The Economics, Bachelor of Business Administration shares the discipline of economics some of the same conceptual concerns, but its focus is on the business firm and its well-being. Economics is a social science focusing on the economic well-being of society.

The Economics, B.B.A./Management of Information and Technology, M.S. program is a great opportunity for undergraduate students who are pursuing a BBA degree to earn a master's degree with a specialization in data analytics.

Price College offers a Minor in General Business for Non-Business Majors.

The Master of Business Administration cohort-based program enhances teamwork and collaboration through designed case studies and interactive learning. The program offers an array of industry specializations, certificates, summer internships, and dual-degree opportunities so that students’ educational experiences are uniquely tailored to their career goals.

The Professional Master of Business Administration program is designed for both rising and seasoned professionals in the Oklahoma City area looking to advance their careers.

The Executive Master of Business Administration in Aerospace & Defense (EMAD) delivers business management education to the growing Aerospace and Defense industry. This executive master’s degree seeks to enhance and expand the career educational opportunities for working professionals in the Aerospace & Defense industry (A&D) with the State of Oklahoma, the U.S., and the broader global community by providing a unique and high-level educational experience focused on fundamental and advanced topics in the field of business specifically tailored for A&D.

The Executive Master of Business Administration in Energy program is designed to create current and future leaders in the energy industry. The program offers students with the business fundamentals specifically customized for energy professionals, a global perspective on energy, and executive career coaching to enhance their leadership skills.

The Executive Master of Business Administration in Renewables program is designed to develop future leaders in the renewable energy industry. The program provides students the business fundamentals included in a MBA specifically for experienced energy professionals.

The Commercial Space Application Graduate Certificate is designed to enable students with an interest in commercial space applications to build on their skillsets to include securing government and private funding for startups.

The Executive Management in Aerospace and Defense Graduate Certificate delivers business management education to the growing Aerospace/Defense industry. The graduate certificate is available to managers, executives, and employees in a wide variety of fields who work in the Aerospace/Defense industry. The certificate provides additional management education for these professionals who need specific skills using a flexible format, enabling students to tailor the certificate to their own needs, as well as those of their employer. The program prepares them for careers at the interface of managerial and leadership positions in aerospace and defense organizations, consulting companies, government agencies, and defense contractors.

The Foundations of Business Graduate Certificate is offered for any OU graduate or professional student.

The Hydrocarbon Energy Graduate Certificate will provide students with specific skills and knowledge relevant to today’s rapidly evolving hydrocarbon-based energy industry.

The Renewable Energy Graduate Certificate will offer students with opportunities to gain expertise in the renewable energy field to further their professional careers and better position them as leaders in this transitioning industry.

The Business Administration, Ph.D. is a high-quality program stressing solid preparation, collaborative relationships with faculty, support for research and professional travel, and strong placements. This program provide students with the necessary knowledge, training, and resources to pursue successful careers in research and teaching that expand the frontiers of knowledge in business disciplines.

Courses

**B AD 1000**  Passport to Success I  
0 Credit Hours  
Prerequisite: Declared Business Majors Only. Collection of curricular, co-curricular and extracurricular activities that enable students to succeed in the workplace regardless of major within Price College of Business. Students are required to earn a total of 40 “milestones” to successfully graduate from Price College. At least five and no more than seven milestones should be earned each semester. Milestones are chosen from an approved list. (F, Sp)

**B AD 1001**  Personal Computing Productivity Tools  
1 Credit Hour  
Computer-assisted introduction to personal computing technology for spreadsheets, word processing, and presentation software. Coursework is presented online but exams must be taken on Norman Campus. (F, Sp, Su)

**B AD 1010**  Passport to Success II  
0 Credit Hours  
Prerequisite: Degree Candidacy. Collection of curricular, co-curricular and extracurricular activities that enable students to succeed in the workplace regardless of major within Price College of Business. Students are required to earn a total of 40 “milestones” to successfully graduate from Price College. At least five and no more than seven milestones should be earned each semester. Milestones are chosen from an approved list. (F, Sp)

**B AD 2091**  Career Readiness I-Transitioning to the Workplace  
1 Credit Hour  
Prerequisite: Business majors only. Introduces students to the professional world of business. Emphasizes important aspects such as business culture, communications, ethics, social responsibility and business skills development. Prepares students for a professional future and to identify and address strengths and weaknesses for earning that first job. Includes Career Services registration, creation of a usable resume, and exploration of people skills necessary for success. (F, Sp)
**B AD 2113 Introduction to Business I** 3 Credit Hours

Designed for non-Business majors. Gives each student a comprehensive introduction to the study of business. Focuses on creation and maintenance of a long-term strategic vision for the firm. Introduces and builds an understanding of the functional business areas such as management, marketing, accounting, finance, and information systems. The concepts learned are essential in managing business activities in an increasingly competitive business world. (F, Sp)

**B AD 2970 Special Topics/Seminar** 1-3 Credit Hours

1 to 3 hours. Prerequisite: May be repeated; Maximum credit nine hours. Special topics course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research, and field projects. (Irreg.)

**B AD 3013 Integrated Business Core Practicum** 3 Credit Hours

Prerequisite: ACCT 2123 or concurrent enrollment; Corequisite: enrollment in Integrated Business Core (L S 3323, MGT 3013, MKT 3013); Students must be approved for degree candidacy by Price College. Students will apply concepts from the corequisite courses to their own start-up business ventures and to community service projects. (F, Sp)

**B AD 3091 Career Readiness II-Advancing in the Workplace** 1 Credit Hour

Prerequisite: Student must be approved for degree candidacy by Price College, junior standing, and B AD 2091. An immersive course designed to explore areas of professional development that will help lead students on a path to a successful career. As an accompaniment to BAD 2091-Business and Professional Basics, this course is designed to further explore areas that will help you, the student, become a more successful, well-rounded business professional as you seek internships and full-time job placement. (F, Sp)

