Strategic Analytics

The Master of Science in Strategic Analytics is a comprehensive program that prepares students for management and executive careers linking technology and management in today's data-heavy analytical world. Data scientists are very good at big data, database, and data analytics, but often lack business training or experience. Managers excel at business operations but have little if any experience with artificial intelligence and machine learning technologies. Graduates with an M.S. in Strategic Analytics will have a good working knowledge of database, data science, analytics, data visualization, and artificial intelligence as well as a good foundation in business functions. This program applies leading-edge analytics techniques and artificial intelligence to identify and solve today's and tomorrow's complex business problems.

Admission Requirements

Applicants to the program should complete or submit the following:

1. SIU Graduate School application form
2. A Bachelor's degree, with a GPA of 2.7 or better on a 4.0 scale over the last two years of study
3. 3.0 or better GPA over all previous graduate coursework, if applicable
4. Resume, including contact information for three professional references
5. GRE or GMAT examination score(s). The GMAT score must be greater than 499 (or GRE equivalent). This requirement is waived for applicants with 5+ years of professional work experience.
6. An open-ended personal statement. This is required for those who do not qualify for the GMAT (GRE) waiver and/or those who do not satisfy the Graduate School's GPA requirements. This personal statement is optional for all other applicants.
7. International applicants whose native language is not English must take the Test of English as a Foreign Language (TOEFL) or another equivalent test, as required by the Graduate School.

Master of Science (M.S.) in Strategic Analytics

Degree Requirements

The following timetables show typical schedules, depending on whether a student enters the fall, spring, or summer semester. When two courses are listed on a line, the first occurs in the first eight weeks of a semester (Term A) and the second course listed occurs in the final eight weeks of a semester (Term B).

Fall Entry

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Core Business Courses (15 Credit Hours)

- BA 510: Managerial Accounting and Control Concepts (3 CH)
- BA 530: Financial Management (3 CH)
- BA 540: Managerial and Organizational Behavior (3 CH)
- BA 550: Marketing Management (3 CH)
- BA 561: Database Design and Applications (3 CH)

Core Analytics Courses (18 Credit Hours)

- BA 523: Strategic Data Mining (3 CH)
- BA 524: Foundations of Analytics for Managers (3 CH)
- BA 525: Data Science and Analytics for Managers (3 CH)
- BA 526: Advanced Analytics and Artificial Intelligence for Managers (3 CH)
- BA 527: Advanced Analytics and Visualization for Managers (3 CH)
- BA 528: Analytics Capstone (3 CH)

One Discipline-Specific Course in Analytics (3 Credit Hours)

- BA 529A: Accounting Analytics (3 CH)
• BA 529B: Financial Analytics (3 CH)
• BA 529C: Marketing Analytics (3 CH)
• BA 529D: Management Analytics (3 CH)

For more information, contact:

Online Graduate Programs
Master of Science in Strategic Analytics
College of Business
Southern Illinois University
Mail Code 4619
Carbondale, IL 62901
Telephone: 618-453-3023

Strategic Analytics Courses


BA430 - Business Finance 430-3 Business Finance. An introductory course combining both a description of the structure of business financing and an analysis of functional finance from a managerial viewpoint. Prerequisites: Business Analytics I and ACCT 220, or equivalents. Restricted to enrollment in M.B.A. program or consent of department.

BA450 - Intro Marketing Concepts 450-3 Introduction to Marketing Concepts. An overview of the role of marketing within an economic system and of the major marketing activities and decisions within an organization. Emphasis is on developing an understanding of the marketing process. Restricted to enrollment in M.B.A. program or consent of department.

BA470 - Legal & Social Environment 470-3 Legal and Social Environment. An overview of the legal, social, and ethical dimensions which influence business with particular attention to the role of law as a control factor of society in the business world. Restricted to enrollment in M.B.A. program or consent of department.

