



# MIAMI UNIVERSITY

OXFORD, OH • EST. 1809

## Dean of the College of Engineering and Computing

### THE OPPORTUNITY

Miami University invites applications and nominations for the position of Dean of the College of Engineering and Computing. Miami University seeks a strategic and innovative leader to further expand a thriving College and sharpen its strategic focus by capitalizing on current strengths and identifying new areas of potential synergy and innovation. In strengthening the College, the next Dean will further Miami's image and standing as a nationally recognized, student-centered public research university.

### MIAMI UNIVERSITY

Miami University is one of the oldest public universities in the country, chartered in 1809 and welcoming its first students in 1824. Deemed as an inaugural Public Ivy institution, Miami University still maintains that esteemed distinction today and is deeply committed to student success, builds great student and alumni loyalty, and empowers its students, faculty, and staff to become engaged citizens who use their knowledge and skills with integrity and compassion to improve the future of our global society.

Miami provides the opportunities of a major university while offering the personalized attention found in the best small colleges. The University values teaching and intense engagement of faculty with students through its teacher-scholar model by inviting students into the excitement of research and discovery. Miami's faculty are nationally prominent scholars and artists who contribute to the University, their own disciplines, and society by the creation of new knowledge and art. Miami supports students in a highly involved residential experience on the Oxford, Ohio campus and provides additional access to students, including those who are time and place-bound, on its regional campuses. Miami provides a strong foundation in the traditional liberal arts for all students, and it offers nationally recognized majors in arts and sciences, business, education, engineering, and fine arts, as well as select graduate programs of excellence.

At Miami University, [diversity and inclusion](#) are central to the institution's core values and mission. Grounded in the belief that diversity and inclusion are Miami's strengths, the University strives to be a community where all perspectives are discussed and celebrated in

the true spirit of an engaged academic community—a place where ideas are freely exchanged, modified, and evolve, as new perspectives and experiences bring new visions and knowledge that can lead to even better ways of resolving problems and fostering relationships with each other and the world. As an inclusive community, Miami strives to cultivate an environment where diversity and differences are valued and respected. Miami instills in its students' intellectual depth and curiosity, the importance of personal values as a measure of character, and a commitment to lifelong learning. The University emphasizes critical thinking and independent thought, an appreciation of diverse views, and a sense of responsibility to a global future.

The quintessentially beautiful grounds and the gracious Georgian-style buildings of the 2,000-acre campus inspired poet Robert Frost to declare Miami University as "the most beautiful college that ever there was." Miami University shares a strong and essential partnership with the Southwest Ohio community. An attractive small city known for providing a vibrant college town experience, [Oxford](#) offers something for just about everyone, including numerous retail and restaurant establishments a short walk from campus, vibrant community festivals and historic attractions, art galleries and farmers markets, and countless outdoor activities for nature enthusiasts. In 2016, Forbes declared Oxford as "the top-ranked college town" in America. Situated just an hour outside of Cincinnati and Dayton, the city of Oxford has a population of more than 20,000 residents, including Miami students. Its unique geographical positioning also offers Miami University faculty and students easy access to the comprehensive cultural, educational, environmental, and industry resources in the greater Cincinnati metropolitan area.

Miami's two regional campuses are in Hamilton and Middletown, located 13 and 22 miles respectively from Oxford. Similarly, the Miami University Voice of America Learning Center is conveniently located in West Chester, midway between Cincinnati and Dayton. Miami University even has an overseas presence strategically located for student study and travel abroad with the Dolibois Center housed in a thirteenth-century chateau in Luxembourg.

Miami University enjoys a strong relationship with the [Miami Tribe of Oklahoma](#) and is the home of the [Myaamia Center](#). Sharing a common name and place, the connection between the University and the Miami Tribe of Oklahoma spans more than four decades and has evolved into a multi-layered collaboration built on trust, respect, and a shared commitment to education. Neepwaantiinki, the Myaamia word meaning "we learn from each other," is a rich interpretation of "partners in learning," a phrase that Miami University and the Miami Tribe have used for years to describe their reciprocal relationship.

