Capacity-Building Initiatives

2019-21 BIENNIAL BUDGET UPDATE

October 5, 2018
Capacity-Building Initiatives

• Designed to increase student success and output, with an emphasis on addressing the state’s workforce needs
Three campuses

UW OSHKOSH
UW–FOND DU LAC
UW–FOX VALLEY

One university

UNIVERSITY OF WISCONSIN SYSTEM
• Expand Engineering Technology

• Create “Integrated Engineering Collaboration”

• Pursue new articulation agreements in SE WI
• Increase % of diverse student teachers
In 2016, six of the largest school districts in the region employed 53 teachers from diverse backgrounds out of a total of 3,029 teachers (1.75 percent).

The non-white student population in these same districts ranges from approximately 10 percent to nearly 30 percent.
• Increase % of diverse student teachers
  • At least two pre-college programs a year
  • Increase FORT, edTPA pass rates
  • New mentor programs
• Increase % of diverse student teachers

• New 1+3 teacher-education partnerships
• Increase % of diverse student teachers

• New 1+3 teacher-education partnerships

• Increase ESL, Bilingual, Special-Education endorsement capacity
Cross-categorical special education is the highest-need licensure area in the State of Wisconsin, with more than 400 teachers currently on emergency licenses.

Currently in WI, there are 209 emergency licensed bilingual/bicultural teachers and 90 emergency licensed ESL teachers (Wisconsin DPI, 2017)
Three campuses

UW OSHKOSH
UW-FOND DU LAC
UW-FOX VALLEY

One university

UNIVERSITY OF WISCONSIN SYSTEM
University of Wisconsin-Stout

Robert Meyer
Chancellor

Patrick Guilfoile
Provost
Our Polytechnic Focus

- Named Wisconsin’s Polytechnic University in 2007 by the Board of Regents

- UW-Stout’s polytechnic tenets:
  - **Career Focus** with a comprehensive curriculum that prepares graduates for professional careers
  - **Applied Learning** that blends theory with practice to produce innovative solutions to real world problems
  - **Collaboration** that works closely with business, industry and other educational institutions to benefit students and grow the economy
Distinctive Programs

**DEGREE OFFERINGS:** 49 undergraduate and 24 graduate programs, including two terminal degrees, are offered in response to industry demands and represent six career cluster areas.

**INDUSTRY CONNECTIONS:** Advisory boards of industry leaders infuse expertise into every program’s curriculum.

**DELIVERY:** Student-centered course delivery formats are offered on campus, online and offsite.

**PROGRAM DIRECTOR MODEL:** Experienced faculty members provide recruitment and student support for each program through our program director model, which is unique to the UW System.
98.2%
Employment rate for graduates who are also offered lifetime career assistance

87%
Graduates who are employed in a field directly related to their major

$43,000
Median reported starting salaries

• One of only 125 polytechnic universities in the nation
• First Malcolm Baldrige National Quality Award recipient in higher education
• We host two of the largest career conferences in the Midwest, with more than 400 employers at each
• Students are actively engaged with faculty and staff through a 19:1 student/faculty-staff ratio
• Last year’s graduates alone earned an estimated $68 million
Capacity Building Proposals

- Capacity building in Information Technology and Computer Science.

- This request would include support for additional faculty in Computer Science, Computer Networking and Applied Mathematics, along with support for equipment and related needs.

- Additional staffing will allow us to provide more student opportunities in our newly approved Center for Academic Excellence in Cyber Defense Education and allow more growth in Computer Science and related fields.

- Proposals also include developing summer camps for students and teachers to help create a pipeline in Cybersecurity, Networking and related areas.
Capacity Building Proposals

- Build capacity in engineering programs.
- Expansion of offerings in Manufacturing Engineering and enhancement of curricular offerings in Computer and Electrical Engineering.
- This support allows for the programs to collaborate on Industry 4.0 and Industrial Internet of Things curriculum.
- This support increases our capacity to attract and train tech school transfers in Welding and Industrial Systems Engineering.
Capacity Building Proposals

- Build capacity in Biochemistry, Molecular Biology and Industrial Chemistry.

- Proposal is for faculty lines and equipment to support development of curriculum and facilities. This will increase our capacity to train students in modern methods for the large-scale production of pharmaceuticals, chemicals, foods and beverages.
Capacity Building Proposals

- Build capacity in our Career Services office to enhance the ability of students in these fields or other areas to participate in internship or co-operative education experiences.