BA503 - Management of Change 503-3 Management of Change. The methods and processes of planned change are examined. Special emphasis is placed on the design and implementation of continuous improvement systems and related issues of managing constant change. Change models are viewed in the context of international competitiveness and a dynamic global environment. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA505 - Brand Management 505-3 Brand Management. This course will focus on important issues facing brand managers who are managing existing brands. The focus will be at the level of the brand and the discussions will pertain to issues involved in the development and implementation of brand strategies. The course will provide students with a conceptual framework to examine brand equity and use it as the basis for managing categories of brands, brand extensions, and dealing with the threats of generic brands. There will be an emphasis on bringing together the different elements of a brand strategy. Prerequisite: BA 550. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA506 - Fundamentals of Business 506-2 Fundamentals of Business & Communication for M.B.A. Professionals. This course will prepare M.B.A. Professionals for the demands of the program. The course is divided into four parts to provide students the necessary foundational skills and knowledge. (1) Introduces students to the program and helps them re-familiarize with academic communication styles. (2) Introduces students to data analytics, and satisfies the Business Analytics I foundation requirement. (3) Covers the fundamental accounting and finance topics, and satisfies the Accounting/Finance/Economics foundation requirement. (4) Introduces students to topics in their preselected concentration.
and satisfies the particular workshop required for that concentration. Restricted to enrollment in an Online MBA program or consent of department.

**BA507 - Critical Issues Business** 507-2 Critical Issues for Business Leaders. This course is designed to provide masters students with a forum to further explore topics on critical issues for business leaders. The two major themes for the course are to enhance the ability to think clearly and decisively, and to build leadership and team performance. The process shall involve reading provocative articles and engaging in experiential exercises the culmination of which provides for a practical portfolio. Restricted to enrollment in an Online MBA program or consent of department.

**BA508 - Career Effectiveness** 508-2 Seminar on Career Effectiveness. This course is designed to provide masters students with a forum to further explore topics on career effectiveness. This course primarily emphasizes self-development and the attainment of tools to advance a student's professional career. The two major themes for the course are to maximize personal job performance/career success, and to engage in effective interaction with others. The process shall involve reading provocative articles and engaging in experiential exercises, the culmination of which provides for a practical knowledge of select issues related to personal brand management. Restricted to enrollment in an Online MBA program or consent of department.

**BA509 - Leadership Development** 509-2 Advanced Seminar in Leadership Development. This course focuses on leadership processes. In particular, this course will emphasize self-development and the skills necessary to lead. This course will also build upon the conceptual foundations provided from leadership topics covered in previous courses, structuring opportunities for finding practical application of theoretical concepts. Restricted to enrollment in an Online MBA program or consent of department.

**BA510 - Managerial Acct & Control** 510-3 Managerial Accounting and Control Concepts. Basic cost concepts, measures, methods and systems of internal accounting useful for managerial planning, implementation, control and performance evaluation. Includes cost analysis relevant for non-routine decision-making. Prerequisites: Accounting, Finance, and Economics Foundation Area, or ACCT 220, or equivalent. Not available to students who were undergraduate accounting majors. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

**BA511 - Entrepreneurship Th & Prac** 511-2 Entrepreneurship Theory & Practice. This course is designed to provide master's students with an introduction to entrepreneurship, its theory, and practical applications. During this course, students will be exposed to a number of activities related to starting and operating a business. The goal of this course is to provide students with the basic tools for business creation. The culmination of the course will be the completion of a business plan. Restricted to enrollment in an Online MBA program or consent of department.

**BA512 - Supply Chain Cost Accounting** 512-3 Supply Chain Cost Accounting. Basic cost concepts, measures, methods, and systems of cost accounting useful for the planning, implementation, control, and performance of supply chains. Includes cost analysis relevant for non-routine decision making. Restricted to enrollment in MS Supply Chain Management and Engineering.

**BA513 - Acct Concepts Bus Organz** 513-3 Accounting Concepts in Business Organizations. Accounting theory and practice as it applies to business and other organizations. Emphasis is on current problem areas in accounting and on research methods being used to resolve these problems. Restricted to Doctoral student in Business Administration or consent of department. Enrollment in College of Business and Analytics graduate program or consent of department.

