



Office Use Only: PP#

**Cover Sheet for In-State Institutions
New Program or Substantial Modification to Existing Program**

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|---------------------------------|--------------------------------------|
| Institution Submitting Proposal | Embry-Riddle Aeronautical University |
|---------------------------------|--------------------------------------|

Each action below requires a separate proposal and cover sheet.

- | | |
|---|---|
| <input checked="" type="radio"/> New Academic Program | <input type="radio"/> Substantial Change to a Degree Program |
| <input type="radio"/> New Area of Concentration | <input type="radio"/> Substantial Change to an Area of Concentration |
| <input type="radio"/> New Degree Level Approval | <input type="radio"/> Substantial Change to a Certificate Program |
| <input type="radio"/> New Stand-Alone Certificate | <input type="radio"/> Cooperative Degree Program |
| <input type="radio"/> Off Campus Program | <input type="radio"/> Offer Program at Regional Higher Education Center |

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|--|--|---|-------------------------|--------------------------|
| Payment <input checked="" type="radio"/> Yes | Payment <input type="radio"/> No | Payment <input type="radio"/> R*STARS # | Payment Amount: \$6,800 | Date Submitted: 09/06/23 |
| Submitted: <input type="radio"/> No | Type: <input checked="" type="radio"/> Check # 4009872 | | | |

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|---|--|
| Department Proposing Program | College of Business |
| Degree Level and Degree Type | Bachelor's |
| Title of Proposed Program | B.S. in Logistics and Supply Chain Management |
| Total Number of Credits | 120 |
| Suggested Codes | HEGIS: CIP: 52.0203 |
| Program Modality | <input checked="" type="radio"/> On-campus <input type="radio"/> Distance Education (fully online) <input type="radio"/> Both |
| Program Resources | <input checked="" type="radio"/> Using Existing Resources <input type="radio"/> Requiring New Resources |
| Projected Implementation Date <small>(must be 60 days from proposal submission as per COMAR 13B 02.03.03)</small> | <input type="radio"/> Fall <input checked="" type="radio"/> Spring <input type="radio"/> Summer Year: 2024 |
| Provide Link to Most Recent Academic Catalog | URL: https://catalog.erau.edu/worldwide/business/bachelors/logistics-supply-chain-management/ |
| Preferred Contact for this Proposal | Name: Nicole Wallace |
| | Title: Associate Director, State Authorizations |
| | Phone: (386) 481-9096 |
| | Email: wwstateauth@erau.edu |
| President/Chief Executive | Type Name: John R. Watret, Ph.D. |
| | Signature: Date: 9/18/23 |
| | Date of Approval/Endorsement by Governing Board: |

Revised 1/2021

OOS NEW PROGRAM REVIEW FURTHER REQUEST

MARYLAND HIGHER EDUCATION COMMISSION

Application for New Academic Programs for Out-of-State Degree-Granting
Institutions that Operate in Maryland

This questionnaire, properly completed with supporting documentation, shall serve as an application for approval for new academic programs for Out-of-State Degree-Granting Institutions under extended operational approval that operate in Maryland under the Code of Maryland Regulations (COMAR) 13B.02.01.06

Out-of-State Degree-Granting Institutions that are not under extended operational approval can add additional programs using the Out-of-State Renewal Application, as per COMAR 13B.02.01.08, which can be found on the MHEC website.

[If these programs/classes are to be offered at a military installation and the recruitment and enrollment of students is limited to active duty personnel, their dependents, or civilians employed at the installation, and if the institution waives its right to claim veterans' benefits for enrolled students, do not complete this application. Complete an Application for Exemption to COMAR 13B.02.01 instead.]

Please Note: A separate application form must be completed and submitted with all supporting documentation for each proposed location in Maryland.

PROPOSED START DATE: 02/01/2024

Applications should be submitted at least 5 months prior to the proposed start date.

INSTITUTION APPLYING FOR APPROVAL.

Name of Institution: Embry-Riddle Aeronautical University

Web Address: www.erau.edu

OPEID Code: 001479

U.S. Department of Education, Office of Postsecondary Education, ID Code -- Title IV eligibility.

Chief Executives Officer: John R. Watret, Ph.D.

Mailing Address: 1 Aerospace Boulevard, Daytona Beach, FL 32114-3900

Telephone: 386-481-9096

Email: wwstateauth@erau.edu

Institutional Liaison: Name and title of the individual who will serve as liaison to the Maryland Higher Education Commission:

Name: Nicole Wallace

Title: Associate Director, State Authorizations

Mailing Address: 1 Aerospace Boulevard, Daytona Beach, FL 32114-3900

Telephone: 386-481-9096

Email: wwstateauth@erau.edu

***** CERTIFICATION *****

I hereby affirm that the answers given in this application and its attachments are accurate and complete and further agree to comply with the *Annotated Code of Maryland* and State regulations governing the operation of out-of-State degree-granting institutions (COMAR 13B.02.01).

9/8/23 _____
Date

Signature of Chief Executive Officer

Electronic applications are preferred for applications. You can send your application to ooauthorization.mhec@maryland.gov

All payments should be mailed to:
Maryland Higher Education Commission
Director of Academic Affairs
6 N. Liberty St., 10th Floor
Baltimore, Maryland 21201

A copy of these regulations can be found on the Maryland Higher Education Commission's web site www.mhec.state.md.us

I. SUPPORTING DOCUMENTATION.

Only a complete application can be acted upon. While separate application forms must be completed and submitted for each proposed location, the following Supporting Documentation needs to be included only once for the entire package of applications. **CHECK EACH ITEM AS ATTACHED.**

Cover letter from the chief academic officer addressed to the Secretary of Higher Education requesting the approval of the new program.

Out-of-State New Program and Sub Mod Cover Sheet with all required signatures.

