



## **DEAN OF THE COLLEGE OF ENGINEERING**

### **POSITION PROFILE**

Embry-Riddle Aeronautical University invites nominations and applications for the position of Dean of the College of Engineering at the institution's campus in Daytona Beach, Florida.

The University seeks a visionary and highly collaborative Dean of Engineering. The College of Engineering is dedicated to providing outstanding educational opportunities in engineering to undergraduate and graduate students. The Dean will lead the engineering faculty – who are dedicated to teaching excellence and actively engaged in research/scholarship – to even greater national and global prominence.

The University community stands together poised to elevate Embry-Riddle to an even more distinctive position within the higher education landscape, and to ensure that it continues to offer the most relevant, effective, and applied learning centered on the intersections of its broad offerings within the fields of aviation and aerospace education. The next Dean of the College of Engineering will join the Embry-Riddle community as it builds on current momentum and continues to elevate itself to a place of true distinction.

### **EMBRY-RIDDLE AERONAUTICAL UNIVERSITY: AN OVERVIEW**

Embry-Riddle Aeronautical University is the leader in aviation and aerospace higher education. Its mission is to teach the science, practice, and business necessary to prepare students for productive careers and leadership roles in business, government agencies, and the military.

The University was founded on December 17, 1925, exactly 22 years after the Wright Brothers' first flight, when T. Higbee Embry and John Paul Riddle formed the Embry-Riddle Company at Lunken Airport in Cincinnati, Ohio. The following spring the company opened the Embry-Riddle Flying School.

In 1939, Riddle joined John and Isabel McKay to establish the Embry-Riddle School of Aviation. They partnered with the University of Miami to provide flight training under the Civilian Pilot Training Program. Embry-Riddle experienced a period of decline in the 1930s but was revitalized with the outbreak of World War II in Europe and an increased demand for aviators and mechanics. Allied nations sent more than 25,000 people to Embry-Riddle's Florida centers to become pilots and aviation technicians.

Following World War II, the Embry-Riddle Aeronautical Institute (ERAI) continued to train pilots. The first president of ERAI, Jack R. Hunt, was named in 1963. In 1965, he consolidated Embry-

Riddle's flight training, ground school, and technical training programs and moved the campus to Daytona Beach, Fla., signaling the rebirth of Embry-Riddle and the start of its journey to world-class status. Within three years of the move, the institution was accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC). Two years later, in 1970, Embry-Riddle gained university status and was renamed Embry-Riddle Aeronautical University.

Today, the university is dedicated to education, outreach and engagement, and knowledge discovery across a wide range of academic disciplines. Embry-Riddle is committed to teaching excellence that reflects creative thought and innovation, giving its students the knowledge and experience for personal fulfillment and professional success. Like the aviation and aerospace industries it serves, Embry-Riddle is dynamic, constantly evolving to serve the educational needs of those who will be future industry, academic, and policy leaders.

Embry-Riddle Aeronautical University in Daytona Beach is a nonprofit, private institution offering more than 100 associate's, bachelor's, master's, and doctorate degree programs through the College of Arts & Sciences, the College of Aviation, the O'Maley College of Business, and the College of Engineering. The university is organized into three campuses. Providing traditional education in a residential setting are two campuses, in Daytona Beach, Fla. and Prescott, Ariz. The university's Worldwide Campus provides instruction to students through top-ranked online learning and in classrooms at more than 130 centers across the U.S., in Europe, Asia, and South America.

Embry-Riddle continues to pioneer industry-responsive degree programs and specialized courses, such as undergraduate degrees in spaceflight operations, unmanned aircraft systems and aerospace physiology. The university grants an MBA and Ph.D. in aviation. It is the first in the country to offer a course in hybrid and urban air mobility. Within the College of Engineering, Embry-Riddle offers three doctoral degrees: Aerospace Engineering, Electrical Engineering & Computer Science, and Mechanical Engineering.

The university offers advanced degrees in multiple areas including all aspects of aviation, unmanned systems, cybersecurity engineering and management, business, human factors, project management and occupational safety management.