**BA514 - Ethics of Business** 514-3 Ethics of Business. (Same as ACCT 514) Philosophical implications of contemporary issues in business ethics. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

**BA522 - Ops & Supply Chain Mgmt** 522-3 Operations and Supply Chain Management. The study of the development of competitive strategy for the operations and supply chain function, frameworks and tools used to implement operations and supply chain strategy, and how the operations and supply chain function contributes to an organization's competitive capabilities in the global marketplace. Prerequisite: Business Analytics I Foundation Area or equivalent. Restricted to enrollment in the College of Business and Analytics graduate program or consent of department.
BA523 - Strategic Data Mining 523-3 Strategic Data Mining. Concepts and techniques for strategic knowledge discovery in structured and unstructured data from pre-processing and transformation to model validation and post-processing. Real-world examples and cases to put data mining in context and to illustrate how the application of data mining can lead to better strategic data-based decision making. Restricted to enrollment in College of Business and Analytics graduate program or consent of the department.

BA524 - Analytics for Managers 524-3 Foundations of Analytics for Managers. This course provides an introduction of data science and analytics from a real-world perspective through interviews with technical staff, managers, and executives. In addition, the course teaches the statistical foundations needed for data science and analytics. Restricted to enrollment in College of Business and Analytics graduate program or consent of the department.

BA525 - Data Science for Managers 525-3 Data Science and Analytics for Managers. Provides a broad overview of basic concepts, principles, and recent innovations in Data Science. Data Science is the study of the extraction of knowledge from data. Data Science includes good domain knowledge, data modeling, database, statistics, and AI to produce effective solutions, predictions, and insights. This course will give a practical introduction to business analytics using databases, data warehouses, structured, and unstructured data from a cross-section of industries. Restricted to enrollment in College of Business and Analytics graduate program or consent of the department.

BA526 - Analytics & AI for Managers 526-3 Advanced Analytics and Artificial Intelligence for Managers. The goal of Artificial Intelligence (AI) is to have a machine that can perform the cognitive functions of the human mind such as learning and thinking. This course is an introduction to artificial intelligence and how it can be combined with data analytics to create a powerful tool for better decision making. Prerequisite: BA 525 or equivalent. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA527 - Analytics Visualization 527-3 Advanced Analytics and Visualization for Managers. This course will introduce students to the field of data visualization. Data visualization is the science of stripping data down to its most important structures and then using the best techniques to take advantage of human perception for effective communication, decision making, and persuasion. Students will learn how to present data in the most efficient, effective, and aesthetic for decision making. Prerequisite: BA 525 or equivalent. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA528 - M.B.A. Analytics Capstone 528-3 M.B.A. Analytics Capstone. This is the capstone course in data analytics. Students will apply techniques learned in analytics, data science, artificial intelligence, and visualization in a variety of real world scenarios. Emphasis is on creative, abstract, and integrative thinking in executing a program in data analytics and managing the data analytics function. Prerequisite: BA 525, BA 526, and BA 527 or equivalent. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA529A - Accounting Analytics 529A-3 Accounting Analytics. Use of analytics and accounting concepts and techniques. How structured and unstructured accounting data are obtained, validated, processes, and used in making descriptive and predictive models. The use of accounting analytics for better data-based accounting decision making. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA529B - Financial Analytics 529B-3 Financial Analytics. Use of analytics and finance concepts and techniques. How structured and unstructured financial data are obtained, validated, processed, and used in making descriptive and predictive models. The use of financial analytics for better data-based financial decision making. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA529C - Marketing Analytics 529C-3 Marketing Analytics. Use of analytics and marketing concepts and techniques. How structured and unstructured marketing data are obtained, validated, processed, and used in making descriptive and predictive models. The use of marketing analytics for better data-based marketing decision making. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.
BA529D - Management Analytics 529D-3 Management Analytics. Use of analytics and management concepts and techniques. How structured and unstructured management data are obtained, validated, processes, and used in making descriptive and predictive models. The use of management analytics for better data-based managerial decision making. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA530 - Financial Management 530-3 Financial Management. Provide a broad overview of basic concepts, principles, and recent innovations in financial management. Topics covered will include risk and return, valuation, capital budgeting, capital structure and cost of capital, dividend policy, financial planning, international financial management and corporate restructuring. Prerequisite: Accounting, Finance, and Economics Foundation Area or equivalent. Not available for students who have credit for FIN 361 or were undergraduate finance majors. Restricted to enrollment in College of Business and Analytics graduate program or consent of the department.