**B AD 3113 Managing Corporate Communication** 3 Credit Hours

(Crosslisted with MGT 3113) Prerequisite: Student must be approved for degree candidacy by Price College; ACCT 2123 or concurrent enrollment; MATH 1743 or MATH 1823 or MATH 1914; B C 2813. Strategic Communication challenges students to master their writing, listening, presentation, and interpersonal communication skills to excel in various business environments. Students will also develop strategies to promote customer engagement and loyalty through social media review sites. Emphasis is placed on credibility management, audience analysis, research, revision, and rehearsal to equip students for professional success. (F, Sp)

**B AD 3440 Mentored Research Experience** 3 Credit Hours

0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)

**B AD 3513 International Business** 3 Credit Hours

Prerequisite: Student must be approved for degree candidacy in the Price College of Business; ACCT 2123 or concurrent enrollment. The nature and economic role of the multinational corporation including the impact of legal, political, educational, sociological, and cultural variables upon firm performance and managerial activity; case studies illustrate managerial, marketing, financial and accounting activities projected across national boundaries. (F, Sp)

**B AD 3700 Internship in Business Administration** 1-3 Credit Hours

1 to 3 hours. Prerequisite: student must be approved for degree candidacy by Price College; permission showing approval from the designated faculty or advisor overseeing internships for credit. (F, Sp, Su)

**B AD 3710 Topics in Business Administration** 1-3 Credit Hours

1 to 3 hours. Prerequisite: student must be approved for degree candidacy in Price College of Business. May be repeated; maximum credit nine hours. Permits students to study topics in business administration not included in standard course offerings. Subject of course will vary. (F, Sp, Su)

**B AD 3960 Honors Reading** 1-3 Credit Hours

1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Provides an opportunity for the gifted honors candidate to study materials not usually presented in regular courses. (F, Sp, Su)

**B AD 3970 Honors Seminar** 1-3 Credit Hours

1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)

**B AD 3980 Honors Research** 1-3 Credit Hours

1 to 3 hours. Prerequisite: admission to Honors Program; junior standing. May be repeated; maximum credit six hours. Independent research on special projects. (F, Sp)

**B AD 3990 Independent Study** 1-3 Credit Hours

1 to 3 hours. Prerequisite: permission of instructor and junior standing. May be repeated once with change of content. Independent study may be arranged to study a subject not available through regular course offerings. (F, Sp, Su)

**B AD 4013 Business Strategy and Policy** 3 Credit Hours

Prerequisite: senior standing and completion of all other College of Business core courses. Administrative decision making with emphasis on analyzing business problems, formulating policies and implementing plans for action; comprehensive cases provide the opportunity to study the proper interrelationships among production, finance, marketing and the many other functions involved in managing a business enterprise. Should be taken in student’s final semester. (F, Sp, Su) [V].

**B AD 4960 Directed Readings** 1-4 Credit Hours

1 to 4 hours. Prerequisite: good standing in University; permission of instructor and dean. May be repeated; maximum credit four hours. Designed for upper-division students who need opportunity to study a specific problem in greater depth than formal course content permits. (Irreg.)

**B AD 4970 Special Topics/Seminar** 1-3 Credit Hours

1 to 3 hours. Prerequisite: Senior standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)

**B AD 4990 Independent Study** 1-3 Credit Hours

1 to 3 hours. Prerequisite: Senior standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)
B AD 5001 Quantitative Methods and Modeling I 1 Credit Hour
Prerequisites: graduate standing; departmental permission. Review of essential mathematical concepts used in business decision making (emphasis on problem solving). Spreadsheets are used as the principal device for building models. The course covers concepts in the effective spreadsheet design and use. Through development and usage of specific spreadsheets, students will become well-versed in verbalizing, visualizing, forming equations, and calculating answers to key types of business problems. (Irreg.)

B AD 5010 Foundations of MBA Success 0 Credit Hours
Prerequisites: departmental permission; graduate standing; majors only. This course provides an orientation to the Price MBA program, and is an essential ingredient for succeeding in the program and beyond. (F)

B AD 5101 MBA - Professional Development 1 Credit Hour
Prerequisite: admission to MBA program. Stresses professional development skills. Designed to prepare students for their professional careers and the job search process in particular. Topics include: resume writing, job search and interview, negotiation skills, business etiquette, career decisions, and project and career management. (F)

B AD 5102 Managerial Economics 2 Credit Hours
Prerequisites: graduate standing; departmental permission. Microeconomic concepts and analysis as used in managerial decision-making with emphasis on marginal analysis, comparative advantage, resource allocation, opportunity cost, demand and supply, elasticity, economic efficiency, price discrimination, welfare analysis, production and cost functions, productivity, market structures, externalities and public goods, game theory, information asymmetry, market signaling, and government regulation of anti-competitive behavior. (Irreg.)

B AD 5112 Global Economics 2 Credit Hours
Prerequisite: graduate standing and Economics 5102. Macroeconomic analysis of the global environment of business and its impact on management decision making. The course analyzes the extent, character, and consequences of globalization with emphasis on how any economy operates in the aggregate to affect real output, unemployment, the price level, interest rates, business cycles, economic growth, foreign exchange rates, trade patterns, international financial flows and foreign investment through its fiscal, monetary, and exchange stabilization and trade policies. (Irreg.)

B AD 5122 Quantitative Analysis I 2 Credit Hours
Prerequisite: Graduate standing and departmental permission. This course examines key probability and applied statistical concepts. General course objectives are: 1) enhanced Excel modeling skills; 2) understanding and use of descriptive statistics; 3) basics of probability theory; 4) use and interpretation of various probability models; 5) ANOVA; and 6) regression analysis. Microsoft Excel will be used to illustrate many of these topics. (Irreg.)

B AD 5162 Mapping your Career: Professional Development for Professional MBAs 2 Credit Hours
Prerequisite: admission to the Professional MBA program. Stresses professional development skills and leadership development. Designed to prepare students for their professional careers and leadership roles within the industry. Topics include: resume writing, job search and interview, negotiation skills, business etiquette, career decisions, and project and career management. (Irreg.)

