirements for completion of the program consist of required business courses.

Program Admission Requirements

For admission to the M.S.B. program, applicants must meet University-wide graduate admission requirements. Applicants will be considered based on their demonstrated potential for success in graduate study in business, as indicated by a combination of prior academic achievement, personal statement, résumé (optional), standardized test scores (optional), and letters of recommendation.

The M.S.B. Program Committee will evaluate each applicant individually based on the complete package of submitted materials.

A complete application package will include:

- A completed application form.
- Transcripts from all universities attended.
- A personal statement of academic and personal goals.

- At least two letters of reference.
- A current résumé with employment or other experience (optional).

Degree Options

The M.S.B. program is offered as either a full-time (11 or 16 months) cohort program or a flexible part-time program.

Degree Requirements

M.S.B. students are required to complete 30 hours of business courses plus 3 credit hours of developmental courses.

Code	Title	Credit Hours
A. 30 semester credit hours of required master’s level business courses		30
ACC 5003	Financial Accounting Concepts	
ECO 5003	Economic Theory and Policy	
FIN 5023	Financial Management	
MGT 5043	Management and Behavior in Organizations	
MGT 5093	Leadership	
MGT 5633	Effective Negotiating	
MGT 5903	Strategic Management and Policy	
MKT 5023	Marketing Management	
MOT 5243	Essentials of Project Management	
MS 5003	Quantitative Methods for Business Analysis	
B. 3 semester credit hours of developmental courses		3
GBA 6302	Professional Development and Communication	
MGT 6971	Special Problems (Business Speaking)	
Total Credit Hours		33

Master of Science Degree in Business Analytics

The Master of Science in Business Analytics (MSBA) program within the Alvarez College of Business (ACOB) at the University of Texas at San Antonio is designed to equip students with the knowledge and skills necessary to thrive in an ever-evolving field of data-driven decision-making in business. Following an interdisciplinary approach, this STEM MSBA program integrates concepts from statistics, computer science, and business domains to provide students with a comprehensive understanding of extracting actionable insights from complex data sets. Therefore, the program provides students with a solid foundation in data visualization, statistics, data mining, predictive modeling, and effective communication skills required for making optimal business decisions. The program also teaches important critical thinking and problem-solving skills through hands-on experience and analytical software to solve real-world business problems.

Program Admission Requirements

For admission to the MSBA program, applicants must meet the University-wide graduate admission requirements. Applicants are further considered based on their demonstrated potential for success in graduate study in business analytics, as indicated by a combination of prior academic achievement, personal statement, résumé, and references.

The MSBA Graduate Program Committee evaluates each applicant individually based on the complete package of submitted materials.

A complete application package will include:

- A completed application form.
- Transcripts from all universities attended.
- A personal statement.
- A current résumé with employment or other experience.
- Two optional letters of reference.
- International applicants are required to prove proficiency in the English language by taking either the Test of English as a Foreign Language (TOEFL) iBT, the International English Language Testing System (IELTS), or the Duolingo English Test (DET). The minimum acceptable scores for admissions consideration are 79 TOEFL iBT, 6.5 IELTS, and 100 DET. Scores may not be more than two years old.

Degree Requirements

The MSBA program requires 30 semester credit hours of work. Students seeking the MSBA degree may select between two options to complete the required 30 semester credit hours.

Option 1: General MSBA Non-Thesis Option

Non-thesis students are required to complete the 18 semester credit hours of Required Business Courses and 9 semester credit hours of electives or concentration coursework. These electives may be taken either in the Alvarez College of Business or in areas outside of the college as approved by the Graduate Program Committee. Students completing the Non-Thesis Option are required to complete BAN 6703 Capstone Project in Business Analytics in one of their final two semesters of the program with a grade of "B" (3.0) or better.

Concentrations

Students may choose to fulfill all 9 semester credit hours of elective coursework through concentration courses. Concentration options include: Accounting, Economics, Finance, and Marketing.

Option 2: General MSBA Thesis Option

Thesis students are required to complete the 18 semester credit hours of Required Business Courses and 6 semester credit hours of elective coursework. These electives may be taken either in the Alvarez College of Business or in areas outside of the college as approved by the Graduate Program Committee. Students completing the Thesis Option are required to complete 6 SCH of BAN 6983 Master's Thesis in consultation with their advisor. See the University's requirements for a thesis in the Master's Degree Regulations.

A. Required Business Courses		18
BAN 5003	Introduction to Business Analytics and Artificial Intelligence	
BAN 6003	Data Management and Analytics Integration	
BAN 6103	Data Visualization and Communication for Business Applications	
BAN 6203	Decision-Making in Business	
BAN 6303	Machine Learning for Business Analytics	
BAN 6403	Text Analytics for Business	
B. Business Electives or Concentration Coursework		6-9

Depending on the choice of Capstone or Thesis, students may fulfill the elective requirement by completing a minimum of 6 credit hours from the list of approved electives below or by selecting a designated concentration and completing 9 credit hours.

General Elective Options	
BAN 5103	Introduction to Statistics for Business Analytics
BAN 6503	Marketing Analytics
BAN 6603	Analytics for Finance and Economics
BAN 6703	Capstone Project in Business Analytics
BAN 6943	Business Analytics Internship
BAN 6953	Independent Study
BAN 6973	Special Topics in Business Analytics
Options for a Concentration in Marketing	
MKT 5023	Marketing Management
MKT 5063	Marketing Research Design and Application
MKT 5083	Advertising and Promotion Management
MKT 6033	Social Media Marketing
MKT 6243	Digital Marketing Foundations
MKT 6473	Data Visualization and Marketing Analytics
Options for a Concentration in Economics	
ECO 6103	Applied Econometrics I
ECO 6303	Applied Econometrics II
ECO 6713	Causal Inference and Machine Learning
ECO 6763	Data Analytics with Python
Options for a Concentration in Finance	
FIN 5023	Financial Management
Select an additional 6 semester credit hours from the courses below to complete this concentration.	
FIN 5633	Investment Theory and Problems
FIN 6213	Derivatives Markets and Instruments
FIN 6313	Modeling of Financial Decision Making
FIN 6323	Financial Data Analytics and FinTech Lab
FIN 6543	Credit Analysis
Options for a Concentration in Accounting	
ACC 5863	Advanced Financial Accounting
ACC 5993	Data Analytics for Accountants
ACC 6003	Management Control Systems
C. Capstone or Thesis	
Students should select either the Capstone Project or Master's Thesis. For the Capstone option, 3 semester credit hours are required. For the Thesis option, 6 semester credit hours are required.	
BAN 6703	Capstone Project in Business Analytics (with a grade of "B" or better)
BAN 6983	Master's Thesis (repeated for 6 semester credit hours)
Total Credit Hours	30

Master of Science in Business Research

The Master of Science in Business Research (MSBR) program within the Alvarez College of Business (ACOB) at the University of Texas at San Antonio is designed to equip students with advanced research skills and analytical expertise in the field of business. This intensive STEM-

certified program combines rigorous academic training with practical applications to prepare students for doctoral programs in business and careers in consulting, market research, analytics, and other industry-related positions. Through a blend of coursework, seminars, and hands-on research projects, students will develop the critical thinking and methodological proficiency necessary to address complex business challenges using sophisticated research designs and analytical models, thereby preparing them for doctoral business programs.