BA531 - Advanced Financial Management 531-3 Advanced Financial Management. An evaluation of selected financial policies connected with the acquisition and disposition of funds by the firm. An emphasis is placed on quantitative solutions to these problems. Prerequisite: BA 530, or FIN 361, or SIU undergraduate Finance major. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA532 - Financial Insts & Market 532-3 Financial Institutions and Markets. The principal financial institutions and markets will be studied in relation to their contribution to the efficient operation of the individual enterprise and the total company. Prerequisite: BA 530, or FIN 361, with a C or better or equivalent. Not available to students with credit for FIN 449 or equivalent. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA533 - Investments Concepts 533-3 Investment Concepts. A study of fixed return and variable return securities, investment services, industry and issue analysis, empirical studies of groups and individual stock price movements. Prerequisite: BA 530, or FIN 361, with a C or better, or equivalent. Not available for students with credit for FIN 433 or equivalent. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA536 - Security Valuation 536-3 Financial Analysis and Security Valuation. (Same as FIN 469) Study of financial problems facing corporations, their causes and solutions. Emphasis given to the impact of these financial problems on how the market values securities. Topics include liquidity and leverage analysis, analysis of profitability, and other financial analysis tools. Not available for students with credit for FIN 469. Prerequisite: BA 530 or BA 531. Restricted to enrollment in M.B.A. program or consent of department.

BA537 - Intel Property & Commercial 537-3 Intellectual Property and Commercialization. (Same as ENGR 522, LAW 633) Course teaches substance & practice of commercializing products of scientific & technical research. Provides a basic understanding of intellectual property laws in commercialization context & how those laws are applied in various fields of technology. Will learn how to value intangible assets, taking into account their commercial potential & legal status. Course will consider the legal & business issues surrounding marketing of products of research. Will prepare & negotiate license agreements. Will analyze legal & business issues surrounding whether & how to enforce intellectual property rights. Content & methods of course delivery & evaluation has been approved for provision by distance education.

BA539A - Corporate Fin Seminar I 539A-3 Doctoral Seminar in Theoretical and Empirical Corporate Finance-I. A series of doctoral seminars on theoretical and empirical issues in finance. Sections (A) through (D) may be taken only once. BA 539A covers a subset of topics on Theoretical and Empirical Corporate Finance, including methodology used in corporate finance research. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA539B - Corporate Fin Seminar II 539B-3 Doctoral Seminar in Theoretical and Empirical Corporate Finance-II. A series of doctoral seminars on theoretical and empirical issues in finance. Sections (A) through (D) may be taken only once. BA 539B covers the remaining set of topics on Theoretical and Empirical Corporate Finance, including methodology used in corporate finance research. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.
BA539C - Investment Seminar I 539C-3 Doctoral Seminar in Theoretical and Empirical Asset Pricing and Investment-I. A series of doctoral seminars on theoretical and empirical issues in finance. Sections (A) through (D) may be taken only once. BA 539C covers a subset of topics on Theoretical and Empirical Asset Pricing and Investment, including methodology used in asset pricing and investment research. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA539D - Investment Seminar II 539D-3 Doctoral Seminar in Theoretical and Empirical Asset Pricing and Investment II. A series of doctoral seminars on theoretical and empirical issues in finance. Sections (A) through (D) may be taken only once. BA 539D covers the remaining set of topics on Theoretical and Empirical Asset Pricing and Investment, including methodology used in asset pricing and investment research. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA540 - Managrl/Orgnzl Behavior 540-3 Managerial and Organizational Behavior. Case analyses of human problems in the business organization. Application of findings of behavioral science research to organization problems. Development of direction and leadership skills. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA541 - Analytic Methods 541-3 Analytic Methods for Supply Chain Management. An introduction to mathematical model building in supply chains and the solution techniques commonly used to solve such models. In addition, this course includes statistical methods for decision making. Topical coverage includes decision theory, hypothesis testing, regression, spreadsheet modeling, mathematical programming, queuing models, and simulation. Restricted to enrollment in MS Supply Chain Management and Engineering.