B AD 5172 Business, Government and Society 2 Credit Hours
Prerequisite: graduate standing, admission into Business graduate program and department permission. Within the study of business, emphasis is placed upon market competition while little attention is paid to "non-market" conditions. Examples of non-market issues include: legislation, lawsuits, etc. Non-market conditions are often reviewed as external events having limited effect upon the strategies of the firm. This course seeks to integrate these concepts/ demonstrate the importance of strategically managing these issues. (Su)

B AD 5182 Quantitative Analysis II 2 Credit Hours
Prerequisite: Graduate standing, departmental permission, and B AD 5122. This course expands treatment of multiple regression analysis and pursues other models and analytical techniques for actionable managerial decision making. Data analysis techniques in the context of Business Intelligence are covered. Specific techniques include multiple regression models and implications of violation of classical assumptions, basic forecasting techniques, linear programming, and optimization and simulation techniques for decision support. (Irreg.)

B AD 5201 MBA - Professional Development II 1 Credit Hour
Prerequisite: B AD 5101. This course will enable students to develop critical skills needed to identify, prepare for, and pursue a post MBA career. The course will focus on real-world and practical aspects of the business arena. Students will interact with key business leaders representing a variety of industries and functional areas. (Sp)

B AD 5202 Career & Professional Development 2 Credit Hours
Prerequisite: Admission into the Professional MBA or Online MBA Program, Graduate Standing, and Departmental Permission. This course will prepare MBA students for the world of work. This class will enable students to develop the critical skills necessary to identify, prepare for, and confidently pursue a post-MBA career - and ultimately become great business leaders. The course will also focus on real-world and practical skills to succeed in the workplace. (F, Sp)

B AD 5302 Advanced Leadership 2 Credit Hours
Prerequisite: Graduate standing and departmental permission. You will explore leadership traits, behaviors, styles, and skills that are important to being an effective leader. We will highlight research in leadership and review important business concepts from business press and books. You will be asked to closely reflect on your current leadership situation and create an actionable development plan that will move your forward in your leadership career. (Irreg.)

B AD 5312 Strategic Communication 2 Credit Hours
Prerequisite: Graduate standing and departmental permission. Strategic Communication challenges students to master writing, listening, presentation, and interpersonal skills to lead in business environments. Students will develop strategies to promote engagement and loyalty with internal and external stakeholders. Emphasis is placed on credibility management, audience analysis, research, revision, and rehearsal to equip students for professional success. (Irreg.)

B AD 5490 Readings in Business Communication and Business Administration 1-3 Credit Hours
1 to 3 hours. Prerequisite: graduate standing and permission. May be repeated; maximum credit 12 hours. Preparation and submission of a research report on an assigned comprehensive topic relating to the business enterprise or to its ethical environment. (F, Sp, Su)
B AD 5812  Global Business Experience  2 Credit Hours
Prerequisite: graduate standing and department permission. The course will focus on a study-abroad experience in a specific country. Students will have in-class instruction prior to and during their trip. Students will visit local and U.S. businesses; interact with and governmental leaders; participate in cultural events and experience local customs and culture; analyze cases involving the country; and, complete a written report. (Irreg.)

B AD 5822  Business Consulting Practicum  2 Credit Hours
Prerequisite: graduate standing and department permission. This course applies the "Design Thinking" approach, which relies on rapid action followed by interaction and then reflection, to business consulting projects. It offers an immersive experience to students by using a hands-on, iterative approach to collaboratively solving real world business problems, and may include developing innovative products, processes and services. (Sp)

B AD 5832  Applied Field Project  2 Credit Hours
Prerequisite: Graduate standing or department permission. This semester-long course will provide experiential learning in a student's area of specialization and thereby enable them to apply their academic knowledge to real world contexts. Students specializing in different academic areas will be matched with internships in those areas. (F)

B AD 5902  Strategic Management  2 Credit Hours
Prerequisite: graduate standing and permission of the department. The study of management decisions and actions to improve an organization's competitiveness in global business environments. Uses a variety of pedagogies to integrate strategies. Students develop skills to formulate, implement, and evaluate organizational strategies in rapidly changing environments. This course is an integrative-cross-functional course. (F, Su)

B AD 5960  Directed Readings  1-3 Credit Hours
1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)

B AD 5970  Special Topics/Seminar  1-3 Credit Hours
1 to 3 hours. Prerequisite: Graduate standing or permission of instructor. May be repeated; maximum credit nine hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or laboratory research and field projects. (Irreg.)

B AD 5980  Research for Master's Thesis  2-9 Credit Hours
Variable enrollment, two to nine hours; maximum credit applicable toward degree, four hours. (F, Sp, Su)

B AD 5990  Independent Study  1-3 Credit Hours
1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)

B AD 6243  Applied Univariate Statistics  3 Credit Hours
Prerequisite: Ph.D. standing or permission of instructor, permission (director-CBA graduate programs). Probability, algebra of expectations, random sampling, sampling distributions, point and interval estimation, tests of hypotheses, parametric and nonparametric, sampling methods, survey design, general linear model, computer applications, statistical analysis system. (F)

B AD 6960  Directed Readings  1-3 Credit Hours
1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit six hours. Directed readings and/or literature review under the direction of a faculty member. (Irreg.)

B AD 6970  Special Topics/Seminar  1-3 Credit Hours
1 to 3 hours. Prerequisite: graduate standing or permission of instructor. May be repeated; maximum credit 12 hours. Special topics or seminar course for content not currently offered in regularly scheduled courses. May include library and/or research and field projects. (Irreg.)

B AD 6980  Research for Doctoral Dissertation  2-16 Credit Hours
2 to 16 hours. Prerequisites: Graduate standing and permission of instructor; may be repeated. Directed research culminating in the completion of the doctoral dissertation. (F, Sp, Su)

B AD 6990  Independent Study  1-3 Credit Hours
1 to 3 hours. Prerequisite: Graduate standing and permission of instructor. May be repeated; maximum credit nine hours. Contracted independent study for a topic not currently offered in regularly scheduled courses. Independent study may include library and/or laboratory research and field projects. (Irreg.)