Program Admission Requirements

For admission to the MSBR program, applicants must meet University-wide graduate admission requirements. Applicants are further considered based on their demonstrated potential for success in graduate study in business research, as indicated by a combination of prior academic achievement, personal statement, résumé, and references. The MSBR Graduate Program Committee evaluates each applicant individually based on the complete package of submitted materials.

A complete application package will include:

- A completed application form.
- Transcripts from all universities attended.
- A statement of academic interests and goals.
- Two letters of recommendation from academic or professional sources familiar with the applicant's background.
- A résumé or curriculum vitae.
- International applicants are required to prove proficiency in the English language by taking either the Test of English as a Foreign Language (TOEFL) iBT, the International English Language Testing System (IELTS), or the Duolingo English Test (DET). The minimum acceptable scores for admissions consideration are 79 TOEFL iBT, 6.5 IELTS, and 100 DET. Scores may not be more than two years old.

Graduate admission test scores are not required. However, please note that competitive GMAT/GRE scores may help your chances of admission as they, along with your GPA, provide a quantitative metric for the MSBR Programs Committee to evaluate you as a candidate.

Degree Requirements

The MSBR program requires 30 semester credit hours of work. Students seeking the MSBR degree may select between two options to complete the required 30 semester credit hours.

Option 1: General MSBR Non-Thesis Option

To complete the non-thesis option, students are required to complete the 18 semester credit hours listed below and 9 semester credit hours of elective or concentration coursework. Graduate Advisor of Record approval is required to select a concentration or elective coursework. Students completing the non-thesis option are also required to complete BAN 6703 Capstone Project in Business Analytics with a grade of "B" (3.0) or better.

Concentrations

Students can complete their MSBR degree with a concentration in one of the following fields: Accounting, Economics, Finance, Marketing, Statistics, Management, and Information Technology.

Option 2: General MSBR Thesis Option

Thesis students are required to complete the 18 semester credit hours listed below and 6 semester credit hours of elective coursework. Graduate Advisor of Record approval is required to select elective coursework. Students completing the thesis option

are also required to complete 6 semester credit hours of BAN 6983 Master's Thesis in consultation with their advisor. See the University's requirements for a thesis in the Master's Degree Regulations.

Code	Title	Credit Hours
A. Required Courses		18
STA 6003	Statistical Methods in Research and Practice I	
ECO 7053	Quantitative Methods for Business and Economics	
ECO 7063	Econometrics I	
GBA 7013	Research Methods I	
MKT 7093	Applied Econometrics in Marketing and Business Research	
STA 6923 or STA 6103	Introduction to Statistical Learning Statistical Methods in Research and Practice II	
B. Electives or Concentration Courses		6-9
Students in the Thesis track may select 6 credit hours from the list of approved electives below.		
Students in the Non-Thesis (Capstone) track may select 9 credit hours from the list of approved electives below by selecting a concentration.		
Accounting Concentration		
ACC 6953	Independent Study	
ACC 7013	Seminar in Empirical Research in Accounting	
ACC 7053	Current Topics in Accounting Research	
ACC 7113	Seminar in Financial Accounting Theory	
ACC 7123	Seminar in Managerial Accounting Theory	
ACC 7983	Special Topics in Accounting	
Economics Concentration		
ECO 7013	Microeconomics I (required)	
Select an additional 6 semester credit hours from the courses below.		
ECO 6573	Game Theory and Business Strategy	
ECO 6583	Special Topics in Econometrics/Forecasting	
ECO 6633	Economic Design of Markets and Platforms	
ECO 6713	Causal Inference and Machine Learning	
ECO 6763	Data Analytics with Python	
ECO 6953	Independent Study	
ECO 7303	Econometrics II	
Finance Concentration		
FIN 5023	Financial Management (required for concentration)	
Select an additional 6 semester credit hours from the courses below to complete this concentration.		
FIN 5633	Investment Theory and Problems	
FIN 5733	Banking and the Financial Services Industry	
FIN 6213	Derivatives Markets and Instruments	
FIN 6313	Modeling of Financial Decision Making	
FIN 6953	Independent Study	
FIN 7023	Corporate Finance	

FIN 7033	Valuation
FIN 7043	Empirical Finance
FIN 7113	International Financial Markets
Marketing Concentration	
MKT 6953	Independent Study
MKT 7013	Seminar in Marketing Theory
MKT 7023	Behavioral Seminar I
MKT 7033	Topics in Strategy Research
MKT 7043	Seminar in Experimental Design
Statistics Concentration	
MS 7033	Applications in Causal Structural Modeling
STA 6013	Regression Analysis
STA 6103	Statistical Methods in Research and Practice II
STA 6243	Exploratory Data Analysis with Python
STA 6813	Multivariate Analysis
STA 6923	Introduction to Statistical Learning
STA 6953	Independent Study
Management Concentration	
MGT 6953	Independent Study
MGT 7013	Seminar in Organizational Behavior
MGT 7023	Seminar in Organization Theory
MGT 7033	Seminar in Human Resource Management
MGT 7043	Foundations of Strategy
MGT 7053	Empirical Approaches to Strategy
MGT 7073	Seminar in Organization and Management Studies
Information Technology Concentration	
Select 6 semester credit hours from the courses below.	
IS 6303	Introduction to Voice and Data Security
IS 6373	Cyber Law
IS 6383	Policy Assurance for Infrastructure Assurance
IS 6503	Principles of Database Management
IS 6703	Introduction to Data Mining
IS 6713	Data Foundations
IS 6733	Deep Learning on Cloud Platforms
IS 6813	Strategic Management of Information Technology
IS 6953	Independent Study
Select 3 semester credit hours from the courses below.	
IS 7013	Foundations of Information Systems Research
IS 7023	Behavioral and Organizational Information Systems and Cyber Security Research

C. Capstone or Thesis **3-6**

Students in the Non-Thesis (Capstone) track are required to complete 3 semester credit hours of Capstone coursework.