BA543 - Personnel Management 543-3 Personnel Management. An overview of the field of personnel administration, based on a review of the relevant literature and on practice in simulations of problems typically encountered in the field. Prerequisite: BA 440 or equivalent. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA544 - Planning and Inventory 544-3 Advanced Production Planning and Inventory Management. An in-depth study of analytical models and techniques for production planning, scheduling, and inventory management. Restricted to enrollment in MS Supply Chain Management and Engineering.

BA545A - Sem:Found Orgnzatn Study 545A-3 to 21 (3,3,3,3,3,3,3) Seminar in Organization Studies. A series of advanced seminars in organization studies. Sections (A)-(G) can be taken only once. Foundations in Organization Studies. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA545B - Sem:Adv in Orgztnl Behavior 545B-3 to 21 (3,3,3,3,3,3,3) Seminar in Organization Studies. A series of advanced seminars in organization studies. Sections (A)-(G) can be taken only once. Advances in Organizational Behavior. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA545C - Sem:Advn Orgnzatn Theory 545C-3 to 21 (3,3,3,3,3,3,3) Seminar in Organization Studies. A series of advanced seminars in organization studies. Sections (A)-(G) can be taken only once. Advances in Organization Theory. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA545D - Sem: Advn Strategic Mgmt 545D-3 to 21 (3,3,3,3,3,3,3) Seminar in Organization Studies. A series of advanced seminars in organization studies. Sections (A)-(G) can be taken only once. Advances in Strategic Management. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA545E - Sem:Spcl Topics Orgnzn Behvr 545E-3 to 21 (3,3,3,3,3,3,3) Seminar in Organization Studies. A series of advanced seminars in organization studies. Sections (A)-(G) can be taken only once. Special Topics in Organizational Behavior. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.
BA545F - Sem: Specl Topics Orgnz Theory 545F-3 to 21 (3,3,3,3,3,3) Seminar in Organization Studies. A series of advanced seminars in organization studies. Sections (A)-(G) can be taken only once. Special Topics in Organization Theory. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA545G - Sem: Spcl Topics Strategc Mgmt 545G-3 to 21 (3,3,3,3,3,3) Seminar in Organization Studies. A series of advanced seminars in organization studies. Sections (A)-(G) can be taken only once. Special Topics in Strategic Management. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA546 - Leadership & Managerial Behav 546-3 Leadership and Managerial Behavior. This course will concentrate on leader and manager behavior at middle and upper organizational levels. Emphasis will be placed on leader and manager effectiveness and the factors that impact effectiveness. Prerequisite: BA 540 or equivalent. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA547A - Sem: Fndtns Prod/Operations Mgt 547A-3 to 15 (3,3,3,3 to 6) Seminar in Production/Operations Management-Foundations in Production/Operations Management. Series of advanced seminars in Production/Operations Management. Sections (A) through (C) may be taken only once. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA547B - Sem Prod/Operations Mgmt 547B-3 to 15 (3,3,3,3 to 6) Seminar in Production/Operations Management. Series of advanced seminars in Production/Operations Management. Sections (A) through (C) may be taken only once. Service Operations Management. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA547C - Sem: Prod/Operations Mgmt 547C-3 to 15 (3,3,3,3 to 6) Seminar in Production/Operations Management. Series of advanced seminars in Production/Operations Management. Sections (A) through (C) may be taken only once. Production/Operations Management and Information Systems. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA547D - Sem:Prod/Operations Mgmt 547D-3 to 15 (3,3,3,3 to 6) Seminar in Production/Operations Management. Series of advanced seminars in Production/Operations Management. Special Topics in Production/Operations Management. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA548A - Seminar in Mgmt Info Sys 548A-3 to 18 (3,3,3,3,3 to 6) Seminar in Management Information Systems. A series of advanced seminars on Management Information Systems (MIS). Sections (A) through (D) may be taken only once. Advances in Management Information Systems. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA548B - Seminar in Mgmt Info Sys 548B-3 to 18 (3,3,3,3 to 6) Seminar in Management Information Systems. A series of advanced seminars on Management Information Systems (MIS). Sections (A) through (D) may be taken only once. Decision Support and Information Systems. Prerequisite: (A). Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA548C - Seminar in Mgmt Info Sys 548C-3 to 18 (3,3,3,3 to 6) Seminar in Management Information Systems. A series of advanced seminars on Management Information Systems (MIS). Sections (A) through (D) may be taken only once. Section (E) may be repeated as topics vary. Quantitative and Computer Methods for Decision Support and Information Systems. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA548D - Seminar in Mgmt Info Sys 548D-3 to 18 (3,3,3,3 to 6) Seminar in Management Information Systems. A series of advanced seminars on Management Information Systems (MIS). Sections (A) through (D) may be taken only once. Section (E) may be repeated as topics vary. Strategic Management of Information. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.
BA548E - Project Management 548E-3 Project Management. Organizations have become increasingly complex and their success is generally dependent on how well individuals can function as a group. It is important that you understand the activities that are necessary to participate in or manage a successful project; these topics include project selection, project scheduling, project budgeting, project monitoring and controlling a project, and closing a project. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA550 - Marketing Management 550-3 Marketing Management. A managerial approach to the study of marketing. Emphasis is on the nature and scope of the marketing manager's responsibilities and on marketing decision-making. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA551 - Product Strategy & Mgt 551-3 Product Strategy and Management. Designed to treat product management and its relationships with business policies and procedures; the development of multiproduct strategies, means of developing such strategies and the problems and methods of commercialization. Prerequisite: BA 550 or equivalent. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA552 - Research Method for Mktg 552-3 Research Methodology for Marketing. The study of theory, method and procedure for quantitative and qualitative analysis of primary and secondary marketing data. Emphasis is placed on application of specific research tools to the process of formulating and testing research hypotheses. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA553 - Markets and Negotiation 553-3 Supply Markets and Negotiation. This course is designed to address markets and negotiations for managing the purchasing function in supply chains. Restricted to enrollment in MS Supply Chain Management and Engineering.