B C 2813  Strategic Communication for Business Professionals  3 Credit Hours
Prerequisite: Business majors or other majors approved by Price College advising; ENGL 1213 or EXPO 1213 or equivalent. Introduces the strategies, processes, and resources necessary for writers in business and professional contexts. Students practice informative and analytical business genres while gaining expertise in research, writing, and revision. (F, Sp, Su)

B C 3440  Mentored Research Experience  3 Credit Hours
0 to 3 hours. Prerequisites: ENGL 1113 or equivalent, and permission of instructor. May be repeated; maximum credit 12 hours. For the inquisitive student to apply the scholarly processes of the discipline to a research or creative project under the mentorship of a faculty member. Student and instructor should complete an Undergraduate Research & Creative Projects (URCP) Mentoring Agreement and file it with the URCP office. Not for honors credit. (F, Sp, Su)

B C 3960  Honors Reading  1-3 Credit Hours
1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Consists of topics designated by the instructor in keeping with the student's major program. The topics will cover materials not usually presented in the regular courses. (F, Sp, Su)

B C 3970  Honors Seminar  1-3 Credit Hours
1 to 3 hours. Prerequisite: admission to Honors Program. May be repeated; maximum credit six hours. Subjects covered vary. Deals with concepts not usually treated in regular courses. (Irreg.)

B C 3980  Honors Research  1-3 Credit Hours
1 to 3 hours. Prerequisite: Admission to Honors Program. May be repeated; maximum credit six hours. Will provide an opportunity for the gifted Honors candidate to work at a special project in the student's field. (F, Sp, Su)
EMAD 5302 Accounting in Aerospace and Defense 2 Credit Hours
Prerequisite: Graduate standing, departmental permission, majors only, and admission to the Executive Management in Aerospace/Defense graduate certificate program. This course will create a foundation for understanding accounting and financial management in the Aerospace and Defense (A&D) industry, including performance measurement and budgeting. This course is intended to provide students with a working knowledge of A&D financial statements, including preparation and analysis. This course includes an in-person class at the Gene Rainbolt Graduate School of Business in Oklahoma City. (Irreg.)

EMAD 5312 Information Technology and Cyber Security in Aerospace and Defense 2 Credit Hours
Prerequisite: Graduate standing, departmental permission, and admission to the Executive Management in Aerospace/Defense graduate certificate program. Information technology and cyber security are crucial in managing a business in the aerospace and defense (A&D) industry. This course will provide a basic understanding of the technical and management aspects of data communications, networking infrastructure, and cyber security concepts for A&D. (Irreg.)

EMAD 5322 Managing Supply Chain and Logistics in Aerospace and Defense 2 Credit Hours
Prerequisite: Graduate standing, departmental permission, and admission to the Executive Management in Aerospace/Defense graduate certificate program. Supply chain and logistics are crucial in the aerospace and defense industry. A&D firms are attempting to improve their competitive positions by managing the flow of raw materials, work-in-process inventories, and finished goods. This course covers managing the supply chain that plans, sources, makes, and delivers an A&D organization's goods and/or services, from suppliers of raw materials to customer. (Irreg.)

EMAD 5332 Legal Environment for Aerospace and Defense 2 Credit Hours
Prerequisite: Graduate standing, departmental permission, and admission to the Executive Management in Aerospace/Defense graduate certificate program. This course examines the A&D industry contract vehicles, contract performance management, and regulation management and federal statutory law. Students will learn the legal and ethical environment of A&D business. The course provides necessary background on traditional A&D business law topics, including A&D contracting. This course includes an in-person class at the Gene Rainbolt Graduate School of Business in Oklahoma City. (Irreg.)

EMAD 5342 Project Management for Aerospace and Defense 2 Credit Hours
Prerequisite: Graduate standing, departmental permission, and admission to the Executive Management in Aerospace/Defense graduate certificate program. This course develops the knowledge, skills, tools, and techniques to initiate, plan, execute, monitor, and control activities related to meeting A&D project requirements. It focuses on the theoretical foundations and practical applications of project management along with the IT tools to support project planning, budgeting, scheduling, cost analysis, resource leveling/control, and human resource management in A&D organizations. (Irreg.)

EMAD 5352 Global Aerospace and Defense Strategy 2 Credit Hours
Prerequisite: Graduate standing, departmental permission, and admission to the Executive Management in Aerospace/Defense graduate certificate program. This course develops an innovative mindset to deal with global complexity, barriers to international trade, and human resource challenges. Students are provided with the evidence, concepts, and models for understanding company performance in a global world and the issues facing executives in the early 21st century. (Irreg.)

EMAD 5362 Field Project in Aerospace & Defense (Analysis) 2 Credit Hours
Prerequisite: Graduate standing, departmental permission, and admission to the Executive Management in Aerospace/Defense graduate certificate program. This course provides experiential learning in the aerospace and defense industry by having students apply knowledge from the classroom and work experience to analyzing problems facing A&D organizations. Field projects will deal with scoping the problem under study, structured analysis of the problem including data collection from internal and external sources, and development of recommendations, solutions, and timeline for implementation. (Irreg.)

EMAD 5372 Field Project in Aerospace & Defense (Implementation) 2 Credit Hours
Prerequisite: Graduate standing, departmental permission, admission to the Executive Management in Aerospace/Defense graduate certificate program, and B AD 5362. This course provides experiential learning in the aerospace and defense industry by having students apply their knowledge from the classroom and their work experience to implement solutions and recommendations developed in B AD 5362 or those provided by the client organization. They will also include the development of a prototype, a pilot implementation of the solutions, and outcome testing. (Irreg.)