BAN 6703	Capstone Project in Business Analytics (with a grade of "B" or better)
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Students in the Thesis track are required to complete 6 semester credit hours of Master's Thesis coursework.

BAN 6983

Master's Thesis (repeated for 6 semester credit hours)

Total Credit Hours

30

Master of Science in Data Analytics

The Master of Science in Data Analytics has moved to the Department of Statistics and Data Science (<https://catalog.utsa.edu/graduate/aicybercomputing/statisticsdatascience/#degreestext>) in the College of AI, Cyber and Computing.

Pre-Ph.D. Pathway

The Pre-Ph.D. Pathway / Research Track Option will provide students with experience and training in the research necessary to make them competitive candidates for doctoral or other graduate programs in traditional business areas (e.g., accounting, finance, management, marketing, information systems), economics, and nascent areas, such as applied statistics, cyber security, to name a few. It will cultivate students' interest in pursuing a doctoral education and will position them to be successful applicants for doctoral or other graduate programs. The program responds to labor market demands suggesting an expanding need for business, economics, applied statistics, and cyber security professors and researchers. The program is open to all graduate students.

Participants are expected to take a series of three courses intended to equip them with the basic tools to conduct academic research, including but not limited to identifying original research questions, developing hypotheses, generating samples, creating datasets, and utilizing statistical tools and reporting to test hypotheses. Most students will be required to take the following course series: GBA 6013 Graduate Academic Research and Programming; GBA 6023 Research Conceptualization, Development, and Practice; GBA 6033 Research Implementation, Reporting and Engagement. Students with more technical backgrounds, whose interests reside in areas that require specialized training (e.g., applied statistics, cyber security, or economics), will have the opportunity (upon advisor approval) to take different courses that fit their needs.

Pre-Ph.D. Pathway / Research Track Option students will also have the opportunity to receive mentoring from faculty, present at research conferences, and attend workshops to prepare students for doctoral and other graduate programs (e.g., how to write a strong personal statement, how to select a graduate program, important things to know about graduate education, what is it like to be a college professor), and write research papers for journal publication.

Admission Requirements

The Pre-Ph.D. Pathway / Research Track Option is open to all UT San Antonio graduate students, including graduate non-degree seeking students, regardless of their college or major. To join the Pre-Ph.D. Pathway / Research Track Option, current UT San Antonio students should contact the Alvarez College of Business Research Office by email at gradbiz@utsa.edu or by telephone at (210) 458-7301. While applicants who are currently enrolled in a graduate degree program at UT San Antonio have already met the University admission requirements, other college-wide requirements may apply.

Applicants who are not currently enrolled in a graduate degree program at UT San Antonio will be required to apply for admission to UT San Antonio as a special (non-degree seeking) graduate student and to indicate their intent to pursue the Pre-Ph.D. Pathway / Research Track Option course

sequence. Meeting the University admission requirements does not guarantee admission. Questions should be directed to the Alvarez College of Business Research Office.

All students interested in the Pre-Ph.D. Pathway must submit a statement of purpose and a current résumé to the Alvarez College of Business Research Office.

Pre-Ph.D. Pathway Requirements

Below is the three-course suggested sequence for graduate students seeking to become competitive applicants in top business Ph.D. programs.

Code	Title	Credit Hours
GBA 6013	Graduate Academic Research and Programming	3
GBA 6023	Research Conceptualization, Development, and Practice	3
GBA 6033	Research Implementation, Reporting and Engagement	3

Graduate Certificate in Intelligence Studies

The Graduate Certificate in Intelligence Studies has moved to the Department of Information Systems and Cybersecurity (<https://catalog.utsa.edu/graduate/aicybercomputing/informationssystemscybersecurity/>) in the College of AI, Cyber and Computing.

Business Analytics (BAN) Courses

BAN 5003. Introduction to Business Analytics and Artificial Intelligence. (3-0) 3 Credit Hours.

This course offers an introduction to the fundamental concepts and applications of business analytics and artificial intelligence (AI) in the modern business environment. Students will explore the role of data-driven decision-making and AI technologies to gain competitive advantages. Key topics include data collection and management, statistical analysis, predictive modeling, and AI-driven business strategies. Through hands-on exercises and case studies, students will learn to apply analytical tools and AI techniques to solve real-world business problems and make informed decisions. By the end of the course, students will have a foundational understanding of how to leverage business analytics and AI to drive innovation and improve organizational performance. This course has Differential Tuition.

BAN 5103. Introduction to Statistics for Business Analytics. (3-0) 3 Credit Hours.

This foundational course aims to equip learners with essential statistical tools and methodologies for making informed, data-driven decisions in the business world. Students will explore core statistical concepts throughout this course, including probability theory, descriptive statistics, sampling design, hypothesis testing, and regression analysis. Emphasis will be placed on practical applications and the use of statistical software to analyze real-world business data. Students will learn to interpret statistical outputs, understand variability, and make predictions based on empirical evidence. By the end of this course, students will be adept at leveraging statistical techniques to solve business problems, enhance strategic decision-making, and provide actionable insights based on data analysis. This course has Differential Tuition.

BAN 6003. Data Management and Analytics Integration. (3-0) 3 Credit Hours.

This course provides an in-depth exploration of data management principles and the integration of advanced analytics in modern business environments. Students will learn how to effectively manage and govern data across an organization, ensuring data quality, consistency, and accessibility while adhering to data ethics and privacy regulations. The course covers key topics such as data warehousing, data lakes, cloud-based data solutions, and data governance frameworks. Additionally, students will explore integrating analytics tools and techniques, including data visualization, predictive modeling, and machine learning, to drive data-driven decision-making. Practical case studies and hands-on projects will enable students to apply their knowledge in real-world scenarios, preparing them for data management, analytics, and business intelligence positions. This course has Differential Tuition.

BAN 6103. Data Visualization and Communication for Business Applications. (3-0) 3 Credit Hours.

This course focuses on the principles and practices of effectively communicating data-driven insights to support business decision-making. Students will learn to translate complex data analyses into clear, actionable messages for diverse business audiences. The course covers data visualization techniques, storytelling with data, and the use of various tools to create compelling data presentations. Emphasis will be placed on tailoring communication strategies to different stakeholders, ensuring that data are appropriately understood and drive informed decision-making. Through case studies, hands-on projects, and presentations, students will develop the skills necessary to influence business decisions through clear and impactful data communication. This course has Differential Tuition.

BAN 6203. Decision-Making in Business. (3-0) 3 Credit Hours.