BA555 - Sem: Consumer Behavior 555-3 Seminar in Consumer Behavior. Emphasis on the theories and research relating behavioral science to the discipline of marketing. Development of sophisticated comprehension of the consumption process is undertaken. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA556 - Seminar in Mkgt Strategy 556-3 Seminar in Marketing Strategy. Long run market opportunities are identified and evaluated. Methods of implementation and execution affecting the relationship of strategic marketing planning to the allocation decisions of top management are emphasized. The orientation is toward theoretical development to provide a base for continuing research in the field. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA557 - Seminar in Mktg Theory 557-3 Seminar in Marketing Theory. The philosophical bases underlying the development of theory in marketing. The process of development of marketing ideations through research is emphasized. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA558 - Promotion Strategy & Mgt 558-3 Promotional Strategy and Management. The study of the elements of the promotional mix including advertising, personal selling, sales promotion and publicity and how they apply in the profit and not-for-profit sectors of the market place. Prerequisite: BA 550 or equivalent. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA560 - Mgmt of Information Systems 560-3 Management of Information Systems. A survey of information system design, analysis and operations. Topics include systems concepts, systems analysis and design, database management, software and hardware concepts, decision support systems, expert systems, distributed processing and telecommunications and information systems planning. Applications of information technology will be emphasized. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA561 - Database Design & Apps 561-3 Database Design and Applications. Database planning, design and implementation; application of data modeling techniques-entity-relationship diagrams, hierarchical, network, relational and object-oriented data modeling; physical design and data administration;
Distributed and Expert Database Systems. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

**BA562 - Information Systems & Design** 562-3 Information Systems and Design. Principles and concepts; strategic systems planning; tools and techniques for analysis and design; construction and quality management; reusability; methodology evaluation; full life cycle CASE tools. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

**BA565 - Managing Information** 565-3 Managing Supply Chain Information. Information system design, analysis and operations. Topics include systems concepts, systems analysis and design, database management, software and hardware concepts, decision support systems, expert systems, distributed processing, and telecommunications and information systems planning. SAP applications in supply chain management will be emphasized. Restricted to enrollment in MS in Supply Chain Management and Engineering.