EMAD 5382 Quantitative Methods & Models for Aerospace & Defense 2 Credit Hours
Prerequisite: Graduate standing and departmental permission, or admission into the Executive Master of Business Administration in Aerospace & Defense program. This course focuses on understanding and applying quantitative methods and models in the context of Aerospace & Defense (A&D). The course content is organized around three modules: summarizing quantitative data, relating and comparing data, and predicting outcomes based on sample data. The topics covered in these modules include descriptive statistics, associative statistics, regression, multiple regression, and inferential statistics. (Irreg.)

EMAD 5392 Organizational Behavior in Aerospace & Defense Organizations 2 Credit Hours
Prerequisite: Graduate standing and departmental permission, or admission to the Executive Master of Business Administration in Aerospace & Defense program. This course deals with the need for managers to understand behavior in organizations and the challenges they face. It discusses individual differences, employee motivation, and effective job design, and how organizations should select, retain, and evaluate employees. The course discusses group dynamics, team management, effective communication, managing conflict, employee stress, and career management issues. (Irreg.)
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMAD 5402</td>
<td>Aerospace and Defense Marketing Fundamentals</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: Graduate standing and departmental permission, or admission into the Executive Master of Business Administration in Aerospace &amp; Defense program. The traditional role of marketing management is enlarged to include the development, implementation, and control of marketing strategies in the aerospace/defense organization. Emphasis is on the strategic marketing process in the dynamic aerospace/defense business environment. Strategic marketing decisions, analysis, and issues are integrated with the goal of achieving customer satisfaction to gain a sustainable competitive advantage within the aviation industry. (Irreg.)</td>
<td></td>
</tr>
<tr>
<td>EMAD 5412</td>
<td>Innovation and Entrepreneurship in Aerospace &amp; Defense</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: Graduate standing and departmental permission, or admission into the Executive Master of Business Administration in Aerospace &amp; Defense program. This course introduces skills and techniques that enable the development of innovative and entrepreneurial strategies in aerospace and defense. We also evaluate approaches to developing an innovative, entrepreneurial culture in environments where science- and technology-related activities are critical for effective operations. The course will analyze the challenges posed by complex organizations and highlight methods to deal with them. (Irreg.)</td>
<td></td>
</tr>
<tr>
<td>EMAD 5422</td>
<td>Lean Six Sigma Tools for Aerospace &amp; Defense</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: Graduate standing and departmental permission, or admission into the Executive Master of Business Administration in Aerospace &amp; Defense program. The course introduces the fundamental Lean Six Sigma concepts within a business organization. It covers the basic concepts within Six Sigma and Lean techniques, and introduces tools for measurement and process improvement metrics in organizations through the DMAIC process. The course has a strategic foundation in which we review the strategic use of techniques, ensuring a positive result upon implementation. (Irreg.)</td>
<td></td>
</tr>
<tr>
<td>EMAD 5432</td>
<td>Advanced Financial Management in Aerospace &amp; Defense</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: Graduate standing, EMAD 5302 and departmental permission, or admission into the Executive Master of Business Administration in Aerospace &amp; Defense program. This is a comprehensive course in corporate financial management and analysis. The course builds on the main concepts of the core Accounting course (EMAD 5302). The primary objective is to develop the skills necessary to value firms and optimize a corporation's capital structure in the Aerospace and Defense Industry using varying finance methods. (Irreg.)</td>
<td></td>
</tr>
<tr>
<td>EMAD 5442</td>
<td>Mergers and Acquisitions in Aerospace and Defense</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: Graduate standing and departmental permission, or admission into the Executive Master of Business Administration in Aerospace &amp; Defense program. This course studies the design and valuation of deals to acquire or divest corporate assets. We study M&amp;A transactions, applying them to the aerospace and defense industry through case-based methods. We explore how the legal system, accounting rules, and tax incentives affect outcomes of M&amp;A transactions. We analyze types of M&amp;A transactions, their motivations, and their effects on corporate value. (Irreg.)</td>
<td></td>
</tr>
<tr>
<td>EMAD 5452</td>
<td>Managing Aerospace &amp; Defense Government Contracts</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: Graduate standing and departmental permission, or admission into the Executive Master of Business Administration in Aerospace &amp; Defense program. This course introduces the procurement and contracting processes used in the aerospace and defense (A&amp;D) industry. Students will gain an understanding of best practices from both government and industry perspectives, including subcontracting. The course will navigate the highly complex federal acquisition process including governance and operational roles. The course emphasizes government contracting but also discusses private sector contracting in A&amp;D. (Irreg.)</td>
<td></td>
</tr>
<tr>
<td>EMAD 5472</td>
<td>Data Management and Security in Aerospace &amp; Defense</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: Graduate standing and departmental permission, or admission to the Executive Master of Business Administration in Aerospace &amp; Defense program. Every organization is concerned with data management. Data must be stored effectively and securely so it can be retrieved to support decision making. These issues are particularly relevant for the A&amp;D industry, an environment where extra measures must be taken in all aspects of security. The objective is to provide a basic understanding of data management and security. (Irreg.)</td>
<td></td>
</tr>
<tr>
<td>EMAD 5482</td>
<td>Data Analytics for Aerospace &amp; Defense</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: Graduate standing and departmental permission, or admission to the Executive Master of Business Administration in Aerospace &amp; Defense program. Data analytics is becoming increasingly important for every industry, and it is especially important in the aerospace and defense (A&amp;D) industry. The objective of this course is to provide a basic understanding of data analytics in A&amp;D. (Irreg.)</td>
<td></td>
</tr>
<tr>
<td>EMAD 5602</td>
<td>The Future of Space</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: Graduate Standing and Departmental Permission. This course focuses on the future of a commercial space application, the history of manned and unmanned space flight, and recent commercial ventures in space along with new innovations in the realm of possibility as space travel and launches are becoming more accessible. The course will also look at political developments and the current business climate for space. (Irreg.)</td>
<td></td>
</tr>
<tr>
<td>EMAD 5622</td>
<td>Space and Small Business: Business Opportunities in the Space Economy</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: Graduate Standing and Departmental Permission. Research-intensive American small businesses have received significant funding from NASA in the past few decades. This course focuses on ways small businesses can obtain early-stage funding from government sources. It will highlight the phases of the funding process and ways small businesses can be competitive in the process. (Irreg.)</td>
<td></td>
</tr>
<tr>
<td>EMAD 5642</td>
<td>Private Equity and Investment in Space</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Prerequisite: Graduate Standing and Departmental Permission. With the declining cost of sending payload into lower orbit, many new startups are forming around the concept of commercializing space. This course reviews the basics of setting up term sheets for new ventures and presents real opportunities to pitch their new venture to tap into this new market. (Irreg.)</td>
<td></td>
</tr>
<tr>
<td>EMAD 5960</td>
<td>Directed Readings</td>
<td>1-3</td>
</tr>
<tr>
<td></td>
<td>1 to 3 hours. Prerequisite: graduate standing and permission of department. May be repeated; maximum credit twelve hours. Directed readings and/or literature reviews under the direction of a faculty member. (F, Sp, Su)</td>
<td></td>
</tr>
</tbody>
</table>
EMBA 5012  Energy Policy and Regulations  2 Credit Hours
Prerequisites: graduate standing, EMBA students only. Examines global
energy policy and regulatory development emphasizing: resource
access, business-government relations, environmental protection, social
responsibility, and sustainability. Topics explored from the perspectives
of government, business, citizens and civil society stakeholder groups,
emphasizing unique positions of various major energy-producing regions
worldwide. (Irreg.)