This course explores advanced techniques in optimization and simulation, focusing on their application to complex decision-making problems in various fields. Students will learn to formulate and solve optimization models, including linear, nonlinear, and integer programming. In addition, the course will cover simulation methods, emphasizing their use in analyzing and improving system performance. Through hands-on projects and case studies, students will develop the skills to apply these techniques to real-world scenarios, enhancing their ability to design efficient, effective solutions in business, engineering, and other disciplines. This course has Differential Tuition.

BAN 6303. Machine Learning for Business Analytics. (3-0) 3 Credit Hours.

This course explores the application of machine learning techniques to solve complex business problems. Students will learn to use various machine learning algorithms, such as regression, classification, clustering, neural networks, and ensemble methods, to analyze large datasets and uncover actionable insights. Emphasis is placed on understanding the practical implications of these techniques in a business context, including model evaluation, selection, and optimization. Through hands-on projects and case studies, students will develop the skills to apply machine learning to real-world business scenarios, enhancing their ability to make data-driven decisions. This course has Differential Tuition.

BAN 6403. Text Analytics for Business. (3-0) 3 Credit Hours.

This advanced course focuses on extracting actionable insights from unstructured text data, a critical skill in today's data-driven business environment. Students will explore the principles of text mining and natural language processing to transform raw text into valuable business intelligence. The course covers various modes for analyzing large volumes of text data, including social media, customer feedback, and other textual sources. Emphasis will be on applying these techniques to real-world business problems and making data-driven decisions. By the end of this course, students will be proficient in leveraging text mining techniques to uncover hidden patterns, trends, and insights from textual data, enhancing their ability to make informed business decisions. This course has Differential Tuition.

BAN 6503. Marketing Analytics. (3-0) 3 Credit Hours.

This course provides an in-depth exploration of data-driven marketing strategies and techniques. Students will learn to leverage analytical tools and methodologies to measure, manage, and analyze marketing performance. Topics include customer segmentation, predictive modeling, campaign effectiveness, and digital marketing analytics. The course emphasizes using data to inform marketing decisions, optimize marketing spend, and improve customer acquisition and retention. Through hands-on exercises and real-world case studies, students will gain practical experience in applying analytics to solve marketing challenges and drive business growth. This course has Differential Tuition.

BAN 6603. Analytics for Finance and Economics. (3-0) 3 Credit Hours.

This course examines the analysis of financial and economic data. Students will learn advanced techniques for modeling and predicting trends, cycles, and seasonal patterns in financial markets and economic indicators. Key topics include ARIMA models, GARCH models, cointegration, vector autoregression (VAR), and machine-learning approaches to time-series forecasting. The course emphasizes practical applications, allowing students to develop predictive models and perform scenario analysis on real-world financial and economic datasets. By the end of the course, students will be equipped to make informed predictions and strategic decisions based on time-series analysis. This course has Differential Tuition.

BAN 6703. Capstone Project in Business Analytics. (3-0) 3 Credit Hours.

The Capstone Project in Business Analytics is the culminating experience for students in the Master's in Business Analytics program. This course allows students to integrate and apply the knowledge and skills acquired throughout their coursework to a real-world business problem or research question. In this course, students will work in teams or individually to tackle a comprehensive analytics project, which may involve collaborating with industry partners, utilizing large datasets, and applying advanced analytical techniques. The project will require students to demonstrate their ability to conduct thorough data analysis, develop actionable insights, and professionally present their findings. This course has Differential Tuition.

BAN 6943. Business Analytics Internship. (0-0) 3 Credit Hours.

Prerequisite: Graduate standing, 15 semester credit hours of graduate work, and consent of instructor. The internship must be approved in advance by the Internship Coordinator and the student's Graduate Advisor of Record. The internship is a supervised experience relevant to the student's program of study within selected organizations and agencies. Individual written reports are required. This course has Differential Tuition.

BAN 6953. Independent Study. (0-0) 3 Credit Hours.

Prerequisite: Graduate standing and permission in writing (form available) from the instructor and the student's Graduate Advisor of Record. Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students needing specialized work not typically or not often available as part of the regular course offerings. May be repeated for credit, but not more than 6 hours, regardless of discipline, will apply to the degree. This course has Differential Tuition.

BAN 6973. Special Topics in Business Analytics. (3-0) 3 Credit Hours.

Prerequisite: Consent of instructor. An organized course offering the opportunity for specialized study not typically or not often available as part of the regular course offerings. Special Topics courses may be repeated for credit when the topics vary, but not more than 6 hours, regardless of discipline, will apply to the degree. This course has Differential Tuition.

BAN 6983. Master's Thesis. (0-0) 3 Credit Hours.

Prerequisite: Permission of the Graduate Advisor of Record and Thesis Director. Thesis research and preparation. May be repeated for credit, but not more than 6 semester credit hours will apply to a Master's degree. Credit will be awarded upon completion of the thesis. Enrollment is required each term in which the thesis is in progress. This course has Differential Tuition.

Doctor of Business Administration (DBA) Courses**DBA 7003. Global Business and Economics. (3-0) 3 Credit Hours.**

This course is designed to provide an in-depth understanding of the complexities and dynamics of the global business environment. This course explores key economic theories and their applications in international markets, including trade policies, global financial systems, and the impact of geopolitical factors on business strategies. Students will engage with advanced topics such as international business operations, global supply chain management, cross-border mergers and acquisitions, and the challenges of competing in diverse cultural and regulatory contexts. The course aims to equip future business leaders with the analytical tools and strategic insights needed to navigate and succeed in a rapidly evolving global economy. This course has Differential Tuition.

DBA 7013. Organizational Behavior and Leadership. (3-0) 3 Credit Hours.

This course explores the dynamic relationship between individual behavior, group interactions, and organizational processes. Students will examine foundational and contemporary theories of leadership, motivation, decision-making, and organizational culture. The course emphasizes the role of leadership in fostering effective communication, team dynamics, and managing change within global organizations. Through case studies and applied research, students will develop advanced skills in leadership strategies, ethical decision-making, and fostering innovation in diverse and complex environments. This course has Differential Tuition.

DBA 7023. Research Design and Survey Design. (3-0) 3 Credit Hours.

This course provides an in-depth exploration of the principles and methods for designing robust research studies and surveys within the business context. Students will learn how to develop effective research questions, sample subjects, select appropriate research methodologies, and construct surveys that yield reliable and valid data. The course emphasizes the practical applications for business problem-solving and decision-making. By the end of the course, students will be equipped to design and conduct research projects that contribute to academic knowledge and offer actionable insights for business leaders. This course has Differential Tuition.

DBA 7103. Marketing Strategy and Consumer Behavior. (3-0) 3 Credit Hours.