Program Review Fees COMAR 13B.02.03.02-1

A. Except as provided in §C of this regulation, each institution of higher education shall pay an academic program review fee for each program review action as provided in this regulation.

B. The following schedule sets forth the fees for academic program review actions.

Click here for the Schedule

II. APPLICATION QUESTIONNAIRE

This questionnaire, properly completed with supporting documentation, shall serve as an application for approval for new academic programs for Out-of-State Degree-Granting Institutions that operate in Maryland under the Code of Maryland Regulations (COMAR) 13B.02.01.06

Please note: a separate application form must be completed and submitted with all supporting documentation for each proposed location in Maryland.

A/B. The institution shall present evidence demonstrating the educational need to establish operations, offer programs, and award the degrees in question in the State pursuant to COMAR 13B.02.01.06

(1) The degree to be awarded;

Bachelor of Science in Logistics and Supply Chain Management (CIP Code 52.0203)

(2) The area of specialization;

Logistics and Supply Chain Management

(3) The purpose or objective of the program or course of study to be offered;

The **objective** of the Bachelor of Science in Logistics and Supply Chain Management is to prepare students with a strong foundation of knowledge in technology, process, and “people solutions” for warehousing, distribution, and transportation operations; inventory management methods that optimize the supply chain; purchasing and procurement policies and procedures; metrics for tracking and analyzing supply chain performance; and best practices, regulations, and professional ethics.

The following are the learning objectives of the program:

- Comprehending the role of Management Information Systems (MIS) in enabling timely logistics management actions
- Assessing the common performance measures for logistics activities
- Evaluating supplier selection and evaluation criteria as part of the procurement process
- Appraising the linkage between demand management, order management, and customer service
- Understanding the strategic importance of facility location and warehousing in a logistical sense
- Evaluating the common performance measures for logistics activities
- Calculating the manner by which supplier selection process is conducted, and evaluating criteria needed as part of the procurement process

The program gives students the advanced knowledge and skill sets that set them apart as an informed professional with a thorough understanding of:

- Modeling approaches for effective problem solving and decision making
- Technology and process solutions for warehousing, distribution, and transportation operations
- Inventory management methods that optimize the supply chain from end to end.

- Purchasing and procurement policies and procedures in varied business settings.
- Metrics for tracking and analyzing supply chain performance.
- Concepts and competencies central to best practices, regulations, and professional ethics.

The program facilitates future training and education, including a master's degree and professional certifications such as the Certified Professional in Supply Management (CPSM) and Certified Professional in Supplier Diversity (CPSD) offered by the Institute for Supply Management (ISM); the Certified Supply Chain Professional (CSCP) offered by Association for Supply Chain Management (ASCM); and the Certified Professional Logistician (CPL) offered by the International Society of Logistics (SOLE). The certification process for the above may be found on the organizations' websites. The process may require exams and a minimum number of years of professional experience.

(4) Specific academic content of the program or course of study;

GENERAL EDUCATION

Communication Theory and Skills

| | | |
|--|---------------------|-----------|
| ENG 123 | English Composition | 3 credits |
| <i>This course focuses on the principles of using writing for thinking, as well as a tool for expressing ideas. It addresses the composing process, research and documentation, and rhetorical strategies for various audiences and purposes. Students develop their communicative, evaluative, critical thinking, and research writing abilities. Pre-Requisite: Qualifying score on the ERAU English Skills Assessment or course listed.</i> | | |

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| ENGL 222 | Business Communication | 3 credits |
| <i>This course is an introduction to effective business communication. Topics in oral, written, non-verbal and intercultural communications are covered. Research methods, effective speaking and the preparation of letters, memoranda and reports are emphasized.</i> | | |

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| Any Communication Theory and Skills course above ENGL 106 | 3 credits |
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Humanities

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| Humanities elective (lower or upper level) | 3 credits |
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|-----------------------------------|-----------|
| Humanities elective (upper level) | 3 credits |
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Social Sciences

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|---|----------------|-----------|
| ECON 210 | Microeconomics | 3 credits |
| <i>This course is an introduction to the economic principles of free enterprise supply and demand, private and social implications of revenue maximization, cost minimization, profit maximization, market structure, and resource markets. Current microeconomic issues in aviation (such as elasticity, pricing, taxes, subsidies, market implications, liability reform, evolution of airline completion, etc.) are discussed.</i> | | |

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|--|----------------|-----------|
| ECON 211 | Macroeconomics | 3 credits |
| <i>This course is an introductory analysis of employment, inflation, recession, GDP economic growth, national income/output and international trade with an emphasis on practical policy alternatives. Macroeconomic aviation applications such as the counter-cyclical growth of start-up airlines and consideration of ATC privatization are incorporated.</i> | | |

Physical and Life Science

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| Physics/Biology/Meteorology/Chemistry, etc. | 6 credits |
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Mathematics

Choice of one: 3 credits

STAT 211 Statistics with Aviation Applications

This course is a study of basic descriptive and inferential statistics. Topics include types of data, sampling techniques, measures of central tendency and dispersion, elementary probability, discrete and continuous probability distributions, sampling distributions, hypothesis testing, confidence intervals, and simple linear regression.

Or

STAT 222 Business Statistics

This course is a study of basic descriptive and inferential statistics. Topics include types of data, sampling techniques, measures of central tendency and dispersion, elementary probability, discrete and continuous probability distributions, sampling distributions, hypothesis testing, confidence intervals, and simple linear regression.

Any college algebra or higher math or any statistics 3 credits

Computer Science

Any Computer Science 3 credits

Total Credits -- General Education 36 credits

COMMON BUSINESS CORE

MGMT 201 Principles of Management

3 credits

A comprehensive overview of relevant management principles and practices as applied in organizations with focus on management theories, philosophies, and functions; Focus on the nature, operating principles, activities, and theories that form the basis for the management functions of planning, organizing, leading, and controlling.