Unifying and defining students, faculty, administration, and alumni is a shared passion for aviation and aerospace. The global reach and increasing complexity of these industries put Embry-Riddle in an enviable position, poised for growth and increased capacity for sponsored research. Nearly 90 percent of students engage in research, internship or capstone projects that provides hands-on experience and an opportunity to apply what they learn in classrooms, labs, and on the flight line.

Embry-Riddle is also a research center, developing solutions to real-world problems in partnership with the aerospace industry, other universities, and government agencies. Faculty members conduct research and mentor student-researchers in all colleges. Signature research focuses on aviation cybersecurity, aviation data science and business analytics, flight research, unmanned aerial systems and autonomous systems.

## **ONE UNIVERSITY, THREE CAMPUSES**

There are three Embry-Riddle campuses and satellite locations across the world, but Embry-Riddle is defined by a common purpose and dedication to student success. Integrating resources and

programs across campuses is a priority that allows the university to leverage competitive advantages. Embry-Riddle has a unique opportunity between Daytona Beach, Prescott, and Worldwide to optimize strengths and distinctions.

### **Daytona Beach, Florida Campus**

Embry-Riddle's 185-acre eastern campus is located along Central Florida's I-4 corridor, a short drive from Orlando and the Space Coast.

Serving more than 6,700 undergraduate and 800 graduate students from 50 states and nearly 100 countries, the Daytona Beach Campus is also home to the university's administrative headquarters. Adjacent to Daytona Beach International Airport, the campus offers undergraduate and graduate degrees from four colleges: [Arts and Sciences](#), [Aviation](#), [David B. O'Maley College of Business](#), and [Engineering](#).

The striking new Mori Hosseini Student Union, at the heart of campus, has become an iconic image representing Embry-Riddle's spirit of ingenuity. Daytona Beach is also home to the University's research park, the John Mica Engineering and Aerospace Innovation Complex (MicaPlex). This state-of-the-art building is a 50,000-square-foot innovation hub with ten specialized labs and a nearby subsonic wind tunnel.

### **Prescott, Arizona Campus**

Embry-Riddle's campus in Prescott, Arizona, 100 miles north of Phoenix, currently serves just over 3,000 students and has graduated more than 10,000 students since opening its doors in 1978. The campus is an integral part of the Prescott community and is becoming known as Arizona's STEM university. The campus has a rolling, seven-year strategic plan, that aligns with and supports the university's five-year plan.

This campus covers more than 500 acres of scenic western terrain. Campus life is centered in a one-square-mile area that centralizes academic, residential, and recreational resources.

The highest enrollment is in engineering programs, followed by aviation programs. Almost 20 percent of students are pursuing degrees in space physics, meteorology, forensics, gaming and simulation, air traffic management and unmanned aerial systems. Security and intelligence programs attract almost 17 percent of the current enrollment. A School of Business opened in 2018 and new programs continue to be added in strategic areas.

### **Worldwide**

Embry-Riddle Worldwide was established in 1970. Today it serves more than 23,000 students online and in classrooms globally. More than 130 locations and online courses deliver flexibility to students across the country and the world.

Led by a chancellor, the campus offers more than 50 undergraduate degrees, graduate degrees and certificate programs. Degree programs include aviation, business, communication, computer science, emergency services, engineering, human factors, management, safety, security, logistics and unmanned systems.

These diverse and dynamic programs support and connect students in a virtual learning community through web-based support groups and online forums. Embry-Riddle Worldwide also offers professional education programs to ensure the workforce builds critical skills.

In recognition of the quality of education and level of student engagement, U.S. News & World Report ranked Embry-Riddle No. 2 in their 2021 list of best bachelor's degrees in the nation, and No. 1 in terms of the most outstanding online bachelor's degree programs for veterans.

## **LEADERSHIP**

In 2017, [P. Barry Butler](#) became the sixth president of Embry-Riddle Aeronautical University. Under his presidency, Embry-Riddle continues to expand discovery-driven degree programs and its research park is home to new aerospace patents, technology transfer and startups. Butler has encouraged collaboration with industry, resulting in expedited hiring initiatives with leading aviation and aerospace industries. He is expanding the university's interest in aviation cybersecurity, aviation data analytics and autonomous vehicles. The university also created new partnerships to prime the aviation/aerospace pipeline.