## **THE MIAMI EXPERIENCE**

Miami University is a stimulating, close-knit, and challenging environment that encourages students to pursue an array of interests, develop talents, and push themselves beyond their

conscious and unconscious bounds within and outside the classroom. Miami's total enrollment at its Oxford and regional campuses is over 22,200 students. The University combines a wide range of strong academic programs with the personal attention ordinarily found only at much smaller institutions, drawing students who want the benefits of a rigorous academic program in a student-centered environment. It is this unique Miami experience that continues to attract exceptional students.

Miami's distinctive collection of programs reflects its foundational belief that the liberal arts and sciences and professional/pre-professional programs are mutually reinforcing. The University is proud to embrace the following colleges and schools:

- College of Arts and Science
- Farmer School of Business
- College of Engineering and Computing
- College of Education, Health, and Society
- College of Creative Arts
- College of Liberal Arts and Applied Science
- Graduate School

Miami University's curriculum and commitment to high-quality instruction and learning have borne it the distinction of:

- Consistently ranking among the top three U.S. universities for undergraduate education by the *U.S. News & World Report* edition of *America's Best College*. Miami has ranked in the top five on this short, elite list of universities for the past eight years.
- Perennially ranking high by Kiplinger as a Best Value School. The root of this success is Miami's excellent and dedicated faculty who practice the teacher-scholar approach. Miami faculty was featured by Science Friday during the on-campus hosting of the public radio program in 2018.
- Receiving special recognition in the 2018 Fiske Guide to Colleges for a "strong academic reputation, dedicated and accomplished faculty, high-caliber students, and high graduation rates." The guide also commends Miami for its emphasis on liberal arts and opportunities for research, travel abroad, and leadership.
- Being recognized in The Princeton Review's annual flagship college guide. In addition to outstanding academics—the primary criteria for selection—Miami was described as having an "astoundingly beautiful" and "gorgeous" campus in its 2018 Edition.

The "Miami Experience" has a rich tradition of academic excellence and intense engagement both inside and outside the classroom. Miami University prides itself on developing both intellect and character in part through its two-year residence hall lodging requirement and a strong partnership between academic affairs and student life. Miami's

comprehensive student focus includes academics, research, career planning, residence life, an emphasis on physical and mental health, and more than 500 student clubs and organizations that allow students to meaningfully apply concepts they are learning in class while partnering with diverse peoples and communities. More than 2,000 undergraduates conduct meaningful research and publish in peer-reviewed journals while in collaboration with faculty and outside partners. Miami students are allotted the opportunity to participate in the Global Incentives Program, studying in other parts of the U.S and in 90 countries around the world. With close to 58% of students participating in the study abroad/away program before they graduate, the undergraduate study abroad program consistently ranks among the top five for participation among U.S. public doctoral institutions. Miami has three leadership institutes on campus and numerous clubs and organizations, including a prominent Greek system, where students exercise leadership. Uniquely, First Miami University Student Federal Credit Union is one of only three federally-chartered, student-run credit unions in the nation.

Home to ten women's and eight men's teams and over 50 club sports, Miami University has a proud athletic tradition. Whether in the stands or on the court, RedHawks witness dedicated student-athletes compete in NCAA Division I, National Collegiate Hockey Conference, and the U.S. Figure Skating Association sports. While the strong athletic program helps Miami distinguish itself amongst other universities, the academic excellence of its athletes is noteworthy. The University ensures that its athletes excel in the classroom, consistently earning GPAs well above 3.0, and enjoying a graduation success rate of 85%.

At Miami University, students stay engaged well past graduation. Miami has more than 200,000 alumni with a fierce loyalty to their alma mater expressed in service and philanthropy. Along with external partners in business, industry, and government, they form a network for students that provides internship experience and potential career tracks across the United States. Miami has received two historic donations in the past three years – \$40 million from the Farmer family for the Farmer School of Business and \$30.1 million from David Dafoe for arts and science scholarships.