MMIS 221 Introduction to Management Information Systems

3 credits

The course integrates many theories, concepts, and methodologies related to the implementation and use of Information Systems within an enterprise. Special attention is given to the following topics: Digital technology; Winning, engaging, and retaining consumers; Optimizing performance with enterprise systems and analytics; Managing business relationships, projects and codes of ethics.

MKTG 311 Marketing

3 credits

An exploration of marketing theory and marketing management; market research, customer relations, promotion, distribution and sales management, and creating customer value.

ACCT 210 Financial Accounting

3 credits

The use of financial accounting information in business operations. The accounting cycle; adjusting entries; merchandising operations; inventory; depreciation; accounting for assets, liabilities, and stockholder's equity; financial statement analysis.

ACCT 312 Managerial Accounting

3 credits

The use of managerial accounting information in business operations. Job order costing, process costing; cost management systems; cost-volume-profit analysis; costing methods; business decisions; budgets; control activities; performance measurement.

OBLD 317 Organizational Behavior

3 credits

Overview and analysis of various behavioral concepts affecting individual and group performance within business organizations with an emphasis on research, theory, and practice.

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| MGMT 325 | Social Responsibility and Ethics in Management | 3 credits |
| <i>Inquiry into ethics and social responsibility for managers. Economic, legal, political, environmental, technological social issues. Interactions between government, business, and society.</i> | | |
| FINE 332 | Corporate Finance I | 3 credits |
| <i>Finance functions as used by management including financial analysis and control, financial planning, short and long-term financings, risk and return relationship, capital investment evaluation, cost of capital, and risk in planning financial strategies. Aviation-related businesses are emphasized.</i> | | |
| BUSW 335 | International Business | 3 credits |
| <i>Attention is focused on the impact of foreign trade on the broader aviation industry and their contribution to economic development. Analysis of economic development and international trade with an examination of the opportunities and threats of the complex environment of international business and current U.S. relations with other nations.</i> | | |
| BUSW 390 | Business Law | 3 credits |
| <i>A survey of the legal aspects of business transactions is provided. Areas covered include contracts, partnerships, corporations, consumer credit, and the government's influence over business law.</i> | | |
| LGMT 420 | Management of Production and Operations | 3 credits |
| <i>An intensive study of management of production and operations in all organizations, both service-oriented and product-oriented, will be conducted. Scheduling, inventory control procurement, quality control, and safety are investigated. Particular attention is given to applications of aviation-oriented activities.</i> | | |
| MGMT 436 | Strategic Management | 3 credits |
| <i>This course introduces students to strategic management principles involving strategy, formulation, implementation, evaluation and organization analysis are studied. Case analysis, employing strategic management principles, is used to solve and examine organizational problems. Total Quality Management concepts are studied for improvement of organizational effectiveness.</i> | | |
| Total Credits – Common Business Core | | 36 credits |

LOGISTICS AND SUPPLY CHAIN MANAGEMENT CORE

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| BUSW 352 | Business Quantitative Methods | 3 credits |
| <i>Development, implementation, and utilization of business models for managerial decision making. Various techniques for modeling, such as statistical analyses techniques, data analysis, regression and correlation analysis, forecasting, simulation, and optimization models are covered. Developing models needed in decision support systems using Microsoft Excel.</i> | | |
| LGMT 236 | Principles of Procurement Management | 3 credits |
| <i>This course introduces students to the procurement function of the firm including the strategic impact of purchasing and supply chain management on competitiveness and profitability. Students will gain experience with the underlying business processes that flow from and support the purchasing process using relevant SAP modules. The purchasing process is examined as it relates to producing products and services, taking and fulfilling orders, billing for products and services rendered, and recording revenues and payments to vendors. The relationship between purchasing and inventory management, materials management, just- in-time manufacturing, and manufacturing resource planning will be explored within a global context. The role of supply chain partnerships is also addressed including how to evaluate, bargain, and negotiate contracts with suppliers in an ethical manner while considering risks.</i> | | |
| LGMT 331 | Transportation Principles | 3 credits |
| <i>The basic principles of the several modes of transportation (air, sea, rail, highway, and pipeline) are analyzed. Topics include problems of competition, the importance of each in the economy, and future developmental prospects.</i> | | |

LGMT 400 Business Process Integration 3 credits
In this course, students will exercise their knowledge of business processes to manage end to end transactions from the upstream, operations, and downstream value chain ranging from supplier to customer. Students will employ SAP to initiate, manage and complete integrated transactions throughout a wide variety of case scenarios.

LGMT 430 Business Process Configuration 3 credits
In this course, students will learn the fundamentals to configure ERP systems. The students will get an understanding of the options available for configuration parameters and system's functional aspects.

LGMT 440 Advanced Professional Logistics 3 credits
In the advanced professional logistics course, a heavy emphasis is placed on the analysis of the Systems Engineering, Integrated Logistics Support and other previously learned business logistics theories and concepts to determine their appropriate application. A secondary emphasis is placed on the horizontal integration of these theories and concepts in a practical framework, which will serve as professional guidance for the business logistics manager.

LGMT 444 Principles of Supply Chain Management 3 credits
Supply Chain Management is one of the hottest topics in business today. The focus of this course is on understanding the history, principles, and major elements of supply chain management. Specific topics include sourcing and purchasing management; managing supplier relationships; demand forecasting; inventory management; quality management; domestic and international transportation; customer relationship management; enterprise resource planning systems; facility location decision-making; performance management; and future challenges facing supply chain managers

Total Credits – Business Analytics Core **21 credits**

SPECIFIED ELECTIVES

Technical transfer credits **or** College of Business minor **or** College of Business electives 12 credits

If technical transfer credit is not applicable, the 12 hours may be used only toward College of Business (COB) minors or COB electives. Minors require fulfillment of a minimum of 15 credit hours. If no minor is chosen, then 200-300-400 level COB courses may be used.

