



Office Use Only: PP#

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

Institution Submitting Proposal	Embry-Riddle Aeronautical University
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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 |

Payment <input checked="" type="radio"/> Yes	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		

Department Proposing Program	College of Business		
Degree Level and Degree Type	Bachelor's		
Title of Proposed Program	B.S. in Project Management		
Total Number of Credits	120		
Suggested Codes	HEGIS:	CIP: 52.0211	
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/project-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 Project Management (CIP Code: 52.0211)

(2) The area of specialization;

Project Management (21 credits core courses)

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

The objective of the bachelor's degree program in Project Management is to position students for a project management profession. The most successful project manager is well versed in the technical soft skills of communication and team leadership, equipped in the hard skills of quantitative analysis to solve project problems, and poised to communicate complex issues to a host of project stakeholders to drive decision making.

Courses are designed so that upon completion, students will have achieved the following academic outcomes:

- Perform generally accepted project management techniques to plan and execute projects.
- Apply analytical tools for problem solving and effective project decision making.
- Apply ethical behavior and communications skills within the project team environment.
- Analyze project metrics for the purpose of project reporting and control.

The Bachelor of Science in Project Management program relies heavily on the use of current Project Management Information Systems (PMIS) software and other common-use software for word processing, presentation, and computation. While the use of some of these PMIS programs will be the subject of learning exercises within the program, the successful student will be expected to show proficient skill in word processing, spreadsheet usage, and presentation graphics.

The Embry-Riddle Worldwide Project Management online program is ranked #4 nationally by *BachelorsDegreeCenter.org*.

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

GENERAL EDUCATION

Communication Theory and Skills

ENG 123 English Composition 3 credits
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.

ENGL 222 Business Communication 3 credits
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.

Any Communication Theory and Skills course above ENGL 106 3 credits

Humanities

Humanities elective (lower or upper level) 3 credits

Humanities elective (upper level) 3 credits

Social Sciences

ECON 210 Microeconomics 3 credits
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.

ECON 211 Macroeconomics 3 credits
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.

Physical and Life Science

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

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.

MGMT 325 Social Responsibility and Ethics in Management 3 credits
Inquiry into ethics and social responsibility for managers. Economic, legal, political, environmental, technological social issues. Interactions between government, business, and society.

FINE 332 Corporate Finance I 3 credits
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.

BUSW 335 International Business 3 credits
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.

BUSW 390 Business Law 3 credits
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.

LGMT 420 Management of Production and Operations 3 credits
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.

MGMT 436 Strategic Management 3 credits
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.

Total Credits – Common Business Core 36 credits

PROJECT MANAGEMENT CORE

PMGT 300 The Project Management Profession 3 credits
In this course, students will be introduced to the project management profession. A common professional language is adopted as a foundation. Students explore the environment where project management is applied to organizational projects by project managers, following global standards and professional ethics.

PMGT 391 Project Planning 1 3 credits
This course introduces basic concepts and tools of project management, such as the work breakdown structure, network diagrams, and critical path. At the end of this course, students will be able to apply the tools to management project scope, schedule, cost, and resources, following global project management standards and professional ethics.

PMGT 394 Project Planning 2 3 credits
This course continues the study of basic concepts and technical tools of project management, such as the communication matrix, stakeholder analysis, and make-buy decisions. At the end of this course, students will be able to apply the tools to the management of project quality, communication, stakeholder, and procurement management, following global project management standards and professional ethics.

PMGT 400: Project Risk and Control 3 credits
This course applies concepts and technical tools of project management, such as the work risk matrix, status reports, and change logs. At the end of this course, students will be able to apply the tools to the management of project risk, project execution, and project control, following global project management standards.

PMGT 490 Project Management Capstone 3 credits
This course is designed to provide the student the opportunity to apply knowledge gained throughout the degree program. Demonstration of the study of project management, paying particular attention to technical project management, project leadership, and business strategy. Pre-Requisite: The Project Management Capstone is the last course taken in the BSPM Program.

Two courses from the following: 6 credits

PMGT 424 Project Management and Aviation Operations
This course introduces the student to the concept of project management within aviation operations. It addresses the three-dimensional goals of every project: the accomplishment of work in accordance with budget, schedule, and performance requirements. The procedures for planning, managing, and developing projects in an aeronautical environment are covered, as well as the aspects of controlling project configuration from inception to completion. Automated tools used to determine cost, schedule, staffing, and resource allocation are covered, as well as the process of determining the effectiveness and technical validity of aviation-related projects.