## **BOLDLY CREATIVE: STRATEGIC ACADEMIC ENRICHMENT INITIATIVE**

Miami University's academic reputation is known, valued, promoted, and lived by senior administrators, faculty, staff, and undergraduate and graduate students alike. Through the University's leadership and conviction to advancing the academic enterprise at Miami, the [Boldly Creative Strategic Academic Enrichment Initiative](#) was recently launched. This academic initiative will focus on generating and funding promising academic programs, research projects, and other cutting-edge learning initiatives. Resources in the Boldly Creative Initiative will be committed to programs that: advance knowledge; prepare versatile, analytical, and flexible students; advance Miami's reputation for excellence and innovation; generate new sources of revenue; and involve transdisciplinary curriculum and research that connect academic units while engaging external partners.

In addition, Miami University is launching a new strategic plan which will focus on innovation and change. For more details and an outline of the process, please review the [Strategic Plan](#).

## LEADERSHIP

### **Gregory Crawford, President**

For more than 25 years, Dr. Gregory Crawford has been a fearless, passionate, and innovative leader in higher education. He is the 22<sup>nd</sup> president of Miami University, a role he assumed in July of 2016. Since President Crawford arrived, he has articulated a clear vision for the University focused on providing a diverse and inclusive education embedded in collaboration and interdisciplinary studies across all of Miami's campuses. His dedication to providing an unparalleled learning experience is illuminated by his various accomplishments.

Before joining the Miami community, President Crawford was vice president and associate provost at the University of Notre Dame. He joined Notre Dame's faculty in 2008, serving as the William K. Warren Foundation Dean of the College of Science. He previously served as the dean of engineering at Brown University, where he had joined the physics and engineering faculty in 1996.

President Crawford earned bachelor's (mathematics and physics), master's (physics), and doctorate (chemical physics) degrees from Kent State University. He completed two postdoctoral fellowships and was a researcher at the Xerox Palo Alto Research Center before joining the faculty at Brown. His work includes more than 400 research and education publications, review articles and book chapters, and 21 U.S. patents and patent applications.

Under the leadership of President Crawford, Miami University has embarked on a process of reinvention, drawing on historic strengths: an unsurpassed residential campus experience; a focus on undergraduate teaching; a teacher-scholar model; a commitment to liberal arts; and a collaborative, inclusive, innovative transdisciplinary mindset equipped to address the future. In July 2016, President Crawford launched a billion-dollar philanthropic campaign still in the silent phase, with nearly \$300M raised in the first 2.5 years. President Crawford also launched the \$50M investment fund, *Boldly Creative*, to shift significant investments into Miami's academics in the coming three years.

### **Jason Osborne, Provost and Executive Vice President for Academic Affairs**

Dr. Jason Osborne began serving as Miami's Provost and Executive Vice President for Academic Affairs effective August 1st, 2019. He most recently served as Dean of the Graduate School and Associate Provost for Graduate Studies at Clemson University. Prior to that, he served as Chair of the Department of Counseling and Human Development at

the University of Louisville. He has also served as a faculty member at the University of Oklahoma, North Carolina State University, and at Old Dominion.

Osborne received his doctorate in Educational Psychology from the University of Buffalo in 1998 and is a prolific and widely cited scholar in applied statistics and education. His seven books and 80 peer-reviewed articles have been cited collectively well over 20,000 times, and he is an Accredited Professional Statistician (tm), credentialed by the American Statistical Association.

## COLLEGE OF ENGINEERING AND COMPUTING

The [College of Engineering and Computing](#) (CEC) enrolls over 2,245 undergraduate and 66 graduate students, with about 91 faculty members and 28 staff members. The College comprises four academic departments:

- [Chemical, Paper, and Biomedical Engineering](#)
- [Computer Science and Software Engineering](#)
- [Electrical and Computer Engineering](#)
- [Mechanical and Manufacturing Engineering](#)

Across these departments, CEC offers a variety of undergraduate and graduate degree programs. For a Bachelor of Science, students have [ten majors](#) to choose from. In addition, CEC offers [four master degrees](#): Chemical Engineering, Computer Science, Computational Electrical and Computer Engineering, and Mechanical Engineering. *U.S. News & World Report* places Miami in the top 10 for undergraduate engineering among U.S. public universities without a doctorate program, placing Miami at No. 8.