Open Electives 15 credits

Total Electives 27 credits

TOTAL DEGREE REQUIREMENTS 120 CREDITS

(5) The quality of the proposed program in comparison to existing programs;

University of Maryland, College Park, offers a Bachelor of Science with a Supply Chain Management Major. The 120-credit program is comparable to the Embry-Riddle Aeronautical University – Worldwide program, as noted **Table 1** below. Listed on the right column are courses in the University of Maryland program that are similar/comparable to courses required for the Embry-Riddle program.

Morgan State University offers a Bachelor of Science in Services and Supply Chain Management. This 120-credit program is comparable to the Embry-Riddle program. **Table 2** is a comparison between the Morgan State University program and the Embry-Riddle program.

Table 1

**Embry-Riddle Aeronautical University – Worldwide: BS in Logistics and Supply Chain Management
And
University of Maryland: Bachelor of Science, Supply Chain Management Major**

| Embry-Riddle Degree Requirements | Comparable University of Maryland Requirements |
|--|--|
| General Education | General Education: |
| ENGL 123, ENGL 222 and “Any Communication Theory and Skills above ENGL 106” (9 credit hours) | ENGL 101 (FSAW) Academic Writing and COMM 110, 107 Oral Communication: Principles and Practices or 200 Critical Thinking and Speaking (FSOC) (6 credit hours) |
| Humanities elective (Lower or Upper level) and Humanities (Upper Level) (6 credits) | Humanities (6 credits) |
| Social Science: ECON 210 Microeconomics and ECON 211 Macroeconomics (6 credits) | ECON 305: Intermediate Macroeconomic Theory and Policy or ECON 306: Intermediate Microeconomic Theory and Policy (3 credit hours) (The ECON 305 and ECON 306 are choices toward Upper-Level ECON Elective) |
| Physics/Biology/Meteorology (6 credits) | Natural Science Non-Lab (DSNS) and Natural Science Lab (DSNL) (7 credit hours) |
| STAT 211 Statistics with Aviation Applications or STAT 222 Business Statistics (3 credits) | BMGT 230 Business Statistics (3 credits) |
| Any College Algebra or Higher Math or Statistics (300 – 400 Level) (3 credits) | MATH 140 Calculus I, or 136 Calculus for Life Science (FSAR) (3 credits) |
| Any Computer Science (3 credits) | |
| Core/Major – Business Core | |
| MGMT 201: Principles of Management (3 credits) | BMGT 110: Introduction to the Business Value Chain (3 credit hours) |
| MMIS 221: Introduction to Management Information Systems (3 credits) | BMGT301: Introduction to Info Systems (3 credits) |
| MKTG 311: Marketing (3 credits) | BMGT350: Marketing Principles (3 credits) |
| ACCT 210: Financial Accounting (3 credits) | BMGT220: Principles of Accounting I (3 credits) BMGT221: Principles of Accounting II (3 credits) |
| ACCT 312: Managerial Accounting (3 credits) | |
| OBLD 317: Organizational Behavior (3 credits) | BMGT364: Managing People and Organizations (3 credits) |
| MGMT 325: Social Responsibility in Ethics in Management (3 credits) | |
| FINE: 332: Corporate Finance (3 credits) | BMGT340: Business Finance (3 credits) |
| BUSW 335: International Business (3 credits) | BMGT446: International Finance (3 credits) |
| BUSW 390: Business Law (3 credits) | BMGT380: Business Law 1 (3 credits) |
| LGMT 420: Management of Production and Operations (3 credits) | BMGT385: Operations Management (3 credits) |
| MGMT 436: Strategic Management (3 credits) | BMGT495: Strategic Management (3 credits) |
| Core/Major – Logistics and Supply Chain Management | |
| BUSW 352: Business Quantitative methods (3 credits) | BMGT 332: Quantitative Models for Management Decisions (3 credits) (An elective from the University of Maryland course list) |
| LGMT 236: Principles of Procurement Management (3 credits) | BMGT 472: Purchasing and Inbound Logistics (3 credits) |
| LGMT 331: Transportation Principles (3 credits) | BMGT 370: Introduction to Transportation (3 credits) |

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| LGMT 400: Business Process Integration (3 credits) | |
| LGMT 430: Business Process Configuration (3 credits) | |
| LGMT 440: Advanced Professional Logistics (3 credits) | |
| LGMT 444: Principles of Supply Chain Mgmt. (3 credits) | BMGT 372: Intro. to Logistics and Supply Chain Mgmt. (3 credits) |
| Electives | |
| Technical transfer credit or College of Business minor, or COB electives. (12 credits) <i>If technical transfer credit is not applicable, the 12 hours may only be used toward College of Business (COB) minors or COB electives. Minors require fulfillment of a minimum of 15 credit hours. If no minor is chosen, then 200-300-400 level COB courses may be used.</i> | |
| Open electives (15 credits) | |
| Total Degree Requirements: 120 credit hours | Total Degree Requirements: 120 credit hours |

Table 2

**Embry-Riddle Aeronautical University – Worldwide: BS in Logistics and Supply Chain Management
And
Morgan State University: Bachelor of Science in Services and Supply Chain Management**