This course explores the strategic frameworks and analytical models that shape marketing decisions in today's dynamic business environment. The course emphasizes the intersection of marketing strategy and consumer psychology, focusing on how companies can effectively align their marketing efforts with consumer needs, motivations, and behaviors. Topics include segmentation, targeting, positioning, consumer decision-making processes, branding, digital marketing, and the impact of cultural and psychological factors on consumer behavior. Through case studies, research analysis, and practical applications, students will develop critical insights to enhance marketing strategies and drive business success. This course has Differential Tuition.

DBA 7113. Human Resource Management. (3-0) 3 Credit Hours.

This course focuses on the strategic role of human resources in fostering organizational growth and competitive advantage. It examines key concepts such as talent acquisition, employee development, leadership, performance management, and organizational culture. Emphasizing both theoretical frameworks and practical applications, the course explores how human capital strategies can enhance productivity, innovation, and employee engagement in a global business environment. Students will develop skills to effectively manage and develop human resources to align with organizational goals and navigate complex workforce challenges. This course has Differential Tuition.

DBA 7123. Advanced Research Design. (3-0) 3 Credit Hours.

This advanced statistics course focuses on complex analyses relevant to education and data-driven decision-making aimed at expanding students' knowledge of multivariate techniques. The course emphasizes the practical application of advanced statistical concepts, providing a balance between theoretical understanding and real-world application. Through hands-on opportunities, students will apply statistical methods to solve practical problems. This course has Differential Tuition.

DBA 7203. Innovation and Entrepreneurship. (3-0) 3 Credit Hours.

This course explores the dynamic processes of creating and managing new ventures, focusing on fostering innovation and entrepreneurial thinking within organizations. It covers critical concepts such as idea generation, business model development, strategic planning, and scaling businesses in competitive environments. The course emphasizes the role of innovation in driving business growth and sustainability, examining both internal corporate entrepreneurship (intrapreneurship) and external venture creation. Students will develop critical skills in risk management, opportunity recognition, and leadership in rapidly changing markets. This course has Differential Tuition.

DBA 7213. Business Statistics and Data Visualization. (3-0) 3 Credit Hours.

This course equips students with essential statistical tools and techniques for analyzing business data and making data-driven decisions. The course covers foundational statistical concepts, including probability, hypothesis testing, regression analysis, and descriptive statistics, with a strong emphasis on practical application in real-world business scenarios. Students will also explore advanced data visualization techniques, using modern software tools to create compelling, insightful visual representations of complex data sets. The course emphasizes interpreting and presenting statistical results effectively to inform decision-making processes, enhancing students' analytical and communication skills in business environments. This course has Differential Tuition.

DBA 7223. Qualitative Research Methods for Business. (3-0) 3 Credit Hours.

This course is designed to equip students with the skills and knowledge to apply qualitative research techniques in business contexts. The course covers various qualitative methodologies such as case studies, ethnography, grounded theory, and narrative analysis, emphasizing their relevance to solving complex business problems. Students will learn to collect, analyze, and interpret non-numerical data, such as interviews and observations, to gain deep insights into organizational behaviors, consumer patterns, and market dynamics. The course also introduces Artificial Intelligence (AI), Natural Language Processing (NLP), and text analysis to analyze qualitative data. This course has Differential Tuition.

DBA 7303. Leadership Theory and Practice. (3-0) 3 Credit Hours.

This course offers an in-depth exploration of leadership theories and their practical application in organizational settings. Students will critically examine classical and contemporary leadership models, including transformational, transactional, servant, and authentic leadership. The course emphasizes the integration of theoretical perspectives with real-world leadership challenges, fostering the development of strategic decision-making, ethical leadership, and effective team management. Through case studies, reflective exercises, and applied research, students will gain the tools to lead diverse organizations, drive innovation, and influence organizational change in complex environments. This course has Differential Tuition.

DBA 7313. Predictive Modeling and Machine Learning. (3-0) 3 Credit Hours.

This advanced course is designed to equip students with advanced analytical tools and techniques used in modern business decision-making. This course covers the fundamental principles of predictive modeling, machine learning algorithms, and their applications in various business scenarios. Students will explore supervised and unsupervised learning, regression models, decision trees, neural networks, and ensemble methods, emphasizing utilizing these techniques to identify patterns, forecast trends, and make data-driven decisions. Practical applications and case studies are used to demonstrate real-world business solutions, enhancing strategic thinking and analytical skills. This course has Differential Tuition.

DBA 7323. Advanced Managerial Accounting. (3-0) 3 Credit Hours.

The course provides an in-depth exploration of advanced managerial accounting concepts and practices, focusing on decision-making, planning, and control in complex business environments. Students will examine cost behavior, performance measurement, budgeting, and strategic cost management, utilizing quantitative and qualitative approaches to enhance organizational effectiveness. Emphasis is placed on integrating financial and non-financial information to support long-term planning and operational efficiency, as well as the role of managerial accounting in shaping business strategy and achieving competitive advantage. This course has Differential Tuition.

DBA 7403. Strategic Management. (3-0) 3 Credit Hours.

The course offers an advanced exploration of formulating, implementing, and evaluating business strategies within complex and dynamic environments. Designed for doctoral candidates, this course integrates cutting-edge theories with practical applications to enhance strategic decision-making skills. Topics include competitive analysis, resource-based perspectives, innovation management, global strategy, and corporate governance. Through case studies, real-world projects, and academic research, students will develop critical insights into how firms can achieve sustainable competitive advantage and navigate evolving market challenges. This course prepares students for leadership roles in strategy formulation and execution across diverse industries. This course has Differential Tuition.

DBA 7413. Advanced Business Statistics. (3-0) 3 Credit Hours.

This advanced course is designed to equip doctoral candidates with advanced knowledge and practical skills in statistical methodologies relevant to business research. This course delves into complex statistical techniques such as factor analysis, structural equation modeling, time series analysis, survival analysis, cluster analysis, and categorical data analysis. Students will learn how to apply these methods to analyze datasets, interpret findings, and make data-driven decisions in a business context. Emphasizing theoretical understanding and practical application, the course prepares students to conduct rigorous research and contribute to data-informed strategies in their respective fields. This course has Differential Tuition.

DBA 7503. Applied Marketing Research. (3-0) 3 Credit Hours.

This course explores the marketing research process in relation to key marketing concepts such as consumer behavior, market segmentation, branding, customer service, pricing strategies, distribution channels, integrated marketing communications, and sales. It provides an in-depth examination of each stage of the research process, including survey design, data collection methods, data analysis techniques, and reporting findings. This course has Differential Tuition.

DBA 7513. Financial Markets and Risk Management. (3-0) 3 Credit Hours.