Previously, Butler was Executive Vice President and Provost of the University of Iowa. He was responsible for more than 100 academic programs in 11 colleges. For ten years, he served as Dean of the College of Engineering. Butler is on the board of the Hoover Presidential Foundation and The Wings Club. He is a member of The Civic League of the Halifax Area. He is a private and glider pilot. He earned three degrees from the University of Illinois at Urbana-Champaign: a bachelor's in Aeronautical Engineering, a master's in Astronautical Engineering and a Ph.D. in Mechanical Engineering.

[Lon Moeller, J.D.](#) was appointed as Senior Vice President for Academic Affairs and Provost at Embry-Riddle Aeronautical University on April 2, 2018. Prior to that, he served as Associate Provost for Undergraduate Education and Dean of the University College at the University of Iowa. While at Iowa, Moeller also held the position of Associate Dean for the Undergraduate Program in the Tippie College of Business, and was a professor in the Department of Management and Organizations. Additionally, Moeller served as University Ombudsperson and as Co-Director for the Larned A. Waterman Iowa Nonprofit Resource Center. Moeller earned his B.B.A., M.A., and J.D. from The University of Iowa. He worked in private law practice and served as System Legal Counsel for the University of Wisconsin System before becoming a faculty member in the Tippie College of Business. Moeller has worked as a labor mediator and arbitrator, serving on several state and national labor arbitration panels. He is a frequent speaker on business ethics, conflict management, and negotiations. Moeller has co-written five books on the topics of business law, conflict management, management, and negotiations.

## **STRATEGIC PLAN**

Through a 10-month collaboration between students, faculty, staff, administration, and community stakeholders, Embry-Riddle created a [Strategic Plan \(2018-2023\)](#) that will help the institution stay true to its mission, advance its vision, and honor its values.

Following a series of internal assessments, analysis of best practices, and review of current opportunities, core teams proposed various strategic focuses and critical tasks aligned with five key

pillars. All University stakeholders were invited to provide feedback through open forums and digital response platforms. The plan was endorsed by Embry-Riddle's Board of Trustees in March 2018.

Each of the five key pillars is supported by a Strategic Implementation Team (SIT), tasked with the ongoing identification of best practices, key goals, success metrics, and next steps. These teams remain responsible for implementing these goals within the timelines and budgets they established.

## **ABOUT DAYTONA BEACH, FLORIDA**

More than 60,000 residents and 8 million annual visitors enjoy year-round moderate weather, quality educational choices, recreational activities, professional sports including NASCAR's premiere track, Daytona International Speedway and LPGA headquarters, an active arts community, and family-friendly beaches.

Daytona Beach, located on Florida's east coast in Volusia County, is internationally known for its beaches and its automobile racing roots but it also boasts historical properties, an aggressive redevelopment strategy, exciting residential and economic development opportunities, and thriving business establishments.

Situated along the Central Florida's I-4 corridor, Daytona Beach is just a short drive from Orlando and major theme parks (about one hour) and within three hours of Florida's west coast (Tampa, St. Petersburg).

To learn more about the greater Daytona Beach area, please visit the Daytona Regional Chamber of Commerce website: [www.daytonachamber.com](http://www.daytonachamber.com).

## **THE COLLEGE OF ENGINEERING**

The College of Engineering prepares students to become problem solvers, innovators, and leaders in their professions. Equipped with cutting-edge skills, the College's graduates take on the critical challenges humankind faces on earth, in space, and beyond.

The College's reputation and the engineering programs' high rankings manifest from a tradition of teaching excellence and a vast array of well-equipped [laboratories](#) and maker spaces, which enable the University's hands-on and learning-by-doing philosophy. The [John Mica Engineering and Aerospace Innovation Complex](#), contains Embry-Riddle's newest and most advanced laboratories, housing one of the most technologically advanced subsonic wind tunnels in the United States, delivering wind flow speeds up to 230 mph. The world-class facility is where engineering research, business incubator spaces, and the presence of aeronautics and space-focused industry collide to create an ecosystem of innovation and entrepreneurship support.

In five academic departments, serving 2,800 undergraduate and graduate students, the College offers 18 bachelor's, master's, and doctoral degree programs.

