

## **ACTION ITEM #1**

### **Establish a Master's of Energy Conscious Construction Degree (Elizabeth S. Chilton)**

TO ALL MEMBERS OF THE BOARD OF REGENTS

**SUBJECT:** Establishment of a Master's of Energy Conscious Construction degree for the WSU Pullman and Global campuses

**PROPOSED:** That the Board of Regents establish a Master's of Energy Conscious Construction degree for the WSU Pullman and Global campuses

**SUBMITTED BY:** Elizabeth S. Chilton, Provost and Executive Vice President

**SUPPORTING INFORMATION:** The Voiland College of Engineering and Architecture's School of Design and Construction proposes the establishment of the Master's of Energy Conscious Construction degree for the WSU Pullman and Global campuses.

The Master's of Energy Conscious Construction (MECC) program provides a comprehensive foundation in building science, focused on high-performing energy-efficient residential building design and construction in the state of Washington. It covers all phases of the design process from pre-design through construction and post-occupancy evaluation. This interdisciplinary program is developed as a collaboration between the School of Design and Construction, the School of Mechanical and Materials Engineering, and Washington State University's nationally recognized Extension Energy Program.

This program aligns WSU with Washington State's initiatives to significantly reduce greenhouse gas emissions from buildings through the Climate Commitment Act. More than half of residential buildings in WA were built before 1980 and residential buildings consume 23% of all energy. Washington State's residential energy code (WSEC-R) is one of the most advanced in the nation, but for effective implementation by a trained workforce, it must be coupled with accessible education focused on energy-efficient buildings. No comprehensive emphasis in this area is currently offered by colleges and universities in the state.

Our innovative MECC program helps advance the WSU mission as a land-grant university in service to society through extending knowledge that will create future leaders in energy-efficient buildings and application of

knowledge that will enhance the quality of life and the economy of the state, nation, and world.

The faculty members in the MECC program are leading experts in their respective disciplines. Our faculty members teach and conduct research activities in energy-efficient carbon-neutral building design, construction, and operation. Creating this program will bring this expertise together leveraging the Voiland College of Engineering and Architecture's unique structure of having design, engineering, and construction disciplines under the same college.

By offering the proposed degree online, WSU creates access to high-quality degrees in a high-demand discipline for those who may not be able to avail themselves of the physical campus degree. The Global Campus degree serves rural students, working professionals, and those who are place-bound for diverse reasons.

This proposal was reviewed carefully and has support from the Provost's Office. This recommendation was recommended by the Faculty Senate on December 7, 2023. The Masters of Energy Conscious Construction degree proposal is available upon request.

The Voiland College of Engineering and Architecture's School of Design and Construction proposes the establishment of the Masters of Energy Conscious Construction degree effective as soon as feasible.