**BA570A - Prof Development Dimensions** 570A-1 Professional Development Dimensions. To aid the professional development of M.B.A. students by providing a variety of experiences to address attitudes, values and ethical standards. Executive guest speakers, roundtable discussion, simulations and role-playing will be used. To be taken as one hour. Additional charges of approximately $20 may be assessed for field trips. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

**BA570B - Prof Development Dimensions** 570B-1 Professional Development Dimensions. To aid the professional development of M.B.A. students by providing a variety of experiences to address attitudes, values and ethical standards. Executive guest speakers, roundtable discussion, simulations and role-playing will be used. To be taken as one hour. Additional charges of approximately $20 may be assessed for field trips. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

**BA571 - Teach & Research Essentials** 571-1 Teaching and Research Essentials for Doctoral Candidates. This course is designed to prepare doctoral candidates within the College of Business and Analytics for entry level (Assistant Professor) positions. Teaching strategies, classroom management, development of courses as well as research and publication strategies are discussed. Restricted to doctoral status in the College of Business and Analytics. This course must be taken the second semester of the student's course work.

**BA573 - Plan Systems & Strategic Decns** 573-3 Planning Systems and Strategic Decisions. A critical review of theory and research on the structure, content and process of strategic decisions. The design and implementation of planning systems also is emphasized. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

**BA574 - Adv Research Methods Admin** 574-3 Advanced Research Methods in Business Administration. A capstone research course in business that exposes the student to a full range of research experiences. Emphasis is on integrating learning and creative thinking in the execution of the research process. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

**BA574B - Adv Research Methods II** 574B-3 Advanced Research Methods II. This course is a practicum in advanced research methods. It will focus on analysis of data, interpretation of results and synthesis of conclusions based on a clear understanding of the objectives of research, the characteristics of data and techniques for manipulating data. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

**BA575 - Sem Multivariate Stats** 575-3 Seminar in Multivariate Statistics. This seminar in multivariate statistics will give doctoral students in Business a theoretical and practical knowledge of multivariate methods such as cluster analysis, multiple regression, discriminant analysis, canonical analysis, etc., for the purpose of equipping them for dissertation work, and subsequent research for publication in the top academic business journals. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.
BA580 - International Business 580-2 to 3 International Dimensions of Business and Management. International business and activities are examined in the international environment. The course will focus on concepts and issues of international business and will analyze the marketing, financial, accounting, managerial, logistical and production functions of international operations. Emphasis is on integrating, learning and creative thinking through lecture and case analysis. Foundational M.B.A. coursework should be completed. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA581 - Global Marketing 581-3 Global Marketing. The basic elements of marketing management are identified in the setting of a global business environment. Emphasis is given to variables in the international markets that effect strategic business planning such as cultural, ethical, political and economic influences. The course focuses on current trends in the marketing practices of organization. Prerequisite: BA 550 or equivalent. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA582 - International Finance 582-3 International Finance. Discussion of international monetary system, parity conditions, foreign exchange markets and financial markets. Special focus on financial management of the multinational firm, including risk assessment, hedging, capital budgeting, and performance evaluation and control. Not available for students with credit for FIN 464. Prerequisite: BA 530. Restricted to enrollment in College of Business and Analytics graduate program, or consent of department.

BA583 - Global Operations Mgmt 583-3 Global Operations Management. A study of issues and problems related to managing global operations and current practices. Topics include international operations comparisons, international operations improvement and competitive leverage, issues critical to global operations, international cross-functional coordination, coordinating international material flow, coordinating international process and product design, among others. Prerequisite: BA 580. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA584 - Global Business Strategies 584-3 Global Business Strategies. To examine decision-making in international business via a broad study of the opportunities and problems encountered when business operations cross national boundaries; to impart current knowledge regarding the theory and practice of functional aspects of global marketing, international finance and global operations management; to focus on the multinational nature of international managerial decisions. Prerequisite: BA 580. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA588A - Study Abroad-Business 588A-3 Study Abroad-Business. Provides graduate credit for study abroad at accredited and approved foreign institutions. To be taken as first study abroad program. Restricted to enrollment in M.B.A. program or consent of department.