### **The Department of Aerospace Engineering**

Students with a passion for the high-tech engineering world of airplanes, helicopters, and spacecraft are right at home in the Department of Aerospace Engineering at Embry-Riddle. Founded in the 1950s, the department has a long history of excellence. The Aerospace Engineering Department is the largest in the country with 1,626 B.S. students, 99 M.S. students, and 35 Ph.D. students as of Fall 2020. The undergraduate Aerospace Engineering program was ranked No. 1 by the *U.S. News and World Report* for 16 years when Daytona Beach was classified among the non-PhD granting institutions, 2000-2015. Now in the Ph.D.-granting category, U.S. News & World Report ranks the undergraduate program as No. 8 in the nation, and the graduate program is currently ranked No. 33.

Aerospace Engineering deals with the scientific principles that govern the design of airplanes, spacecraft, and jet engines. After studying fundamental mathematics and physics, Aerospace Engineering students study the core areas of aerodynamics and propulsion, dynamics and control, and structures and materials. These studies give them the necessary background to take the year-long senior capstone aircraft/spacecraft/propulsion design courses. There are ample opportunities for lab courses and hands-on experiences.

To learn more about the Department's degree programs, please visit:

<https://daytonabeach.erau.edu/college-engineering/aerospace>.

### **The Department of Civil Engineering**

Students who graduate with a Bachelor of Science in Civil Engineering or a Master of Science in Civil Engineering do so with all the knowledge, confidence, and insight they need to make a significant impact in the field of civil engineering.

Civil engineering involves all the design activities that make the world habitable by humans — buildings, bridges, roadways, airports, and the other structures we take for granted all required civil engineering to bring them to reality. The Daytona Beach Campus is perfect for hands-on civil engineering projects, such as the concrete canoe and solar-powered systems. By taking classic civil engineering design problems, applying an approach using space-age technology, and then constructing that solution in a team, students develop the entire spectrum of skills needed to understand the engineering design cycle.

Small class sizes, hands-on projects, and dedicated faculty mentoring provide the basis for a modern education in applying engineering approaches to an ever-increasing spectrum of problems as environmental concerns collide with the increasing needs for transportation infrastructure, particularly in the aviation industry. The Department also investigates the infrastructure needed to make other locations, such as Mars, habitable by humans given modern technology.

To learn more about the Department's degree programs, please visit:

<https://daytonabeach.erau.edu/college-engineering/civil>.

### **The Department of Engineering Fundamentals**

The department does not offer degree programs; rather, the department provides the foundation for the degree programs offered by all of the other departments in the College of Engineering.

First-year students in aerospace engineering, electrical engineering, computer and software engineering, among other programs, begin with the Department of Engineering Fundamentals and then transition into their degree-oriented work during their second year on campus.

Faculty members have focused their education and research not just on solving engineering problems, but also on how best to teach engineering. That translates into more hands-on activities and other forms of active learning that take students out of the lecture hall and into the lab. In this way, students learn how to put theory into practice.

This involves a variety of technologies, from the most advanced computing systems down to the most basic — popsicle sticks and straws. With an approachable, knowledgeable faculty who are truly dedicated to encouraging success, students in this department get the best chance possible to move forward into their chosen fields with a firm footing in the basics they need to become great engineers.

To learn more about the Department's courses, please visit:

<https://daytonabeach.erau.edu/college-engineering/fundamentals>.

### **The Department of Mechanical Engineering**

The Department of Mechanical Engineering provides a strong foundation in all of the fundamental areas of Mechanical Engineering, along with focused tracks in areas of rapid employment growth such as high-performance vehicles, bio-mechanical systems, clean energy systems, and robotics.

Mechanical engineering is the broadest of the engineering professions, involving work in almost every technical area and in a wide variety of industries and organizations. It is also among the most enduring professional careers, with stable job opportunities during difficult economic periods.

The undergraduate program gives students a solid background in the basic mechanical engineering subjects so they can plan, analyze, design, and schedule mechanical systems, including those in high-performance vehicles, energy and power, biomedical systems, and robotics. Coursework is designed to give students a chance to work in teams and explore the breadth of engineering topics.