| Embry-Riddle Degree Requirements | Comparable Morgan State University Requirements |
|--|--|
| General Education | |
| ENGL 123, ENGL 222 and “Any Communication Theory and Skills above ENGL 106” (9 credits) | |
| Humanities elective (Lower or Upper level) and Humanities (Upper Level) (6 credits) | |
| Social Science: ECON 210 Microeconomics and ECON 211 Macroeconomics (6 credits) | |
| Physics/Biology/Meteorology (6 credits) | |
| STAT 211 Statistics with Aviation Applications or STAT 222 Business Statistics (3 credits) | |
| Any College Algebra or Higher Math or Statistics (300 – 400 Level) (3 credits) | |
| Any Computer Science (3 credits) | |
| Common Business Core | |
| MGMT 201: Principles of Management (3 credits) | BUAD 202: Professional Development (3 credits) |
| MMIS 221: Introduction to Management Information Systems (3 credits) | INSS 360: Management Information Systems (3 credits) |
| MKTG 311: Marketing (3 credits) | MKTG 331 Principles of Marketing (3 credits) |
| ACCT 210: Financial Accounting (3 credits) | ACCT 201 Principles of Accounting I and ACCT 202 Principles of Accounting II (6 credits) |
| ACCT 312: Managerial Accounting (3 credits) | FIN 343 Managerial Finance (3 credits) |
| OBLD 317: Organizational Behavior (3 credits) | MGMT 324 Organizational Behavior (3 credits) |
| MGMT 325: Social Responsibility in Ethics in Management (3 credits) | BUAD 326 Business and Society: Ethics and Sustainability (3 credits) |
| FINE 332: Corporate Finance (3 credits) | |
| BUSW 335: International Business (3 credits) | BUAD 327 Fundamentals of International Business (3 credits) |
| BUSW 390: Business Law (3 credits) | BUAD 381 The legal and Ethical Environment of Business (3 credits) |
| LGMT 420: Management of Production and Operations (3 credits) | |

| | |
|---|---|
| MGMT 436: Strategic Management (3 credits) | |
| Core: Logistics and Supply Chain Management | |
| BUSW 352: Business Quantitative Methods (3 credits) | |
| LGMT 236: Principles of Procurement Management (3 credits) | SSCM 350 Procurement Management (3 credits) |
| LGMT 331: Transportation Principles (3 credits) | |
| LGMT 400: Business Process Integration (3 credits) | |
| LGMT 430: Business Process Integration (3 credits) | |
| LGMT 440: Advanced Professional Logistics (3 credits) | SSCM 355 Strategic Procurement and Logistics Management (3 credits) |
| LGMT 444: Principles of Supply Chain Management (3 credits) | SSCM 330 Supply Chain Management and Sustainability (3 credits) |
| Electives | |
| Technical transfer credit or College of Business (COB) minor or COB electives. (12 credits) <i>If technical transfer credit is not applicable, the 12 hours may only be used toward College of Business (COB) minors or COB electives. Minors require fulfillment of a minimum of 15 credit hours. If no minor is chosen, then 200-300-400 level COB courses may be used.</i> | |
| Open electives (15 credits) | |
| Total degree requirements: 120 credit hours | Total degree requirements: 120 credit hours |

(6) An analysis of the market for the program;

The *Bureau of Transportation Statistics* recognizes Maryland as one of the states that is key in transporting commodities, goods, and services. Not only within its own state lines, but through the United States as a whole. Maryland is a major contributor of the shipment of commodities, goods, and services via air (airports), sea (ports), railway (train) and land (freight via trucking).

- According to the Bureau of Transportation Statistics TranStats, the amount of freight carried by the for-hire transportation industry rose 0.3% in May 2022, rising after the previous month (April 2022) decline.
- From May 2021 to May 2022 the index rose 2.6% compared to a decline of 2.0% from May 2019 to May 2021. The May increase came in the context of mostly positive results for several other indicators.
- The Federal Reserve Board Industrial Production (IP) Index grew by 0.2% in May, reflecting increases of 1.0% in utilities, and 1.3% in mining. The Institute for Supply Management Manufacturing (ISM) index was up 0.7 points to 56.1, indicating accelerating growth in manufacturing.
- **Trend:** The May freight index increase was the eighth month-over-month increase in nine months and followed a decrease in April, for a total increase of 4.4% since August 2021. The May Freight TSI is 11.8% above the pandemic low in April 2020; it has increased in 17 of the 25 months since that low. It is at its second highest point since that record level.
- **Index highs and lows:** For-hire freight shipments in May 2022 (140.1) were 47.5% higher than the low in April 2009 during the recession (95.0).
- **Year to date:** For-hire freight shipments measured by the index were up 2.1% in May compared to the end of 2021.
- **Long-term trend:** For-hire freight shipments are up 11.1% in the five years from May 2017 and are up

24.0% in the 10 years from May 2012.

- **Maryland’s transportation infrastructure:** (www.bts.gov)
 - 3 major airports (as defined by the FAA as Part-139 public use airports) (https://www.faa.gov/airports/airport_safety/part139_cert/)
 - 530 miles of waterway, with one major water port ranked as the top 150 ports
 - 769 miles of freight railroad.

(7) The State's equal educational opportunity obligations under State and federal law.

Embry-Riddle Aeronautical University is committed to ensuring that women and minorities are equitably represented among the student body, faculty, staff, and administration of the university, and to devote ample resources to achieving equal opportunity employment. These commitments are in alignment with the Maryland Code, Title 12, Subtitle 1, Section 12-107; Florida’s Statute, Title XLIV, Civil Rights, ss. 760.01-760.11; and the federal Civil Rights Act of 1964.

The following, an excerpt from “Civil Rights Equity and Sex/Gender-Based Harassment, Discrimination, and Sexual Misconduct Policy,” is the published Embry-Riddle policy on nondiscrimination:

Embry-Riddle Aeronautical University continually strives to recognize, respect, and celebrate the differences and cultural identities among individuals as we recruit, support, and embrace our diverse community. We work to provide a safe environment where self-expression is welcome. We strive to create a campus climate free of discrimination, so that networks, partnerships, and cultural competency continue to be fostered through leadership, integrity, care, and respect. In doing so, Embry-Riddle does not permit discrimination or harassment in its programs and activities on the basis of race, color, national origin, sex, gender identity, gender expression, sexual orientation, disability, veteran status, predisposing genetic characteristic, age, religion, pregnancy status or any other characteristic protected by university policy or state, local, or federal law.