PMGT 461 Global Project Management
Emerging and evolving economies, world circumstances, and global competition require that project managers be able to lead and manage project in this challenging arena. Project Managers must operate within environments that contain diverse cultures and projects including multiple corporations crossing international boundaries. In this course, students will analyze the global environment and determine criteria for international project selection.

Additionally, students will consider requirements to prepare themselves, others, and the organization for global expansion.

PMGT 465 Managing Troubled Projects

This course applies concepts and technical tools of project management to manage troubled projects. At the end of this course, students will be able to determine the project status using the schedule baseline, cost estimations, and earned value management techniques, following global project management standards and professional ethics. Students will learn how to perform a project audit and will create a troubled project recovery plan.

PMGT 470 Agile Project Management

Students will acquire a working knowledge of agile project management methodologies, tools, and techniques. The working knowledge starts by differentiating agile project management from traditional project management lifecycles. Scrum methods are used to manage the project status using the schedule baseline and cost estimations, as outlined in the Agile Manifesto.

Total Credits -- Project Management Core 21 credits

ELECTIVES

Transfer Credit, Minor, or College of Business Electives 15 credits

Open Electives 12 credits

Total credit – Electives 27 credits

TOTAL DEGREE REQUIREMENTS 120 CREDITS

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

Towson University in Maryland offers a bachelor’s degree program in Business Administration with a concentration in Project Management and Business Analysis. Both the ERAU program and the Towson program are designed to help graduates become certified by the Project Management Institute (PMI).

The table below presents the degree requirements of the ERAU bachelor’s degree in Project Management as compared to similar degree requirements of Towson University’s program.

ERAU Degree Requirements	Comparable Towson University Requirements
General Education: 36 credit hours	
ENGL 123, ENGL 222 and any course in communication theory and skills above ENGL 106 (9 credit hours)	Business Communications (4 credit hours)
Humanities elective (Lower or Upper level) and Humanities (Upper Level) (6 credit hours)	
Social Science: ECON 210 Microeconomics and ECON 211 Macroeconomics (6 credit hours)	ECON 201 Microeconomic Principles or ECON 203 Honors Microeconomic Principles (3 credit hours)
Physics/Biology/Meteorology (6 credit hours)	
STAT 211 Statistics with Aviation Applications or STAT 222 Business Statistics (3 credit hours)	ECON 205 Statistics for Business and Economics I or MATH 231 Basic Statistics or MATH 233 Honors Basic Statistics (3 credit hours)
Any College Algebra or Higher Math or Statistics (300 – 400	MATH 211 Calculus for Applications or

Level) (3 credit hours)	MATH 273 Calculus 1 (3 credit hours)
Any Computer Science (3 credit hours)	
Core/Major – Business Core: 36 credit hours	
MGMT 201: Principles of Management (3 credit hours)	
MMIS 221: Introduction to Management Information Systems (3 credit hours)	
MKTG 311: Marketing (3 credit hours)	MKTG 349 Product Management (3 credit hours)
ACCT 210: Financial Accounting (3 credit hours)	ACCT 201 Principles of Financial Accounting or ACCT Honors Accounting Principles (3 credit hours)
ACCT 312: Managerial Accounting (3 credit hours)	ACCT 202 Principles of Managerial Accounting or ACCT 212 Honors Accounting Principles II (3 credit hours)
OBLD 317: Organizational Behavior (3 credit hours)	
MGMT 325: Social Responsibility in Ethics in Management (3 credit hours)	
FINE: 332: Corporate Finance (3 credit hours)	FIN 331 Principles of Financial Management (3 credit hours)
BUSW 335: International Business (3 credit hours)	
BUSW 390: Business Law (3 credit hours)	
LGMT 420: Management of Production and Operations (3 credit hours)	EBTM 365 Principles of Operations Management (3 credit hours)
MGMT 436: Strategic Management	MNGT 481 Strategic Management (3 credit hours)
Core/Major – Project Management: 21 credit hours	
PMGT 300 The Project Management Profession (3 credit hours)	EBTM 343 Introduction to Project Management (3 credit hours)
PMGT 391 Project Planning 1 (3 credit hours)	EBTM 310 Introduction to ERP Systems (3 credit hours)
PMGT 394 Project Planning 2 (3 credit hours)	
PMGT 400 Project Risk and Control (3 credit hours)	
Choose 2 from the following: (6 credit hours) PMGT 424 Project Management in Aviation Operations PMGT 461 Global Project Management PMGT 465 Managing Troubled Projects PMGT 470 Agile Project Management	
PMGT 490 Project Management Capstone (3 credit hours)	
Electives – Transfer Credit, Minor, or COB Electives	
Technical transfer credit, any minor, or College of Business 300-400 level electives (15 credit hours)	
Open Electives (12 credit hours)	
Total Degree Requirements: 120 credit hours	Total Degree Requirements: Complete the major in Business Administration and 24 units in the concentration, of which 18 units are in required courses and 6 units from elective courses.