## CEC MISSION

CEC's mission is to serve society by providing high-quality undergraduate and graduate education in engineering and computing. CEC is committed to creating an environment for teaching, learning, and scholarship that is intellectually stimulating, interactive, and innovative in which students, faculty, and staff realize their full potential. CEC's guiding principle is to provide professional education integrated with Miami University's traditional strength in liberal education.

The College works continually to assess and improve teaching, learning, and critical thinking; to engage in scholarship of discovery, application, integration, and teaching; to contribute to the accumulated knowledge of the centuries through faculty and student research; to encourage creativity; and to promote the continuing intellectual growth of the

community. CEC graduates are prepared for a lifetime of learning and growing, where they can significantly address society's most complex problems.

The College also offers students several resources to support their educational journey, broaden their understanding of global society and foster a collaborative and cross-disciplinary approach to learning. CEC offers students access to four different centers and institutes:

- [Lockheed Martin Leadership Institute](#) Working together with seasoned leaders from business and government, engineering and computer science students engage in a unique and transformative learning experience that embraces interpersonal and communication skills, teamwork, self-knowledge, innovation, change management, emotional intelligence, cultural diversity, and business acumen.
- [Grand Challenges Scholars Program](#) A combined curricular and extra-curricular program to prepare CEC students to solve the grand challenges facing society in this century, the program is a call to action and serves as a focal point for society's attention to opportunities and challenges influencing quality of life.
- [Paper Science and Engineering Foundation](#) An augmentation of the academic curriculum delivered by the Chemical, Paper, and Biomedical Engineering (CPB) Department, the Foundation provides the little things that can make a big difference to students: merit-based scholarships and key networking contacts for employment opportunities.
- [Center for Assistive Technology](#) An interdisciplinary center working collaboratively with Scripps Gerontology Center as well as the Center for Social Entrepreneurship in Farmer School of Business, this center identifies socially relevant problems and develops engineering solutions by engaging Miami's students and faculty across multiple divisions.

CEC prepares students for their chosen careers by integrating Miami University's strength in liberal arts education with fundamental engineering and computing technical concepts, modern technologies, and scholarly research taught by renowned faculty in CEC's classroom and labs. There are numerous opportunities for experiential learning, such as internships, service-learning, participation in professional organizations, leadership training, and international experiences.

The University's goal for CEC is to educate engineers and computer scientists to be prepared to address both the technical and social dimensions of engineering work; in short, [Socially Engaged Engineering and Computing](#) (SEEC). SEEC's vision has faculty and students work together to advance the idea of improving the general well-being of individuals and societies by integrating social and technical aspects into the pedagogical, design, and scholarly endeavors of students, faculty, and partners of the CEC. The focus on sustainability is central to the SEEC initiative. CEC's engineering and computer science graduates work on projects that truly meet user needs, provide value to communities, are



economically viable, and whose continued use can be sustained. SEEC also offers a [Scholar in Residence](#) connecting and expanding the SEEC philosophy to a broader community that supports and values the SEEC mission.

CEC also offers a minor in Humanitarian Engineering and Computing, which is designed to graduate engineering and computing majors who are globally-aware, culturally-sensitive, and socially conscious, and who would use their knowledge to design solutions that enhance the lives of and opportunities for people on a local, national or international level.

CEC's environment for teaching, learning, and scholarship is intellectually stimulating, interactive, and innovative. In the classroom and labs, the faculty, who are deeply committed to student success, inspire and encourage students to actively participate in their learning. CEC utilizes the [Engineering and Computing Complex](#), a 190,000 square foot state-of-the-art facility complex. This flexible space houses a two-story high-bay space for crane construction and working with robots; rooftop satellite receivers and high-frequency communication equipment; faculty and student research labs; high-tech classrooms and computer labs, and collaborative areas rooms where students can work in teams and study. Within the complex, each department has its own innovation labs that contain cutting edge equipment.