The course provides an in-depth exploration of global financial markets and the various risks that impact financial institutions and investors. The course covers critical topics such as market structure, financial instruments, portfolio theory, derivatives, and regulatory frameworks. Students will develop advanced analytical skills to assess and manage financial risks, including credit, market, liquidity, and operational risks. Through a combination of theoretical models and practical case studies, the course equips students with the tools to make informed decisions in risk management and navigate the complexities of financial markets effectively. This course has Differential Tuition.

DBA 7613. Doctoral Research. (0-0) 3 Credit Hours.

This course offers a comprehensive framework for doctoral students to undertake original research that contributes to the field of business. Students will engage in rigorous academic research, selecting a topic aligned with their professional interests and academic objectives. Through guided instruction, they will formulate research questions, conduct a thorough literature review, develop a research methodology, collect and analyze data, and present their findings through a course presentation or written paper. The course emphasizes producing high-quality work that advances both business theory and practice. At the conclusion of this course, students will complete a research project that showcases their ability to perform independent research, integrate complex concepts, and effectively communicate their findings in a scholarly format. May be repeated for up to 9 credits. This course has Differential Tuition.

DBA 7713. Doctoral Dissertation. (0-0) 3 Credit Hours.

Prerequisite: Admission to candidacy for Doctoral degree in Business Administration. May be repeated for credit, but not more than 12 hours may be applied to the Doctoral degree. This course has differential tuition.

Business of Health (BOH) Courses**BOH 6123. Healthcare Strategic Management. (3-0) 3 Credit Hours.**

Prerequisite: MGT 5003, an equivalent, or consent of instructor. Strategic management of healthcare organizations involves both making good decisions about where you want your organization to go and deciding how to get there. This course will focus on both direction issues and execution issues. Students will do case studies of current healthcare organizations. (Same as MGT 6123. Credit cannot be earned for both MGT 6123 and BOH 6123.) This course has Differential Tuition.

BOH 6133. Organizational and Managerial Issues in Healthcare Delivery. (3-0) 3 Credit Hours.

Prerequisite: MGT 5003, an equivalent, or consent of instructor. An analysis of the organizational and managerial implications of clinical issues in the delivery of healthcare. Students have the opportunity to examine quality of care issues and concerns related to patient care that affect how healthcare organizations are managed. (Same as MGT 6133. Credit cannot be earned for both MGT 6133 and BOH 6133.) This course has Differential Tuition.

BOH 6763. Legal and Tax Strategies for Healthcare Organizations. (3-0) 3 Credit Hours.

Prerequisite: ACC 5003, an equivalent, or consent of instructor. Overview of taxation and related legal issues affecting the healthcare industry. Topics include tax-exempt organizations, community benefit standards, choice of organizational form, and tax planning strategies for healthcare organizations and professionals. (Same as ACC 6763. Credit cannot be earned for both ACC 6763 and BOH 6763.) This course has Differential Tuition.

BOH 6773. Seminar in Medicare Regulation. (3-0) 3 Credit Hours.

Prerequisite: ACC 5003, an equivalent, or consent of instructor. Seminar in Medicare covered services, payment systems and compliance for healthcare providers. Emphasis is on understanding the role of Medicare in the American healthcare system, and developing the technical skills to identify and research problems in Medicare payments. Topics include Medicare administration and covered services, Part A hospital insurance benefits, Part B supplementary medical insurance benefits, Part C Medicare Advantage benefits, Part D prescription drug benefits, exclusions from coverage, provider payment rules, fraud & abuse, recovery audits, physician self-referral, anti-dumping rules, claims & appeals, and managed care plans. Includes practical experience using online research software, a comprehensive Medicare hospital cost report, and professional cost reporting software. (Same as ACC 6773. Credit cannot be earned for both ACC 6773 and BOH 6773.) This course has Differential Tuition.

BOH 6783. Accounting for Healthcare Organizations. (3-0) 3 Credit Hours.

Prerequisite: ACC 5003, an equivalent, or consent of instructor. A seminar on financial and managerial accounting in for-profit and nonprofit healthcare organizations. Accounting issues related to strategic decision-making in health service production, financing, and investment will be emphasized throughout the course. Topics include the healthcare accounting and financial environment, revenue and expense recognition, balance sheet valuations, ratio analysis, cost accounting, performance measurement, variance analysis, physician compensation and practice valuation, tax-exemption issues, mergers, and disclosure requirements. Special attention is given to the financial implications of third-party payment systems and accounting analyses for physician practices. Includes practical experience using actual healthcare case materials. (Same as ACC 6783. Credit cannot be earned for both ACC 6783 and BOH 6783.) This course has Differential Tuition.

Data Analytics (DA) Courses**DA 6213. Data-Driven Decision Making and Design. (3-0) 3 Credit Hours.**

This course introduces students to the process of making organizational decisions using data-driven techniques. Specifically, this course emphasizes question formulation, hypothesis development, data analysis, model building, and model testing using business case studies. The first component of this course focusses on data-driven decision making using linear and logistic regression analysis. The second component of this course focusses on time series analysis using regression, Exponential Smoothing, ARIMA, ARIMAX, and Unobserved Component modeling-based approaches. The third component of this course focusses on survival analysis using non-parametric, semi-parametric, and parametric methods. Appropriate statistical software will be used throughout this course to demonstrate various methods. This course has Differential Tuition.

DA 6223. Data Analytics Tools and Techniques. (3-0) 3 Credit Hours.

This course offers an introduction to big data analytics using the SAS Enterprise Guide and SQL procedure, essential tools for today's analytical industry. Students will be provided with the opportunity to gain education and experience in managing real-world, complex datasets, addressing challenges such as missing values and data errors. The curriculum covers data importation from various sources, effective data merging, table restructuring, data recoding, conditional processing, summary statistics, and data visualization. Designed for those new to data analytics, this course emphasizes practical skills over programming formalisms, preparing students for applied data analysis tasks. This course has Differential Tuition.

DA 6233. Data Analytics Visualization and Communication. (3-0) 3 Credit Hours.

Since the purpose data analytics is to inform and facilitate better data-driven decisions, and transform data to information and knowledge, the ability to effectively communicate data aggregations, summarizations, and analytic findings to decision makers is very important. The ability to communicate highly complex analyses and scientific findings to a non-technical audience is challenging. This course will educate students on common mistakes and success factors in technical communication, and give them experience communicating findings orally and in writing. The course will also focus heavily on data analytics visualization approaches and tools. Students will be provided the opportunity to learn common methods for data visualization for a wide variety of data types and data analytics applications. This course has Differential Tuition.

DA 6813. Data Analytics Applications. (3-0) 3 Credit Hours.