The graduate programs in Mechanical Engineering expand on this with advanced studies in engineering specializing in Electro-Mechanical Systems. Graduates are prepared to design and implement electro-mechanical systems. There is high demand for expertise in this area in a wide range of industries including aerospace, aviation, automotive, biomedical, and energy systems industries.

To learn more about the Department's degree programs, please visit:

<https://daytonabeach.erau.edu/college-engineering/mechanical>.

### **The Department of Electrical Engineering and Computer Science**

The Department of Electrical Engineering and Computer Science offers four undergraduate programs (Computer Engineering, Computer Science, Electrical Engineering, Software Engineering), five master's programs (Cybersecurity Engineering, Electrical and Computer Engineering, Software Engineering, Systems Engineering, Unmanned and Autonomous Systems Engineering), and the Ph.D. in Electrical Engineering and Computer Science. The department's twenty faculty members collaborate with undergraduate (278 count) and graduate (88, including

25 in the doctorate) students and colleagues in the college, throughout the university, and at other institutions to perform cutting edge research in areas ranging from additive manufacturing of antennas and wireless electronics to aviation cybersecurity to drone defense to UAV air traffic management to systems development in regulated industries. The department strives to be agile and inclusive. It is engaged in a five-year NSF funded project to employ the Agile framework Scrum in department operations, and it is committed to increased utilization of evidence-based and inclusive instructional practices.

For more information on the Department's degree programs, please visit: <https://daytonabeach.erau.edu/college-engineering/electrical-computer-software-systems>.

## **ROLE OF THE DEAN**

Reporting to the Senior Vice President for Academic Affairs and Provost, the Dean is the chief administrative, academic, and budgetary officer for the College of Engineering. The Dean serves, orchestrates, and executes the strategic vision of the College. The Dean serves as a role model of integrity and professionalism for the College's faculty and is accessible to both undergraduate and graduate students. The Dean collaborates closely with other deans, among others within the University, region, nation, and globe to coordinate academic programs, interdisciplinary initiatives, and traditional and cross-disciplinary scholarship.

The Dean will be an approachable, collaborative, and communicative community builder, serving as an articulate and strong advocate for the College. In addition, the Dean will possess a passion for engineering education, and will continue the important work of fostering the same in the College's many constituent groups.

In support of both students and faculty, the Dean must lead the development and implementation of innovative academic programs, improvements in the recruitment efforts of students, and comply with accreditation criteria and comprehensive academic assessment.

The Dean will facilitate the creation and sustainment of partnerships with likely or potential student employers and will work to bring externally funded research opportunities. The Dean will work with alumni, foundations, and corporations toward greater financial support for both the College and the University.

The Dean oversees 107 full-time faculty, 30 staff, and administers a budget of \$21.6 million.

## **Opportunities and Challenges**

As the University continues to grow and evolve, the next Dean will honor the legacy of the College of Engineering through a commitment to growing the educational and research aspirations of the College while remaining dedicated to undergraduate education. In addition, the next Dean will have the opportunity to address the following priorities:

- **Lead the development and implementation of a unifying and responsible strategic vision for the future of the College.** The next Dean will have the opportunity to lead the College in an inclusive planning and implementation process with the goal of further advancing the visibility, prominence, and quality of the College locally, nationally, and globally. It will be important for the new Dean to listen well and to integrate the vision of

the current leadership team with their own aspirational vision, and to have an understanding of the trends and opportunities in the engineering education landscape.

Additionally, it is essential that the next Dean prepares the College to meet the changes and challenges facing higher education during and following the COVID-19 pandemic. With the University facing a crowded marketplace for prospective students both in person and online, the next Dean will lead a transparent and inclusive process to identify an emerging set of priorities for the College that both stays true to its unique traditions and values, and also embraces a more creative, flexible, and entrepreneurial future.

