

**ENGINEERING PROGRAMS IN THE UW SYSTEM – OVERVIEW OF
ENGINEERING SUPPLY AND DEMAND IN WISCONSIN
AND UW SYSTEM ADMINISTRATION PERMISSION TO PLAN PROGRAMS**

BACKGROUND

At its December 4, 2014 meeting, the Education Committee engaged in a broad discussion about the supply and demand for engineers in Wisconsin. The discussion centered on how to efficiently and appropriately expand the University of Wisconsin System's array in engineering based on supply and demand data submitted by institutions and by the National Center for Higher Education Management Systems (NCHEMS). The NCHEMS Study identified geographic need in five engineering fields in the State of Wisconsin: Chemical, Civil, Electrical, Industrial and Mechanical Engineering. The chancellors of UW-Stout, UW-Platteville, and UW-Stevens Point, as well as industry representatives, presented their cases for and against expanding the UW System's available engineering programming to additional institutions.

REQUESTED ACTION

For discussion only.

DISCUSSION

At the February 6, 2015 reconvening of the Education Committee meeting, Interim Senior Vice President for Academic and Student Affairs, David J. Ward, will present an overview of the supply and demand for engineering graduates in the state. Further, he will describe the UW System approval process for new academic programs, as well as next steps to be completed by the institutions before they bring requests for program authorizations to the Education Committee for possible approval. Dr. Ward will present a statewide approach to addressing engineering needs:

1. To meet the needs of the Northwestern region of the state, UW System Administration will issue permission to plan new engineering programs at the following institutions:
 - UW-Stevens Point for a B.S. in Chemical Engineering;
 - UW-River Falls for a B.S. in Agricultural Engineering;
 - UW-Eau Claire for a B.S. in Materials Science Engineering; and
 - UW-Stout for a B.S. in Mechanical Engineering.
2. To meet the needs of the Northeastern region of the state, UW System Administration proposes planning for an expansion of the UW-Platteville engineering programs offered in collaboration with UW Colleges in the area.
3. To meet the needs of the Southeastern region of the state, UW System Administration proposes the expansion of UW-Milwaukee programs and three collaborative

programs delivered by UW-Milwaukee and UW-Parkside, by UW-Platteville and UW Colleges-Rock County, and by UW-Madison and UW-Whitewater.

4. To serve engineering research needs, UW-Madison and UW-Milwaukee will continue to serve the state. This effort will be complemented by ongoing applied research conducted at UW-Stevens Point, UW-Stout, UW-Eau Claire, UW-River Falls, and UW-Platteville.
5. To meet the state's need for graduate education in engineering, UW-Madison and UW-Milwaukee will continue to deliver and develop graduate programs at the master's and doctoral level.
6. To meet the state's need for continuing education of engineers, UW-Madison and UW-Milwaukee's continuing education programs will continue to deliver professional development to engineers. Other UW System continuing education programs will be considered for further discussion and planning.

Starting in April 2015, institutions may bring their requests for authorization of new programs to the Board. Among the conditions for authorization are: evidence of clear demand; sufficient campus resources for implementation of new engineering programs; the incorporation of consortial elements to reduce the cost; the initiation of the Accreditation Board for Engineering and Technology (ABET) accreditation process; and Higher Learning Commission approval, if applicable.

Authorization documents submitted for review by the Board of Regents must include pertinent information on faculty, the budget, facilities, the curriculum, non-duplication, mission congruence, the possibility for economic development, and demonstration of program gaps.