Faculty members are active researchers who mentor both undergraduates and graduates. They address important global challenges ranging from clean water and air, Alzheimer's disease, biomaterials and bioengineering, cybersecurity, photonics, and lasers for communications and health, to the broad spectrum of knowledge and innovation that provides people with access to information technology. Faculty make teaching their top priority, spurring a collaborative research environment. CEC faculty offer undergraduates many opportunities to engage in meaningful research and scholarship. Each year, more than 2,000 Miami students work with professors on funded research.

## **ROLE OF THE DEAN**

Reporting directly to Provost and Executive Vice President of Academic Affairs, the Dean is the chief administrative, academic, and budgetary officer for the College of Engineering and Computing. 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 and others across the University, the region, the nation, and the globe to coordinate academic programs, interdisciplinary initiatives, and traditional and cross-disciplinary scholarship. The Dean will also work collaboratively with the College to advance, create, and implement programs consonant with the University's [strategic plan](#) launched in July 2019.



## OPPORTUNITIES AND CHALLENGES

As the University continues to grow and evolve under the leadership of President Crawford, the Dean will have the opportunity to address the following priorities:

- **Set the College's strategic priorities and vision.** The Dean will bring creativity, vision, and an innovative perspective to the College. In collaborating with students, faculty, and staff, the Dean will develop initiatives aligned with Miami University's recently launched strategic plan. The Dean will manage the rapid growth of the College, build upon existing programs, innovate new programs, and continue to nurture the SEEC initiative.
- **Support an interdisciplinary culture.** The Dean must be an excellent collaborator and partner who will advance the College by forging innovative programmatic, educational, and research partnerships within Miami University and externally. CEC is in a position to cultivate cross-disciplinary research within CEC as well as amongst the University's other colleges. Innovation in pedagogy, technology, and communication has allowed for greater collaboration and sharing of knowledge than ever before, and the Dean will play a larger role in connecting, sharing, and collaborating on its innovative research with the rest of Miami University and its external partners.
- **Champion diversity, equity, and inclusion.** The 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 ethnically, socially, economically, and by gender and sexual orientation underrepresented in higher education, most particularly in engineering, technology, and computing. It is important that the Dean possess the skills, passion, and commitment to advance diversity and foster a welcoming environment for all individuals.
- **Secure additional resources for the College.** With CEC's rapid growth over the last decade, the Dean will play a key role in developing funding to support the College's growing faculty and student population. The 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 Division of University Advancement to articulate a compelling case for supporting the College and laying the groundwork for future relationships. In addition, the Dean will need to create a plan for additional revenue-generating programs to grow CEC further and maintain its competitiveness within the engineering and computing fields.

- **Define, foster, and support a research vision for CEC while maintaining a strong commitment to excellence in teaching.** The Dean will leverage the impressive quality of CEC faculty to advance the creative, entrepreneurial culture that drives research and discovery in the College. The Dean will work closely with faculty to identify opportunities to improve the infrastructure that supports research and scholarship. The Dean will partner with faculty to identify additional sources of funding to enhance the research capacity of the College, including support from federal agencies, corporations, and other funding sources. The Dean will also seek new external partnerships while continuing to build upon existing partnerships, to support and advance teaching, research, internships, and job opportunities for students. The Dean will cultivate an environment of the highest expectations in teaching and research, while simultaneously working closely with department chairs to ensure that all faculty members are adequately supported in their efforts to achieve the optimal balance between these two priorities.

## **REQUIRED QUALIFICATIONS**

The ideal candidate will hold an earned doctorate in one of the College of Engineering and Computing's general fields of study and have achieved a distinguished record of scholarly, professional achievement for appointment as a Full Professor in one of the programs within the College.