EMBA 5021  Hydrocarbon Value Chain - Technology &
Innovation  1 Credit Hour
Prerequisite: Graduate standing and EMBA majors only. An introduction
to critical aspects of the oil and gas infrastructure value chain with an
emphasis on identifying value creation opportunities and strategies,
commercial trading activities, policy and regulatory issues, key industry
players, and the impacts of technology, innovation, trends, and cycles.
Principal focus on crude oil with comparisons and contrasts to natural
gas and natural gas liquids value chains. (Irreg.)

EMBA 5022  Introduction to Energy Accounting  2 Credit Hours
Prerequisite: Graduate standing and EMBA majors only. This course uses
concepts from financial accounting and managerial accounting and
applies them to specific reporting issues in the energy industry as well
as presentation of the information on the financial statements of an oil
and gas company. Reviews the accounting cycle with an emphasis on
the proper accounting treatment of energy-related activities, actions (e.g.,
acquisition of mineral interests). (Irreg.)

EMBA 5031  Organizational Behavior  1 Credit Hour
Prerequisites: graduate standing, EMBA students only. For students
responsible for leading and managing HR in the energy industry and
seeks to increase students' understanding of individual behavior
in organizations. Explores theories and concepts of organizational
behavior to address managerial problems. Topics include: management
challenges; the use of evidence-based management; managing diversity;
motivating, evaluating, and rewarding employees; and creating a positive
work environment and achieving personal well-being. (Irreg.)

EMBA 5042  Energy Economics  2 Credit Hours
Prerequisite: graduate standing, EMBA students only. Economic concepts
and analysis as used in managerial decision-making in energy companies
with emphasis on demand, supply, market equilibrium, elasticity, perfect
competition, external effects and public goods, market power and
monopoly, natural monopolies, dominance and economic regulation,
mergers, cartels, collusion and antitrust, oligopolistic models, GDP
unemployment rates, and price indices, and the interrelations among
the different sectors of the economy. (Irreg.)

EMBA 5052  Financial Markets and Securities  2 Credit Hours
Prerequisites: graduate standing, EMBA students only. Provides a strong
foundation for an understanding of financial markets and the main types
of securities traded in these markets. The topics covered in the course
include trading structure, risk and return, portfolio theory, asset pricing
models, market efficiency and an introduction to the nature and valuation
of equities, bonds, and options. (Irreg.)

EMBA 5062  Quantitative Methods and Models  2 Credit Hours
Prerequisites: graduate standing, EMBA students only. Understanding
and applying quantitative methods and models in the context of energy
management. The content of this course is organized around three
modules: summarizing quantitative data; relating and comparing data;
and, predicting outcomes based on sample data. The topics covered
in these modules include descriptive statistics, associative statistics,
regression, multiple regression, and inferential statistics. (Irreg.)

EMBA 5072  Corporate Finance  2 Credit Hours
Prerequisites: graduate standing, EMBA students only. Provides students
with the analytical and conceptual skills required in the modern practice
of corporate financial management in energy organizations. The course
will focus on three key areas of financial management: (1) the optimal
allocation of capital; (2) the optimal choices for raising capital; (3) the
optimal management of risk in conjunction with (1) and (2). Includes
application of finance theory to solving real business problems in
energy companies, and emphasizes the importance of technology and
globalization to the modern practice of finance. (Irreg.)

EMBA 5082  Strategic Management  2 Credit Hours
Prerequisites: graduate standing, EMBA students only. Examines
management decisions and actions to improve an organization's
competitiveness in global business environments. Uses a variety of
pedagogies to integrate strategies, and students will develop skills to
formulate, implement, and evaluate organizational strategies that play
across the energy industry in rapidly changing environments. (Irreg.)

EMBA 5091  Accounting II  1 Credit Hour
Prerequisite: Graduate standing and EMBA majors only. This course will
cover Financial Accounting Standards Board (FASB), Generally
Accepted Accounting Principles (GAAP), and Securities and Exchange
Commission (SEC) financial statement disclosures specific to entities
engaged in oil and gas producing activities (referred to as Upstream
Entities), accounting for derivatives, and tax issues affecting the energy
industry. (Irreg.)

EMBA 5111  Management Information Systems  1 Credit Hour
Prerequisites: graduate standing, EMBA students only. Examines
energy policy and regulatory development emphasizing: resource
access, business-government relations, environmental protection, social
responsibility, and sustainability. Topics explored from the perspectives
of government, business, citizens and civil society stakeholder groups,
emphasizing unique positions of various major energy-producing regions
worldwide. (Irreg.)