This policy covers nondiscrimination in employment and in access to educational opportunities. Therefore, any member of the campus community, guest or visitor who acts to deny, deprive, or limit the educational, employment, and/or social access, benefits and/or opportunities of any member of the campus community on the basis of their actual or perceived membership in the protected classes listed above is in violation of the University policy on nondiscrimination. When brought to the attention of the University, any such discrimination will be appropriately remedied by the University according to the procedures below.

The following is an official statement of Embry-Riddle’s policy on nondiscrimination in employment, which appears in Policy 8.3.1 of the *Administrative Policy and Procedures Manual: Equal Employment Opportunity Policy*:

Purpose and Scope

To promote an employment environment free from all aspects of illegal discrimination. This policy applies to all employees at all locations of the University.

Policy

1. *The University will maintain a policy of nondiscrimination with all employees and applicants for employment. All aspects of employment within the University will be governed on the basis of merit,*

competence, and qualifications, and will not be influenced in any manner by race, creed, color, religion, gender, age, national origin, disability, protected veteran status, genetic information, sexual orientation, gender identity, or any other status protected by federal, state or local law. The university will provide equal employment opportunity and affirmative action for qualified individuals.

2. All decisions made with respect to recruiting, hiring, and promotions for all job classifications will be made solely on the basis of individual qualifications related to the requirements of the position. Likewise, the administration of all other personnel matters such as compensation, benefits, transfers, reduction-in-force, recall, training, education, and social/recreational programs will be free from any illegal discriminatory practices.

The statement below is found in the Embry-Riddle -- Worldwide Campus student handbook:

<https://worldwide.erau.edu/administration/student-handbook>

Our campus culture nurtures and celebrates different and unique perspectives, while valuing the ideas and efforts of individual contributors in a safe and non-judgmental environment. We are committed to attracting and retaining a diverse group of students, faculty, and staff. We promote civility and respect. We consider one of our missions to be the stewardship of students, who are our primary focus. Their well-being and feeling of belonging are paramount to Embry-Riddle Aeronautical University – Worldwide (ERAU-WW). We ensure that students feel welcomed and included into the ERAU-WW "family."

C. In addition, the out-of-State institution shall demonstrate that the proposed program, for which the institution is making application:

(1) Meets a critical and compelling regional or Statewide need; and

Since Maryland has 9,135 distribution and logistics companies, there is a high demand for logistics and supply chain professionals to meet the industry staffing needs. (<https://open.maryland.gov/industries/distribution-logistics/>)

The U.S. Bureau of Labor Statistics for 2022, suggests that 6,480 individuals were employed as “Logisticians” in the State of Maryland. The 6,480 total does not encompass self-employed workers/contractors and/or persons employed under other designations (such as supply-chain management), that also were considered “Logisticians.”

| | |
|---|---------------------------|
| Occupation:Logisticians(SOC Code131081) | |
| Period:May 2022 | |
| Area Name | Employment ⁽¹⁾ |
| Maryland(2400000) | 6480 |

(1)Estimates for detailed occupations do not sum to the totals because the totals include occupations not shown separately. Estimates do not include self-employed workers.

SOC code: Standard Occupational Classification code -- see <http://www.bls.gov/soc/home.htm>

Date extracted on :Jun 15, 2023

Data for Maryland’s “Occupational Employment and Wage Statistics Query System” by U.S. Bureau of Labor Statistics, 2021,

<https://data.bls.gov/oes/#/occGeo/One%20occupation%20for%20multiple%20geographical%20areas>

- According to onetonline.org, there was a total of 128 graduates from 4 major colleges and/or universities (University of Maryland, Cecil College, Mount St. Mary University and Morgan State) with degrees in Logistics and/or Supply Chain Management. (<https://www.onetonline.org/link/localtraining/13-1081.00?st=MD>)

- If the graduation trend continues, as listed above, the workforce needed to fill Logistics and/or Supply Chain Management positions will be deficient and will not be able to keep up with the industry’s future needs and/or demands.

(2) Is consistent with the Maryland State Plan for Postsecondary Education.

The Maryland State Plan for Postsecondary Education

(<https://mhec.maryland.gov/About/Pages/2017StatePlanforPostsecondaryEducation.aspx>) is aligned broadly with the Embry-Riddle Aeronautical University Strategic Plan. (<https://erau.edu/leadership/president/our-strategic-plan>)

The Maryland plan is built on the overarching goals of *access*, *success*, and *innovation*.

- *Access*: The Maryland Plan seeks to “Ensure equitable access to affordable and quality postsecondary education for all Maryland residents.” Similarly, the ERAU Plan supports an increase in institutional and philanthropic financial aid.
- *Success*: The Maryland Plan, Strategy 5, ensures “that statutes, regulations, policies, and practices that support students and encourage their success are designed to serve the respective needs of both traditional and non-traditional students.” Embry-Riddle’s Worldwide Campus, as the university’s online provider, has for decades served the non-traditional adult working student. Course curricula, class schedules, tuition rates, academic advisement, and other components of the educational experience are specifically geared to the non-traditional student.

The Maryland Plan, Strategy 5, includes a sub-strategy for improved “policies regarding academic program review that meet the State’s needs – e.g., workforce shortages, do not duplicate, do not saturate . . .” Embry-Riddle’s Data Analytics program offers skills that are clearly in demand in Maryland organizations that value employees who can advise in data-driven decisions and help solve complex business problems.

The Maryland Plan, Strategy 6, is to “Improve the student experience by providing better options and services that are designed to facilitate prompt completion of degree requirements.” Embry-Riddle’s online delivery of courses helps students complete their programs through frequent course offerings, nine-week terms, and asynchronous classes.

- *Innovation*: The Maryland Plan pledges to “Foster innovation in all aspects of Maryland higher education to improve access and student success.” Maryland’s Strategy 8 seeks to “support workforce development and improve workforce readiness.” Maryland’s Strategy 10 expands “support for research and research partnerships.” Embry-Riddle’s plan includes a strategy, “Undergraduate Discovery,” which integrates research “as a critical element to enrich the undergraduate curriculum and spur innovation.” Another strategy, “Innovation,” is designed to strengthen industry partnerships.