## **DESIRED QUALITIES**

In addition to the above-required qualifications, the ideal candidate will demonstrate the following attributes:

- The ability to articulate and implement a vision for research and creative activity in the 21st century to position the College as a leader in research and education in keeping with Miami University's culture and mission;
- Experience serving as a catalyst for research innovation and the integration of research into undergraduate and graduate education;
- A strong track record of identifying, developing, expanding, and sustaining public and private partnerships and sources of research funding;
- The ability to bring visibility to the research and educational accomplishments of the College both within and outside the campus;
- An ability to partner with the University's advancement office to build foundational relationships with alumni, parents, and friends of the College;
- An appreciation for both engineering and information technology/computing as equal facets of the College;
- A deep understanding of the landscape of engineering and technology education and significant experience addressing the needs of employers and industry leaders;
- The breadth of knowledge and foresight needed to identify existing, emerging, and

interdisciplinary fields for investment, both within the College and collaboratively with other colleges in Miami University and beyond;

- A commitment to fostering and facilitating opportunities for interdisciplinary research and educational collaborations;
- Demonstrated ability to develop and promote activities that support a large and diverse faculty, oversee faculty recruitment and development, manage promotion and tenure, and appoint departmental chairpersons and directors, as needed;
- Ability to foster a culture of high ethical standards and effective business practices in the College, including exceptional fiduciary skills;
- An energetic and engaging personality with excellent interpersonal, oral, and written communication skills;
- Demonstrated ability to foster innovation in teaching pedagogy and curriculum design;
- Ability to work collegially and collaboratively with other University senior administrators (e.g., deans, vice presidents, vice provosts, etc.); and,
- A commitment to inclusive excellence and ability to ensure a welcoming, nurturing, and equitable environment for a diverse community of faculty, staff, and students, and a track record of leadership in this arena;
- A deep understanding and appreciation of shared governance;
- Experience as a distinguished teacher-scholar;
- Creativity, an entrepreneurial spirit, and the agility to bring new ideas to fruition in a timely fashion.

## PROCESS OF CANDIDACY

The Miami University Dean of Engineering and Computing search committee will begin reviewing applications immediately. Requested application materials include a letter of interest; curriculum vitae; and five professional references. References will not be called until after the first screening of applications and then only after the applicant has given explicit permission. Although applications will be welcomed until the time that a new Dean is selected, for best consideration candidates should submit materials by December 6, 2019 to the following address: [MiamiCECDean@storbecksearch.com](mailto:MiamiCECDean@storbecksearch.com)

Miami University is being assisted in the search by Storbeck/Pimentel & Associates. For additional information, please contact:



Mr. Tom Fitch, Partner  
Ms. Amanda Bennett, Sr. Associate  
Storbeck/Pimentel & Associates, LP  
Email: [MiamiCECDean@storbecksearch.com](mailto:MiamiCECDean@storbecksearch.com)

An online application may be found here: <http://jobs.miamioh.edu/cw/en-us/job/496219>

*While every effort will be made to preserve confidentiality until finalists are selected, the search is subject to the Ohio Public Records Act.*

*Miami University, an Equal Opportunity/Affirmative Action employer, encourages applications from minorities, women, protected veterans and individuals with disabilities. Miami University prohibits harassment, discrimination and retaliation on the basis of age (40 years or older), color, disability, gender identity or expression, genetic information, military status, national origin (ancestry), pregnancy, race, religion, sex/gender, status as a parent or foster parent, sexual orientation, or protected veteran status in its application and admission processes, educational programs and activities, facilities, programs or employment practices. Requests for reasonable accommodations for disabilities related to employment should be directed to ADAFacultyStaff@MiamiOH.edu or 513-529-3560.*

*As part of the University's commitment to maintaining a healthy and safe living, learning, and working environment, we encourage you to read Miami University's Annual Security & Fire Safety Report at: <http://www.MiamiOH.edu/campus-safety/annual-report/index.html>, which contains information about campus safety, crime statistics, and our drug and alcohol abuse and prevention program designed to prevent the unlawful possession, use, and distribution of drugs and alcohol on campus and at university events and activities. This report also contains information on programs and policies designed to prevent and address sexual violence, domestic violence, dating violence, and stalking. Each year, email notification of this website is made to all faculty, staff, and enrolled students. Written notification is also provided to prospective students and employees. Hard copies of the Annual Security & Fire Safety Report may be obtained from the Miami University Police Department at (513) 529-2223. A criminal background check is required. All campuses are smoke- and tobacco-free.*