EMBA 5112  Data, Analytics and Decision-Making  2 Credit Hours
Prerequisite: Graduate standing and EMBA majors only. Develops
skills in data analytics including managing data resources, techniques
for analysis, visualization, security and privacy, and data-driven
decision-making. Particular attention is paid to disruptive technologies,
governance, and organizational issues in deepening analytics capabilities
in the energy industry. (Irreg.)

EMBA 5131  Renewable Energy Resources  1 Credit Hour
Prerequisite: Graduate standing and EMBA majors only. Considers
interest in renewable energy from the view that meeting global energy
demand is "all of the above." Examines traditional energy firms possibly
adding alternative energy to its offerings. Provides student with a broad
overview of how renewable energy affects markets today, renewable
energy technology, and its cost effectiveness compared to other energy
sources and its future penetration rate projections. (Irreg.)

EMBA 5141  Supply Chain Management  1 Credit Hour
Prerequisites: Graduate standing, EMBA students only. An overview of
supply chain management principles and management considerations
vis-a-vis the energy industry. Students are exposed to frameworks to
evaluate the efficiency and effectiveness of a supply chain function,
methodologies for managing organizational expenditures, and techniques
for maximizing value from supply chain operations. Additional topics
are: strategic sourcing, inventory management, global sourcing, contract
management, and ethics. (Irreg.)
EMBA 5142 Derivatives and Energy Trading 2 Credit Hours
Prerequisite: Graduate standing and EMBA majors only. Provides a comprehensive review of the organization and structure of the market for energy assets and commodities. Topics include trading platforms, pricing issues, forecasting, role and linkage with associated futures, forwards and options contracts, "basis" and spreads, hedging strategies, the principles governing the valuation of these "derivative" securities, and the ways in which these securities can be used effectively. (Irreg.)

EMBA 5152 Derivative Securities and Markets 2 Credit Hours
Prerequisites: graduate standing, EMBA students only. Develop an understanding, both intellectual and practical, of the organization and microstructure of the markets for forward, futures, and options contracts, the principles governing the valuation of these "derivative" securities, and the ways in which these securities can be used effectively in investment banking, portfolio management, hedging, and risk management. Particular attention is paid to energy derivatives and the perspective of the energy sector. (Irreg.)

EMBA 5162 Energy Assets and Commodities Trading 2 Credit Hours
Prerequisites: graduate standing, EMBA students only. Provides a comprehensive and in-depth review of the market for energy assets and commodities: including trading platforms, pricing issues, forecasting, role and linkage with associated futures, forwards and options contracts, study of "basis" and spreads, and hedging strategies. The course will be anchored solidly within a theoretical conceptual framework and be supported with relevant case studies. (Irreg.)

EMBA 5182 Enterprise Valuation, Mergers and Acquisitions, and Corporate Restructuring 2 Credit Hours
Prerequisite: graduate standing, EMBA students only. The course covers major aspects of M&A and other corporate restructuring transactions; reasons that deals are done, the mechanics of the transactions, the valuation of the firms involved, various aspects of deal structure, the roles and incentives of the parties involved, and related issues. Brings together materials from previous finance courses and links financial decision-making with firm’s overall business strategy. (Irreg.)

EMBA 5191 Marketing Strategy – Changing Energy Mix and New Markets 1 Credit Hour
Prerequisite: Graduate standing and EMBA students only. Covers the challenges faced by the energy industry in developing new markets for its products, and how to manage customer and client relations. Students will learn practical marketing tools and how they can be used to affect corporate strategy. Topics include the strategic marketing process, oil, gas and NGL valuation, market segmentation, supply chain and logistics, pricing mechanisms and hedging. (Irreg.)

EMBA 5201 Managing Change – Role of Leadership 1 Credit Hour
Prerequisite: Graduate standing, EMBA students only. Provides a theoretical understanding and skill development necessary for being an effective leader and manage organizational change. Identify ways to become a more effective leader by applying theories of human behavior to solve day-to-day problems of organizational administration. Examines core decision-making challenges, complex change scenarios, and leadership approaches and strategies to manage change in the context of the energy industry. (Irreg.)

EMBA 5212 Valuation of Hydrocarbon Resources 2 Credit Hours
Prerequisite: Graduate standing, EMBA students only. This course brings together concepts to make better economic decisions in the energy industry. Examines ways to evaluate an energy project's economic viability from an investment opportunity and develop the skills needed to make economic evaluations to assess such projects. The participants perform economic evaluations of field development projects and practice creating value during negotiation skills for an oilfield acquisition. (Irreg.)

EMBA 5222 Corporate Energy Finance 2 Credit Hours
Prerequisite: Graduate standing, EMBA students only. Provides students with the analytical and conceptual skills required in the modern practice of corporate financial management in energy organizations. Will focus on three key areas: (1) optimal allocation of capital; (2) optimal choices for raising capital; (3) optimal management of risk in conjunction with (1) and (2), including measuring and managing risks in energy companies. (Irreg.)

EMBA 5232 Hydrocarbon Law and Regulations 2 Credit Hours
Prerequisite: Graduate standing, EMBA students only. From "wellhead to burner-tip" or "shale to sail" - This course will cover the law and regulation related to the full value chain of energy: upstream, midstream (transport, gathering, processing, fractionation); downstream (oil, gas, liquids - petrochem, refining, industrial, commercial, residential). This class will primarily focus on oil and gas but will also cover electric, coal, renewable, and international energy. (Irreg.)

EMBA 5242 Reserve Valuation and Reporting 2 Credit Hours
Prerequisites: graduate standing, EMBA students only. Key objectives are learning compliant methods of preparing reserves/resources estimates, learning to estimate and understand the composition of and variables to the estimates, understanding the impact of economics on those estimates, properly classifying those estimates using current industry accepted definitions, and understanding the use of reports. Will discuss utilizing a reserves report as the basis for company modeling projections. (Irreg.)