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

Project managers are mid- to senior-level staff responsible for executing one or more projects. They oversee and assign duties to those working on the project and keep track of progress. Project coordinators assist with specific projects.

According to the *Occupational Outlook Handbook, Occupational Employment and Wages, May 2019*, Project Management Specialists and Business Operations Specialists numbered 29,930 in Maryland, 36,840 in the District of Columbia, and 36,920 in Virginia. The annual mean wage in Maryland was \$94,770, which was comparable to

neighboring states. Industries with the highest published employment were the federal executive branch (OES) with 173,850 positions; companies and enterprises with 77,330 positions; colleges, universities, and professional schools with 60,290 positions; management, scientific, and technical consulting services with 69,740 positions; and computer systems design and related services with 55,690 positions.

In the future, the *Occupational Handbook* predicts that employers will need to fill 2.2 million new project management-oriented positions every year through 2027. The biggest growth in these roles were predicted in health care, manufacturing and construction, information services and publishing, finance and insurance, and management and professional services.

According to O*NET OnLine, the following are projections in Maryland from 2020 through 2030 for (specifically) Information Technology Project Managers:

Employment (2020) – 18,120 employees
Projected employment (2030) – 20,560 employees
Projected growth (2020-2030) – 14%
Projected annual job openings (2020-2030) – 1,640

Source: <https://www.onetonline.org/link/localtrends/15-1299.09?st=MD>

According to the Maryland Department of Labor, Office of Workforce Information and Performance, the following are Maryland Long Term Occupational Projections for 2020—2030 for Project Management Specialists and Business Operations Specialists:

Number of openings (2020) – 49,635
Number of openings (2030) – 52,576
Percent change (2020-2030) – 5.93%

Source: <https://dllr.state.md.us/lmi/iandoproj/>

On May 16, 2023, *Indeed.com* advertised 2,335 project manager positions needing to be filled in Maryland. An additional 153 positions were designated for project coordinators. *Zip Recruiter* on the same day advertised 27,337 project management jobs in Maryland.

(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

Project managers are mid- to senior-level staff responsible for executing one or more projects. They oversee and assign duties to those working on the project and keep track of progress. Project coordinators assist with specific projects.

As noted above in Section A/B (6), the following information suggests that there is a compelling need in Maryland for project management managers.

According to the most recent *Occupational Outlook Handbook, Occupational Employment and Wages, May 2019*, Project Management Specialists and Business Operations Specialists numbered 29,930 in Maryland, 36,840 in the District of Columbia, and 36,920 in Virginia. The annual mean wage in Maryland was \$94,770, which was comparable to neighboring states. Industries with the highest published employment were the federal executive branch (OES) with 173,850 positions; companies and enterprises with 77,330 positions; colleges, universities, and professional schools with 60,290 positions; management, scientific, and technical consulting services with 69,740 positions; and computer systems design and related services with 55,690 positions.

In the future, the *Occupational Handbook* predicts that employers will need to fill 2.2 million new project management-oriented positions every year through 2027. The biggest growth in these roles were predicted in health care, manufacturing and construction, information services, and publishing, finance and insurance, and management and professional services.

On May 16, 2023, *Indeed.com* advertised 2,335 project manager positions needing to be filled in Maryland. An additional 153 positions were designated for project coordinators. *Zip Recruiter* on the same day advertised 27,337 project management jobs in Maryland.

In AY 2021-2022 Towson University conferred 481 bachelor's degrees in Business Administration. The information in the university's website (*IR – Student Data*) does not show a breakout of the degree concentrations Project Management. <https://www.towson.edu/ir/student-data.html>.

Comparing the number of job openings in Maryland for project managers and coordinators with the number of graduates from the Towson University Business Administration program, it appears that Maryland citizens earning a degree in Embry-Riddle's program would have ample career opportunities in the Maryland area.

