REQUEST FOR A DEPARTMENT CHANGE AT THE UNIVERSITY OF IOWA:
FROM DEPARTMENT OF MECHANICAL AND INDUSTRIAL ENGINEERING TO
DEPARTMENT OF MECHANICAL ENGINEERING AND DEPARTMENT OF INDUSTRIAL
AND SYSTEMS ENGINEERING

Action Requested: Consider recommending approval of the request by the University of Iowa to split the Department of Mechanical and Industrial Engineering into the Department of Mechanical Engineering and the Department of Industrial and Systems Engineering.

Executive Summary: The proposed department change will better reflect the expertise, teaching and research of many faculty in the department and aligns with department structures at peer institutions. No other Regent university has a department with this name. The Council of Provosts and Board Office reviewed this request and recommend approval.

Background:

Description of program. The Department of Mechanical and Industrial Engineering is the home of two independent programs. The department graduates future engineers and leaders to meet the needs of modern industries and service organizations. Mechanical engineering is broadly concerned with energy, manufacturing, and design of machines. Industrial engineering is concerned with analysis, design, and implementation of systems through optimal use of resources—human, material, energy, information, and financial.

Proposed names. Department of Mechanical Engineering and the Department of Industrial and Systems Engineering

Reason for proposed change. Currently, the BS, MS, and PhD degree programs in Industrial Engineering and Mechanical Engineering at the University of Iowa are in a single department, designated as the Department of Mechanical and Industrial Engineering. This has constrained the ability of both programs to fully establish their independent identities and pursue their distinct programmatic goals. With the large growth in Mechanical Engineering program enrollments in recent years, the student demographics of the Mechanical and Industrial Engineering department have skewed substantially toward Mechanical Engineering. This, coupled with the lack of a clear departmental identity, has made it increasingly difficult for the Industrial Engineering program to grow its student and faculty base as desired. To increase the flexibility of both programs, enhance their stature, and serve their respective missions, it is advantageous to split the Mechanical and Industrial Engineering Department into two separate departments.

The name of the Department of Industrial and Systems Engineering will maintain consistency with the broader Industrial Engineering discipline. The name emphasizes the broad employment opportunities offered by an Industrial Engineering degree, which span both traditional industrial and manufacturing settings as well opportunities in health-care, energy, and information management. Approximately two-thirds of ABET-accredited Industrial Engineering programs use the term “Systems” in either their program name, department name, or both. The primary professional society serving Industrial Engineering is named “The Institute of Industrial and Systems Engineering.” Interviews with Industrial Engineering students and alumni have indicated strong support for the inclusion of the term “Systems” in the department name.
Consistency with accreditation requirements. The reorganization will not affect program accreditation. The Engineering accreditation body, ABET, accredits academic programs, not departments. The Bachelor of Science programs in Mechanical Engineering and Industrial Engineering have always been separately accredited by ABET and this will be unchanged under the new departmental organization. This change requires no change to HLC accreditation.

Effect on program configuration. No new degree programs will be created as a result of this change in departmental name and structure. The Mechanical Engineering Department will continue to offer its current degree programs: BSE with major in Mechanical Engineering; MS in Mechanical Engineering; PhD in Mechanical Engineering. The Industrial and Systems Engineering Department will continue to offer the current degree programs: BSE with major in Industrial Engineering, MS in Industrial Engineering; PhD in Industrial Engineering. Faculty currently affiliated with the Mechanical and Industrial Engineering Department will have their affiliation changed to either Mechanical Engineering or Industrial and Systems Engineering at their discretion.

Effect on students. The proposed change will not have any negative impact on current students. The BS, MS, and PhD degree programs in Mechanical Engineering and Industrial Engineering will not change. Course-offerings will not be reduced or constrained. Student access to academic advising and other academically-related resources will not be affected.

Effect on resources. The proposed change will not require any significant new resources. Additional Department office space will be available, as needed, with the opening of the new Engineering Annex. Any additional resource allocations for facilities, faculty, administrative staff, etc. will come out of the College of Engineering budget.

Date of implementation. Summer 2018