EMBA 5251 Electric Utility Fundamentals 1 Credit Hour
Prerequisite: Graduate standing and EMBA majors only. This course covers material on basic concepts, terms, and the integration of primary functions in electric utility systems, including an overview of the utility regulatory environment and markets, general business model of regulated and unregulated utilities, and electric generation options and economic dispatch. (Irreg.)

EMBA 5261 Energy and Environment 1 Credit Hour
Prerequisite: Graduate standing and EMBA majors only. An introduction to the global energy industry's past, present, and future, along with the history and current issues/challenges that different regions face. The course provides a broad look at the fundamentals (resources, politics, culture, regulatory, and legal framework, plus environmental issues) that impact world energy supply and demand. (Irreg.)

EMBA 5271 Energy and Environment II 1 Credit Hour
Prerequisite: Graduate standing, EMBA 5261, and EMBA majors only. Introduces energy system from an environmental and human health perspective, and the industry's social license to operate. Examines energy supply and use, its environmental and human health impact and mitigating factors. Discusses energy system organization: how we got here, how it operates, feasible paths going forward, and how to leverage forces of change for a more sustainable energy future. (Irreg.)
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMBA 5281</td>
<td>Introduction to Energy Systems I</td>
<td>1</td>
<td>Graduate standing and EMBA in Renewables majors only</td>
</tr>
<tr>
<td>EMBA 5291</td>
<td>Electric Power Systems</td>
<td>1</td>
<td>Graduate standing and EMBA in Renewables majors only</td>
</tr>
<tr>
<td>EMBA 5301</td>
<td>Transportation and Residential, Commercial &amp; Industrial Energy Systems</td>
<td>1</td>
<td>Graduate standing and EMBA in Renewables majors only</td>
</tr>
<tr>
<td>EMBA 5312</td>
<td>Introduction to Accounting for Renewable Energy</td>
<td>2</td>
<td>Graduate standing and EMBA in Renewables majors only</td>
</tr>
<tr>
<td>EMBA 5322</td>
<td>Managing Change in Renewables - Strategy and Leadership</td>
<td>2</td>
<td>Graduate standing and EMBA in Renewables majors only</td>
</tr>
<tr>
<td>EMBA 5331</td>
<td>Accounting for Renewable Energy</td>
<td>1</td>
<td>Graduate standing and EMBA in Renewables majors only</td>
</tr>
<tr>
<td>EMBA 5341</td>
<td>Cyber-Physical Security and Resilience for Smart Grid</td>
<td>1</td>
<td>Graduate standing and EMBA in Renewables majors only</td>
</tr>
<tr>
<td>EMBA 5351</td>
<td>Renewable Energy Law and Regulations</td>
<td>1</td>
<td>Graduate standing and EMBA in Renewables majors only</td>
</tr>
<tr>
<td>EMBA 5361</td>
<td>Introduction to Energy Systems II</td>
<td>1</td>
<td>Graduate standing and EMBA in Renewables majors only</td>
</tr>
<tr>
<td>EMBA 5371</td>
<td>Data Analytics and Digitization</td>
<td>1</td>
<td>Graduate standing and EMBA in Renewables majors only</td>
</tr>
<tr>
<td>EMBA 5381</td>
<td>Renewable Energy Analysis and Forecasting</td>
<td>1</td>
<td>Graduate standing and EMBA in Renewables majors only</td>
</tr>
<tr>
<td>EMBA 5391</td>
<td>Renewable Energy Project – Business Plan</td>
<td>1</td>
<td>Graduate standing and EMBA in Renewables majors only</td>
</tr>
<tr>
<td>EMBA 5402</td>
<td>Renewable Energy Project – Develop, Implement, and Manage</td>
<td>2</td>
<td>Graduate standing and EMBA in Energy majors only</td>
</tr>
<tr>
<td>EMBA 5403</td>
<td>Renewable Energy Project (Capstone)</td>
<td>3</td>
<td>Graduate standing and EMBA in Renewables majors only</td>
</tr>
</tbody>
</table>
EMBA 5412  Carbon Management: Strategies and Steps  2 Credit Hours
Prerequisite: Graduate standing and EMBA in Energy majors only. Carbon footprint is the amount of carbon dioxide, or Greenhouse Gas Emissions, that organizations contribute to the environment. This course is on developing and implementing a long-term carbon management plan to provide an organization with strategies and steps that will help prepare the organization for the physical and economic risks of climate change, remaining competitive in a low carbon economy. (Irreg.)

EMBA 5421  ESG and Sustainability  1 Credit Hour
Prerequisite: Graduate standing and EMBA in Energy majors only. Sustainability factors are part of the fundamentals needed to attain higher returns, organizational resilience, and stakeholder trust. Environmental, social, and governance (ESG) risks have gained increasing attention, and organizations are seeking to proactively manage and report on their ESG risks. This course will provide an understanding of ESG and how to implement sustainable ESG requirements. (Irreg.)

EMBA 5431  Financing Hydrocarbon Projects  1 Credit Hour
Prerequisite: Graduate standing and EMBA in Energy majors only. This course is designed to teach students how to finance hydrogen projects and to provide an understanding of the steps involved in valuation, financing, structuring a deal, addressing carbon footprint issues, and packaging for presentation for securing investments. (Irreg.)

EMBA 5441  Renewable Energy Technology and Innovation  1 Credit Hour
Prerequisite: Graduate standing and EMBA in Energy majors only. Innovations in renewable energy encompass all new approaches that help to overcome barriers and result in accelerated deployment of renewables supporting the energy transition. Innovation powers the ongoing transformation of the global energy system. This course provides a broad overview about energy-related innovation and technology issues, and what they may mean for the future of energy and energy transition. (Irreg.)

EMBA 5451  Renewable Energy Project Valuation  1 Credit Hour
Prerequisite: Graduate standing and EMBA in Energy majors only. This course introduces valuation concepts and the main factors affecting the valuation of a broad range of renewable energy assets, projects, and business enterprises. (Irreg.)