- This funding would cover the cost for an additional staff person to manage relationships with employers, faculty and students. In turn, this will help to ensure that more students will be able to find appropriate co-ops and internships, and companies will better be able to identify potential future employees.
Expected Outcomes

- Increase of 10 percent in the number of students completing degrees in engineering, computer science and information technology.

- Increase the number of students in these and other programs who complete a co-op, internship or other experiential program as part of their degree.

- Maintain a high employment rate (currently 98.2 percent) for UW-Stout students upon graduation.
Overview of UW-Milwaukee Request

• Six initiatives that support all CBI priorities

• Enhancing Diversity
• Freshwater University
• Information Technology
• Nursing
• STEM
• Student Advising
PRIORITIES: Expanding Wisconsin’s Talent Pipeline & Collaborate to Spur Innovation

**Information Technology**: $665k investment

**Actions**
- Artificial intelligence, business intelligence and big data analytics programming
- Existing initiatives: Connected Systems Institute, Data Sciences Institute

**Results**
- Increase IT graduates by 75/year and Increase transfer students

**Nursing**: $500k investment

**Actions**
- Locate traditional Bachelor of Science in Nursing at UWM at Waukesha in fall 2019

**Results**
- Increase total annual graduates by 32/year; a 28% increase
- Increase transfer students
- Opportunity with new employer partners in Waukesha and Washington Counties
PRIORITIES: Prepare Students for Success & Ensure Affordability Educational Attainment

STEM: $1M investment

Actions
• Undergraduate internships in engineering, information sciences and natural sciences
• NSF programming aimed at two-year campus students to boost transfers

Results
• Increase STEM graduates by 100/year and transfer students by 95/year
• Increase internships in natural science fields by 45/year

Enhancing Diversity: $500k investment

Actions
• Diversity, Equity and Inclusion Officer to work campus-wide
• Faculty opportunity hires to address student needs

Results
• Reduce the gap in first year retention rates between targeted and non-targeted undergraduate students to 5-6% in three years, 3-5% in six years and 0-3% in ten years
• Increase Pell-eligible graduation rates to 41-43% in three years, 77-79% in six years and 79-80% in ten years
Summary of UW-Milwaukee Request

• $4.5M for 6 initiatives that support all CBI priorities

• Meet workforce needs in high demand areas
  • Business
  • Engineering
  • IT
  • Healthcare

• Partnerships with industry
  • Expand on Connected Systems and Data Science Institutes

• Prepare employees for today’s diverse world
Expanding Wisconsin’s Talent Pipeline & Preparing Students for Success

Through Collaboration, Innovation, and Growth
Record of Success with Collaborative Academic Programs

- Consortia Programs with UW Campuses
  - BS-Sustainable Management
  - BS-Health Information Management Technology
  - MS-Sustainable Management
  - MS-Health and Wellness Management
  - MS-Health Care Administration
  - Master's in Business Administration
  - MS-Information Systems (in development)
  - MS-Bio Tech (in development)

- Partnership Programs with UW Campuses
  - Nursing with UW-Milwaukee
  - Engineering with UW-Milwaukee

- Adult student program development
  - Online MBA (concentrations in: Data Analytics, Finance, General Management, Global Management, Marketing, Supply Chain)
  - Online B.S. in Business Administration (degree completion)
  - Flex B.S. in Business Administration (competency-based; January 2019)
Collaboration, Innovation & Growth
Curriculum Priorities

• Strengthen Information Technology programs
• Expand Supply Chain Management and Logistics Offerings
• Support growing Clinical Mental Health Counseling Master's program
• Infuse “Smart Cities, Smart Futures” learning into the curriculum
• Strengthen Career Services and build stronger bridge between University and Industry Partners
Bold Student Success Goal

Increase number of annual graduates by 50% by 2025
Student Profile Incoming Freshmen
First-Time, Full-Time

- First generation student 53%
- Pell recipients 36%
- Under-represented minorities 38%
- Work more than 16 hours/week 49%
Student Success Priorities

• Increase the number of Academic Advisors to the NACADA student to advisor ratio
• Hire additional staff to support growing population of under-represented students
• Grow the Summer Bridge programs – Summer Scholars, Math Move-Up, etc.
• Develop Pre-College Program to serve regional youth
• Add additional transfer advisor to serve growing population of transfer students
• Bolster Career Services to build stronger bridge between University and Industry partners
Higher Education Regional Alliance

Improve educational attainment across the MKE Region
Capacity-Building Initiatives

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