D. The out-of-State institution shall clearly state the demand and need for a program, for which the institution is making application, in terms of meeting present and future needs of the region and the State in general. Two kinds of need may be identified:

- (1) Societal needs, including the tradition of liberal arts education, which provides immeasurable returns to the State in part by instilling in citizens a capacity for advanced learning and individual and societal benefits regardless of workforce or market demand considerations; and**

Graduates of the ERAU Logistics and Supply Chain Management program will benefit from both the liberal arts and skill-specific components of the program. Students will learn and experience the values of student teamwork, critical thinking, intellectual curiosity, and other important qualities that benefit both the individual and society.

(2) Occupational needs relative to meeting workforce requirements or upgrading vocational or technical skills.

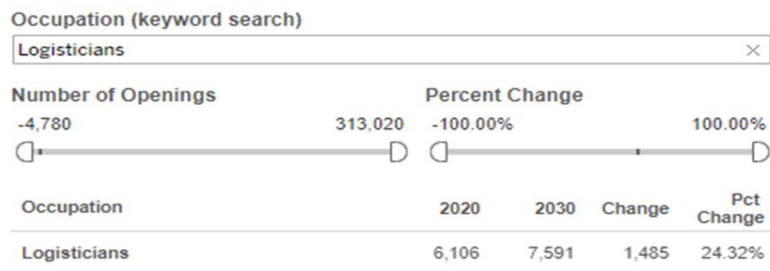
The following statements are from: (<https://open.maryland.gov/industries/distribution-logistics/>)

- *As e-commerce accelerates at lightning speed, companies are innovating to get their products from the warehouse to buyers’ doorsteps faster than ever. With as-soon-as-possible becoming the standard, companies cannot afford to fall behind. Technology and process are important factors in efficient e-commerce, but location is the real game-changer for companies that need to move products or materials quickly.*
- *Maryland’s distribution infrastructure is anchored by the Port of Baltimore, a deepwater [sic] port named one of “Three Ports Building for the Future.” The Baltimore/Washington International Airport (BWI) sits in the center of the State of Maryland, and three other international airports are accessible in the region.*

Five major highways and two Class 1 railroads operate and/or traverse through the State of Maryland. Due to the amount of cargo, goods, and/or services that travel through Maryland’s ports, roads, rail, and air, there is an exponential need for Logisticians and/or Supply Chain personnel to staff the needs of the State of Maryland and/or other feeder states. (<https://www.dllr.state.md.us/lmi/iandoproj/maryland.shtml>)

- 2020 – 2030 Logistician projection for demand shows a 24.32% increase. Within the 10-year growth projection, the need for logisticians goes from 6,106 in 2020 to 7,591 by 2030 (an increase of 1,485).

Maryland Long Term Occupational Projections (2020 - 2030)



Note. The data for “Maryland Long Term Occupation Projections (2020 – 2030)” by the Maryland Department of Labor, (<https://www.dllr.state.md.us/lmi/iandoproj/maryland.shtml>)

- According to onetonline.org, currently there are 267 job postings for Logistics, Supply Chain and/or other feeder Logistics positions in the State of Maryland. (<https://www.onetonline.org/link/localjobs/13-1081.00?st=MD>)

E. Market Demand Data

(1) The out-of-State institution shall present data projecting market demand and the availability of openings in the job market to be served by the new program for which the institution is making application. The type of information submitted will vary, depending on the program, but may include workforce and employment projections prepared by the federal and State governments as well as professional and trade associations.

Note: Additional data supporting the market demand for graduates of the program in Maryland are presented in sections C (1) and D (2) above.

According to Maryland.gov, *at the center of the East Coast . . . Maryland anchors one of the country’s busiest commercial corridors—and products are within an overnight drive of one-third of the U.S. population.*

Maryland’s prime location makes it ideal for logistics and distribution:

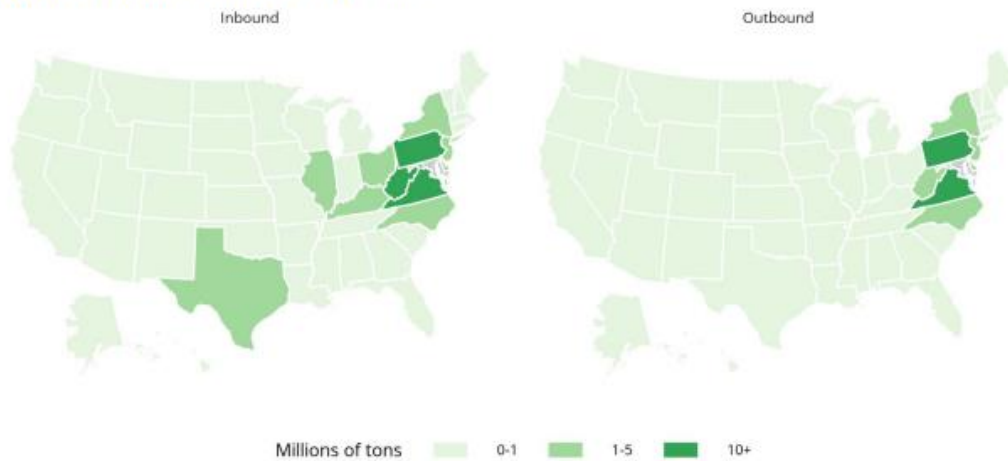
- *Maryland, which is part of the Boston – Atlanta Corridor, is ranked 5th in highest workforce concentration of logisticians.*
- *Port of Baltimore is #1 in the nation in handling cars, trucks and in Roll On/Roll Off cargo.*
- *Tradepoint Atlantic, a 3,300-acre multimodal industrial site centrally located in the Port of Baltimore, features a unique combination of access to deep-water berths, railroads and highway.*

The amount of freight and/or goods and services that travel in and out of the State of Maryland reinforces the need for skilled and trained industry stakeholders.