(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 Project Management degree program offers skills that are clearly in demand in Maryland organizations that value employees who can deliver projects effectively and on time. [Section D (1) below]

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.

Embry-Riddle’s Project Management Program uses current Project Management Information Systems (PMIS) software, which is an innovative tool for gathering, integrating, and disseminating the outputs of the project management process. Experience with this software will help qualify graduates for immediate success as project managers in a variety of enterprises.

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 Project Management program will benefit from their knowledge and understanding of planning, organization, and completion of goals. Project management skills are life skills. They are applicable not only to the workplace but also to the management and planning of the individual’s life within the family, home, and community. All the courses within the program, whether general education or skill-specific, teach the 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 employment of project managers is expected to grow in number between 2020 and 2030. As noted in Section C (1) above, it appears that Maryland graduates of Embry-Riddle’s bachelor’s degree program in Project Management will have sufficient career opportunities in Maryland.

According to O*NET OnLine, the following are projections in Maryland from 2020 through 2030 for (specifically) Information Technology Project Managers:

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Source: <https://dllr.state.md.us/lmi/iandoproj/>

In AY 2021-2022 Towson University conferred 481 bachelor's degrees in Business Administration. However, the information in the university's website (IR – Student Data) does not show a breakout of the degree concentrations Project Management. <https://www.towson.edu/ir/student-data.html>.

Comparing the number of job openings in Maryland for project managers and coordinators with the number of graduates from the Towson University Business Administration program, it appears that Maryland citizens earning a degree in both the Towson and Embry-Riddle programs will find job opportunities in the Maryland area.

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: Market demand data for Maryland is also included in Section D (2) above.

The U.S. Bureau of Labor Statistics (2021) published the following U.S. projections for an occupational category that would likely include project management:

Operations specialties managers (11-3000): 2,243,300 employment 2021
2,510,800 projected employment 2031
11.9% growth 2021-2031
208,900 Annual average occupational openings

Source: <https://www.bls.gov/emp/tables/occupational-projections-and-characteristics.htm>

The Project Management Institute (PMI) has published the following (PMI (2017). Project Management Job Growth and Talent Gap 2017-2027)

The latest PMI-commissioned talent gap analysis by Anderson Economic Group (AEG) points to outstanding opportunities in jobs and career growth for project managers within the 11 countries studied. Through 2027, the project management-oriented labor force in seven project-oriented sectors is expected to grow by 33 percent, or nearly 22 million new jobs.

By 2027, employers will need nearly 88 million individuals in project management-oriented roles. China and India will represent more than 75 percent of the total project management-oriented employment.

This report shows that project managers are important contributors to productivity. Talent shortages in the profession can potentially create risks of nearly US\$208 billion in GDP over the 10-year period in the 11 countries examined.

The PMI report also notes that industries such as health care, manufacturing and construction, information services and publishing, finance and insurance, and management and professional services are expected to see the biggest growth in project-oriented roles.

(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.

According to *Learn.org*, a candidate for a project manager position will need a bachelor's degree, although candidates with prior experience and expertise in a specific area may not need a degree. A Project Management Professional Certificate from the Project Management Institute can serve as evidence of experience and dedication

to the career.

[https://learn.org/articles/What are the Education Requirements for Becoming a Project Manager.html](https://learn.org/articles/What_are_the_Education_Requirements_for_Becoming_a_Project_Manager.html)

O*NET OnLine advises that most of the occupations in their Job Zone Four, which includes project management, require “considerable preparation.” Most of the occupations require a four-year bachelor’s degree. Employees usually need work-related experience or training. <https://www.onetonline.org/link/details/13-1082.00>

Anticipated number of vacancies in the next five years:

Data provided in the preceding sections of this proposal suggest that there is a growing need for project managers in a wide range of organizations, both private and public. As noted in Section C (1), on May 16, 2023, *Indeed.com* advertised 2,335 project manager positions needing to be filled in Maryland at that time. An additional 153 positions were designated for project coordinators. *Zip Recruiter* on the same day advertised 27,337 project management jobs in Maryland.

(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.

In AY 2021-2022 Towson University conferred 481 bachelor’s degrees in Business Administration. The information in the university’s website does not show a breakout of the degree concentration, Project Management. <https://www.towson.edu/ir/student-data.html>.

However, comparing the number of job openings in Maryland for project managers and coordinators with the number of graduates from the current Towson University’ broader Business Administration program, it appears that Maryland citizens earning a degree in both the Towson program and Embry-Riddle’s program would have ample career opportunities in the Maryland area.