BA588B - Study Abroad-Business 588B-1 to 3 Study Abroad-Business. Provides graduate credit for study abroad at accredited and approved foreign institutions. To be taken as second study abroad program. Prerequisite: All Foundation Area degree requirements. Restricted to enrollment in M.B.A. program or consent of department.

BA591 - Independent Study 591-1 to 15 (3 per semester per 700 number) Independent Study. Directed independent study in selected areas of business administration. May be repeated as topics vary. Restricted to enrollment in College of Business and Analytics graduate program. Departmental approval required.

BA595 - Internship/Work Experience 595-1 to 6 Internship/Work Experience. Current practical experience in a business or other work directly related to course work in a College of Business and Analytics program and to the student's educational objectives might be used as a basis for granting credit to the college. Credit is given when specific program credit cannot be granted and is usable for elective credit only. Credit is sought by petition and must be approved by the CoBA dean before registration. Graded S/U or DEF only. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

BA598 - Business Policies 598-3 Business Policies. Study of the development and evaluation of business strategies and policies as they relate to the overall performance of the firm within its environment. Knowledge of the functional areas of administration, available business data and analytical
tools will be utilized in solving comprehensive business cases and simulation games. Restricted to enrollment in College of Business and Analytics graduate program or consent of department.

**BA599 - Thesis** 599-3 to 6 Thesis. Restricted to enrollment in M.B.A. program or consent of department, consent of instructor.

**BA600 - Dissertation** 600-1 to 24 (1 to 16 per semester) Dissertation. Minimum of 24 hours to be earned for the Doctor of Philosophy degree in Business Administration. Restricted to advancement to candidacy for Doctor of Philosophy Degree in Business Administration.

**BA601 - Continuing Enrollment** 601-1 per semester Continuing Enrollment. For those graduate students in business who have not finished their degree programs and who have one or more INCs or DEFs on their records and/or are in the process of completing their degree requirements. The student must have previously enrolled in a minimum of 36 hours of course work that meets M.B.A. program core and elective requirement or have completed a minimum of 24 hours of BA 600 before being eligible to register for this course. Concurrent enrollment in any other course is not permitted. Graded S/U or DEF only.

**BA699 - Postdoctoral Research** 699-1 Postdoctoral Research. Must be a Postdoctoral Fellow. Concurrent enrollment in any other course is not permitted.

### Strategic Analytics Faculty

**Anaza, Nwamaka**, Associate Professor, Marketing, Ph.D., Purdue University, 2010; 2015. Consumer behavior, international marketing, marketing analytics.

**Balan, Shilpa**, Associate Professor, Analytics, Ph.D., University of Mississippi, 2010; 2021. Business analytics, data mining, database management.

**Islam, Md. Shariful**, Assistant Professor, Accountancy, Ph.D., Louisiana Tech University, 2019; 2019. Accounting information systems, auditing, data analytics.

**Kamran-Disfani, Omid**, Assistant Professor, Marketing, Ph.D., University of Missouri-Columbia, 2019; 2019. Data analytics.


**Perry, Timothy T.**, Clinical Assistant Professor, Finance, Ph.D., Texas Tech University, 2009; 2019. Financial analytics.

**Sylwester, Kevin**, Professor, Economics, Ph.D. University of Wisconsin-Madison, 1997; 1998. Macroeconomics, data analytics.

**Van Alfen, Tyson**, Assistant Professor, Finance, Ph.D., University of Kentucky, 2019; 2019. Financial analytics.

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**Catalog Year Statement:**
Students starting their collegiate training during the period of time covered by this catalog (see bottom of this page) are subject to the curricular requirements as specified herein. The requirements herein will extend for a seven calendar-year period from the date of entry for baccalaureate programs and three years for associate programs. Should the University change the course requirements contained herein subsequently, students are assured that necessary adjustments will be made so that no additional time is required of them.