- The total value of interstate freight flow in Maryland for 2018 was \$402.4 billion. The freight flow tonnage in Maryland consisted of 271.1 million and “Ton-Miles of freight flow” for the state of Maryland was 62.6 billion.



MARYLAND INTERSTATE FREIGHT FLOWS. 2018



(2) With the exception of programs in the liberal arts, recently collected, existing, or new market surveys shall be used which clearly provide quantifiable and reliable data from prospective employers on the educational and training needs, and the anticipated number of vacancies, expected over the next 5 years.

Note. The data for “Maryland Interstate Freight Flows” by U.S. Department of Transportation Bureau of Transportation Statistics, 2018, <https://www.bts.gov/browse-statistical-products-and-data/state-transportation-statistics/state-transportation-numbers>

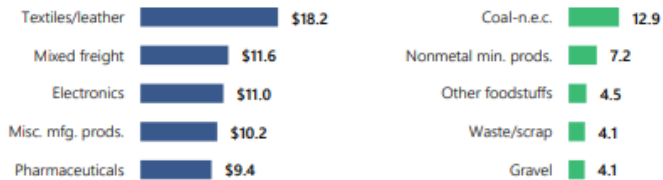
- Furthermore, the amount of goods, commodities and/or freight that are shipped from Maryland; shipped to Maryland; and shipped within Maryland contribute and/or impacts the State of Maryland’s Gross Domestic Product numbers to the amount of \$412.6 billion in 2018.
- From 2008-2018, the State of Maryland has seen a 32% increase in the distribution of freight and/or commodities.

STATE GROSS DOMESTIC PRODUCT



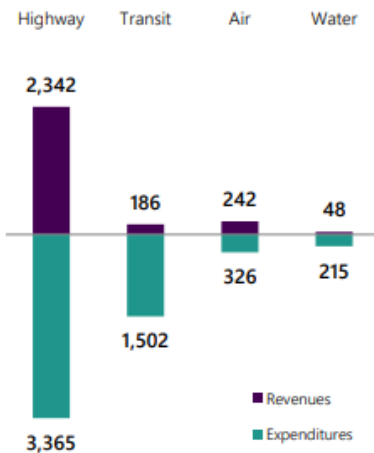
TOP COMMODITIES SHIPPED FROM MARYLAND

By value moved in billions of current dollars, 2018 By weight moved in millions of tons, 2018



STATE AND LOCAL GOVERNMENT TRANSPORTATION REVENUES AND EXPENDITURES

Millions of current dollars, 2017



TOP COMMODITIES SHIPPED TO MARYLAND

By value moved in billions of current dollars, 2018 By weight moved in millions of tons, 2018



TOP COMMODITIES SHIPPED WITHIN MARYLAND

By value moved in billions of current dollars, 2018 By weight moved in millions of tons, 2018



MARYLAND TRANSPORTATION BY THE NUMBERS

(3) In assessing demand for a new program, for which the institution is making application, an institution shall also present data showing the current supply of graduates in that program area in the State and region.

Logistics and/or Supply Chain Management Degrees/Certificates awarded in the State of Maryland (2021): (<https://www.onetonline.org/link/localtraining/13-1081.00?st=MD>)

- University of Maryland – College Park:
49 bachelor’s degrees awarded in Logistics, Materials, and Supply Chain Management major.
64 bachelor’s degrees awarded in Logistics, Materials, and Supply Chain Management, second major.
- Mount St. Mary’s University:
6 post-baccalaureate certificates awarded in Logistics and Supply Chain Management

- Morgan State University:
9 bachelor's degree awarded in Services and Supply Chain Management

Since Maryland has 9,135 distribution and logistics companies, there is a high demand for logistics and supply chain professionals to meet the industry staffing needs. (<https://open.maryland.gov/industries/distribution-logistics/>)

The U.S. Bureau of Labor Statistics for 2022, suggests that 6,480 individuals were employed as “Logisticians” in the State of Maryland. The 6,480 total does not encompass self-employed workers/contractors and/or persons employed under other designations (such as supply-chain management), that also were considered “Logisticians.” (<https://data.bls.gov/oes/#/occGeo/One%20occupation%20for%20multiple%20geographical%20areas>)

According to the Bureau of Transportation Statistics (www.bts.gov), Maryland's transportation infrastructure consists of:

- 3 major airports (as defined by the FAA as Part-139 public use airports) (https://www.faa.gov/airports/airport_safety/part139_cert/)
- 530 miles of waterway, with one major water port ranked as the top 150 ports
- 769 miles of freight railroad.

There is a critical need for logisticians in Baltimore County alone. Baltimore County is a critical hub for Transportation, Distribution & Logistics (TDL). Baltimore County's strategic east coast location makes it a critical hub for the TDL industry, which is central to the region's economy.

(<https://www.greaterbaltimore.org/news/blog/get-know-logistics-greater-baltimore-region>)

Baltimore County is home to the 3rd highest number of TDL employers in Maryland, including Coty (formerly Proctor & Gamble), Element Fleet Management, Stanley Black & Decker, Cowan Systems, and UPS Supply Chain Solutions. *With strong locational assets, including access to one of the nation's leading ports, miles of rail and major highways, the TDL industry is well situated for continued robustness and growth. Regional impacts include:*

- *Over 14,000 employers*
- *\$10 billion associated worker income*
- *235,811 jobs*

This data suggests that as Logistic and/or Supply Chain Management industry needs increase and graduation rates of Logistic and Supply Chain professionals do not keep up with the growing trends, the workforce needed to fill Logistics and/or Supply Chain Management positions will be deficient and will not be able to keep up with the industry's future needs and/or demands.