- **Continue to strive for academic and research excellence.** The College offers its next Dean the opportunity to take full advantage of the impressive quality of its faculty; to advance the creative, entrepreneurial culture that drives research and discovery; and to provide vision and leadership for pedagogical innovation. The Dean should foster an environment of the highest expectations in teaching and research. The Dean will be expected to work with department chairs to ensure that all faculty members have opportunities to develop and contribute at every stage of their careers.
- **Expand the research profile of the College including opportunities for student research.** While maintaining a focus on engineering education, the next Dean will work closely with faculty and students to identify sources of funding to continue to build the research capacity of the College, including support from federal agencies, corporations, and other funding sources. The next Dean will seek new external partnerships while continuing to build upon existing partnerships with foundations, among other organizations, for teaching, research, and job opportunities and internships for students.
- **Lead the College to new opportunities with ERAU's other colleges, satellite locations, and regional campuses around the world.** The next Dean will be expected to advance the College and the University as a whole by forging programmatic, educational, and research partnerships with other colleges. The next Dean will leverage the strength of ERAU's system to identify and address recruitment opportunities for emerging undergraduate and graduate degree programs, microcredentialing, and continuing education.
- **Advance further the College's commitment to diversity and inclusion.** The next Dean will support the University's commitment to academic excellence by fostering a diverse and inclusive community. The Dean will also work to recruit, attract, and retain faculty, students, and staff who are racially, ethnically, socially, economically, and by gender and sexual orientation underrepresented in higher education and in engineering in particular. The Dean must continue to foster a welcoming environment for all individuals.
- **Secure additional resources for the College through effective fundraising.** The next Dean will identify and pursue a wide variety of development opportunities, as well as leverage existing resources, with alumni, foundations, corporations, and other entities to execute the next strategic vision and plan. The Dean will partner with the University's development office in articulating the case for supporting the College and pursuing promising opportunities.

- **Understand and effectively communicate the College's budgeting and academic planning model.** The next Dean will work closely with the finance team to effectively align the College's resource management model with an increasingly competitive and dynamic higher education marketplace. A clear, robust, and transparent budget and resource management process is vital to long-term competitive viability.

### **Desired Qualities and Required Qualifications**

The next Dean will hold an earned doctorate in an engineering-related field and have earned tenure through an outstanding record of teaching, research, and service. Experience working as an industry professional is preferred. In addition, the individual must possess significant administrative experience, and the next Dean will possess the ability to:

- Leverage the widely held sense of optimism that the College is poised to achieve a higher level of national and international distinction;
- Support shared governance and transparency;
- Attract first-rate faculty and students;
- Work collaboratively with multiple constituents to develop and implement a strategic plan in service of the University's and College's distinct vision;
- Demonstrate a track record of obtaining external support for research and a commitment to growing the educational and research tradition of the College;
- Understand the needs of industry and the ability to promote entrepreneurial collaborations with faculty;
- Ensure a welcoming and inclusive environment for faculty, staff, and students, as demonstrated through previous experience;
- Advocate and champion the benefits of setting high standards for faculty and their professional development;
- Demonstrate experience with planning and budget oversight; strong organizational, administrative, and interpersonal skills; and exceptional oral and written communication skills;
- Be passionate about engaging directly with students;
- Understand the critical need for and is knowledgeable about ABET accreditation and practices;
- Cultivate strong relationships with alumni and donors, and to raise financial resources for the College;
- Utilize data from multiple sources to inform strategy, policy, and practice;
- Provide vision for, and a strong commitment to, both undergraduate and graduate engineering education;
- Successfully manage and mentor talented faculty, staff, administrators, and students to perform at their best;
- Demonstrate an entrepreneurial spirit with interest in taking advantage of opportunities to advance the College as they emerge; and,
- Model high ethical standards.

### **PROCEDURE FOR CANDIDATES**

The review of candidates will begin immediately and continue until the position is filled. Nominations, inquiries, requests for the detailed position profile, and application materials,

Embry-Riddle Aeronautical University, Dean, College of Engineering

including a letter of interest, curriculum vitae, and the names of five professional references should be forwarded in confidence to:



**Steve Leo, Partner**  
**Matthew Bunting, Managing Associate**  
**Storbeck Search**  
[ERAUDeanEngineering@storbecksearch.com](mailto:ERAUDeanEngineering@storbecksearch.com)

For more information about ERAU please visit: <https://www.erau.edu/>

*ERAU is committed to being a global leader in diversity and inclusion in higher education. It continually strives to recognize, respect, and celebrate the differences and cultural identities among individuals as the institution recruits, supports, and embraces its diverse community. ERAU works to provide a safe environment where self-expression is welcome. ERAU strives 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.*