Students will be presented a big picture understanding of data analytics, including its purpose, common benefits and challenges, important analytic processes, and what is needed to perform data analytics, such as skills, tools, technology, etc. Students will be introduced to a wide variety of data analytics applications in a wide variety of fields, which may include some of the topics from fields such as information technology, cybersecurity, bioinformatics, biomedical/health, insurance and risk, finance, economics, accounting, business intelligence, crime and fraud detection, marketing and customer analytics, energy and environment, manufacturing and operations, and logistics and supply chain. This course has Differential Tuition.

DA 6821. Data Analytics Practicum I. (1-0) 1 Credit Hour.

This course presents students with practical knowledge, skills, and experience needed to conduct real-world, high-quality data analytics in an application area of interest. Students will meet formally with their peers and the instructor for the purpose of facilitating the practicum experience. In the first 1 credit semester of this course students will learn how to identify the proper statistical technique to apply to a problem, complete a set of modules that review basic statistical fundamentals and have the opportunity to gain a first experience at data analysis using small time series data sets. During the second 2 credit semester of the practicum, students will engage in a project that incorporates the following steps of the data analytics process: problem defining, question formulation, hypothesis development, preliminary analytics, analytical design, data acquisition, data preparation and pre-processing, and initial data analysis as well as develop some fundamental coding skills using a large, real world data set. In addition, they will acquire training in analytical and statistical techniques including introduction to social network analysis as well as an introduction to a number of other statistical methods designed to encourage the student to explore and learn more advanced techniques. May be repeated for credit. This course has Differential Tuition.

DA 6822. Data Analytics Practicum I. (2-0) 2 Credit Hours.

This course presents students with practical knowledge, skills, and experience needed to conduct real-world, high-quality data analytics in an application area of interest. Students will meet formally with their peers and the instructor for the purpose of facilitating the practicum experience. In the first 1 credit semester of this course students will learn how to identify the proper statistical technique to apply to a problem, complete a set of modules that review basic statistical fundamentals and have the opportunity to gain a first experience at data analysis using small time series data sets. During the second 2 credit semester of the practicum, students will engage in a project that incorporates the following steps of the data analytics process: problem defining, question formulation, hypothesis development, preliminary analytics, analytical design, data acquisition, data preparation and pre-processing, and initial data analysis as well as develop some fundamental coding skills using a large, real world data set. In addition, they will acquire training in analytical and statistical techniques including introduction to social network analysis as well as an introduction to a number of other statistical methods designed to encourage the student to explore and learn more advanced techniques. This course has Differential Tuition.

DA 6833. Data Analytics Practicum. (3-0) 3 Credit Hours.

Students will work on a major data analytics project, focusing on the analysis and presentation of results portion of the process. The next steps will be detailed data analysis, conclusion drawing, report preparation and refinement, presentation preparation and final presentation. The practicum will culminate in a formal, completed report to the supporting organization, as well as to data analytics peers and professors. Students who earn a grade of "B" (3.0) or better in this course will satisfy the comprehensive examination requirement. A student who receives a grade of "B-," "C+," or "C" may still satisfy this requirement by successfully passing a comprehensive examination as set out in this catalog. This course has Differential Tuition.

General Business Administration (GBA) Courses

GBA 6013. Graduate Academic Research and Programming. (3-0) 3 Credit Hours.

Prerequisite: Consent of instructor. The course introduces academic research in business, economics and related areas through a series of readings and exercises delivered in seminar format. The first part of the course introduces the scientific method, defines and distinguishes elements, such as theories, propositions, and hypotheses, and equips students with concepts and tools to identify original research questions. The second part of the course is empirical in nature and equips students with basic skills in sample selection/construction methods, multi-source data processing, merging and cleaning, and statistical analyses to answer research questions. More generally, the course explores the nature of doctoral and graduate programs and careers in business academia. This course has Differential Tuition.

GBA 6023. Research Conceptualization, Development, and Practice. (3-0) 3 Credit Hours.

Prerequisite: GBA 6013 (MS 3043, or MS 5003, or MBA 5413 or equivalent), and consent of instructor. This is the first in a two-part sequence of courses focusing on the practice and execution of academic research in business, economics, and related areas, including identifying and articulating original research questions, developing hypotheses (using theory or existing academic research), generating samples and datasets, and utilizing statistical tools to test research questions. This course emphasizes the writing and documentation of code, writing and presentation of research findings. This course has Differential Tuition.

GBA 6033. Research Implementation, Reporting and Engagement. (3-0) 3 Credit Hours.

Prerequisite: GBA 6023 and consent of instructor. This is the second course in a two-part sequence of courses focusing on the practice and execution of academic research in business and economics, and related areas. This course continues to emphasize the empirical aspects of academic research and progresses to developing a manuscript (based on the student's research area and interest) containing all of its basic elements (i.e., introduction, background, hypotheses development, research design, results, conclusion, and references). The course further emphasizes the importance of writing and presentation of ideas and research findings for publication in academic journals. Topics related to the selection of research outlets are incorporated. This course has Differential Tuition.

GBA 6302. Professional Development and Communication. (2-0) 2 Credit Hours.

Prerequisite: Consent of instructor. This course is designed to enhance the student's ability in and experience with building networking skills, verbal and written communication skills, business etiquette, and learning how to increase their professional human capital. Students will learn how to build a personal career portfolio (an approved resume, a LinkedIn profile, etc.), how to market themselves, how to prepare for internship and job placement interviews, how to utilize professional networking, and how to work effectively and professionally in collaborative settings. The goal is to make students more marketable and valuable professionals to the global economy. Written assignments and attendance at course-related seminars are required. This course has Differential Tuition.

GBA 6883. Global Business Immersion. (0-0) 3 Credit Hours.

Prerequisite: 6 College of Business semester credit hours and official admission into the Business Immersion Program. An advanced field-trip course designed to provide intensive exposure to the business practices of the locations visited. The pre-departure activities enhance prior knowledge of the local business climate and culture. The in-country activities include visits to local companies and workshops hosted by local professors. The post-immersion components engage students in reflection opportunities and applied project experiences. This course relies heavily on experiential components. Attendance to all official course events is required. This course may be repeated for credit. This course has Differential Tuition.

GBA 6933. Business Foundations and Analytics. (3-0) 3 Credit Hours.

This course is designed to provide students with a conceptual foundation for business analysis and decision-making. Topics will include an overview of business organizations, industry structure, the time value of money, and an introduction to managerial decision analysis using quantitative and statistical tools. This course has Differential Tuition.

GBA 6941. Graduate Internship. (0-0) 1 Credit Hour.

Prerequisite: Graduate standing, 15 semester credit hours of graduate work, and consent of instructor. Internship must be approved in advance by the Internship Coordinator and the student's Graduate Advisor of Record. Supervised full- or part-time, off-campus work experience and training in business operations and/or management. Individual conferences and written reports required. This course has Differential Tuition.

GBA 6972. Special Topics in General Business Administration. (2-0) 2 Credit Hours.

Prerequisite: Consent of instructor. An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Topics courses may be repeated for credit when topics vary, but no more than 6 hours, regardless of discipline, will apply to the degree. This course has Differential Tuition.

GBA 6973. Special Topics in General Business Administration. (3-0) 3 Credit Hours.

Prerequisite: Consent of instructor. An organized course offering the opportunity for specialized study not normally or not often available as part of the regular course offerings. Special Topics courses may be repeated for credit when topics vary, but no more than 6 hours, regardless of discipline, will apply to the degree. This course has Differential Tuition.

GBA 7013. Research Methods I. (3-0) 3 Credit Hours.

Prerequisite: Consent of instructor. An introduction to the research process. The course examines the scientific method, issues in the philosophy of science, ethical issues in research, and an introduction to basic experimental and quasi-experimental design principles and threats to validity. The course also examines the elements of scientific paper writing. This course has Differential Tuition.

GBA 7023. Research Methods II. (3-0) 3 Credit Hours.

Prerequisite: Consent of instructor. A survey of contemporary research design and data collection methods, including archival data, surveys, interviews, and qualitative research methods. This course has Differential Tuition.

GBA 7103. Doctoral Teaching Seminar. (3-0) 3 Credit Hours.

A critical examination of teaching philosophies and pedagogical styles. Topics include course construction, content selection, and student learning. This course has Differential Tuition.

Master of Business Administration (MBA) Courses

MBA 5113. Business Foundations. (3-0) 3 Credit Hours.

A first semester MBA degree course designed to provide students with a conceptual foundation for business analysis and decision-making. Topics will include overview of business organizations, industry analysis, and time value of money. This course has Differential Tuition.

MBA 5133. Financial Accounting Concepts. (3-0) 3 Credit Hours.

An intensive study of accounting as a tool to communicate financial information for planning, analyzing, and controlling business enterprises directed toward decision-making. (Same as ACC 5003. Credit cannot be earned for both ACC 5003 and MBA 5133.) This course has Differential Tuition.

MBA 5213. Management and Behavior in Organizations. (3-0) 3 Credit Hours.

Prerequisite: Completion of or concurrent enrollment in MBA 5113 and MBA 5133. The course focuses on factors affecting individual and group behavior in organizations. It includes organizational behavior topics such as motivation, perception, job attitudes, job design, leadership, and individual differences. It also includes organizational theory topics such as organizational structure, design, culture, and environmental influences. (Same as MGT 5043. Credit cannot be earned for both MBA 5213 and MGT 5043.) This course has Differential Tuition.

MBA 5233. Accounting Analysis for Decision Making. (3-0) 3 Credit Hours.

Prerequisite: MBA 5113 and MBA 5133. The study of accounting and its uses by management in the decision-making process. (Same as ACC 5023. Credit cannot be earned for both ACC 5023 and MBA 5233.) This course has Differential Tuition.

MBA 5313. Marketing Management. (3-0) 3 Credit Hours.

Prerequisite: Completion of or concurrent enrollment in MBA 5113 and MBA 5133. An analysis of marketing management processes within organizations. Focus is on the use of strategic planning and market analysis to design marketing programs in competitive environments. (Same as MKT 5023. Credit cannot be earned for both MBA 5313 and MKT 5023.) This course has Differential Tuition.

MBA 5333. Financial Management. (3-0) 3 Credit Hours.

Prerequisite: MBA 5113 and MBA 5133. The study of concepts related to the financial management of the firm. Topics include asset and liability management, capital investment analysis and valuation, risk and uncertainty, sources and costs of financial alternatives, corporate financial policy, and other corporate financial management topics. (Same as FIN 5023. Credit cannot be earned for both FIN 5023 and MBA 5333.) This course has Differential Tuition.

MBA 5413. Management Science with Data Analytics. (3-0) 3 Credit Hours.

Prerequisite: MBA 5113 and MBA 5133. This course provides students with knowledge and applications of quantitative methods and data analytics tools commonly used in the fields of management science and operations management. The focus is to demonstrate how to analyze raw data and solve managerial and technical problems encountered in various functional areas in business. The topics covered under the "data analytics" portion of the course include descriptive analytics, measures of location/shape/variability, normal probability distributions, sampling distributions, confidence interval estimation, hypothesis testing, and simple/multiple linear regression. The topics covered under the "management science" portion of the course include time series analysis and forecasting, and various optimization tools such as linear and integer linear programming, and distribution and network models. Computer software and spreadsheet models are adopted in the instructions. This course has Differential Tuition.

MBA 5513. Managerial Economics. (3-0) 3 Credit Hours.

Prerequisite: MBA 5113 and MBA 5133. Application of price theory to economic decisions of the firm. An applications-oriented approach emphasizing demand, production, and profit maximizing conditions, and their implications for output and pricing strategies under various market structures and types of organization. (Same as ECO 5023. Credit cannot be earned for both ECO 5023 and MBA 5513.) This course has Differential Tuition.

MBA 5613. Strategic Management and Policy. (3-0) 3 Credit Hours.

Prerequisite: Completion of all other MBA Core courses or approval of instructor, Department Chair, and Associate Dean of the Office of Graduate Studies. A course intended to integrate material taken in the M.B.A. program, as well as to broaden the horizons of the student beyond the focus on the firm. The macroeconomic aspects of the economy and contemporary problems and trends of business are covered. Students who earn a grade of "B" (3.0) or better in this course will satisfy the comprehensive examination requirement. A student who receives a grade of "B-," "C+," or "C" may still satisfy this requirement by successfully passing a comprehensive examination as set out in this catalog. (Same as MGT 5903. Credit cannot be earned for both MBA 5613 and MGT 5903.) This course has Differential Tuition.

MBA 6953. Independent Study. (0-0) 3 Credit Hours.

Prerequisite: Graduate standing and permission in writing (form available) from the instructor and the student's Graduate Advisor of Record. Independent reading, research, discussion, and/or writing under the direction of a faculty member. For students needing specialized work not normally or not often available as part of the regular course offerings. May be repeated for credit, but not more than 6 hours, regardless of discipline, will apply to the degree. This course has Differential Tuition.

MBA 6986. Master's Thesis. (0-0) 6 Credit Hours.

Prerequisite: Permission of the Graduate Advisor of Record. Thesis research and preparation. Credit will be awarded upon completion of the thesis. Enrollment is required each term in which the thesis is in progress. This course has Differential Tuition.