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**BACHELOR OF SCIENCE IN AGRICULTURAL SYSTEMS TECHNOLOGY AND
BACHELOR OF SCIENCE IN INDUSTRIAL TECHNOLOGY PROGRAMS
ACCREDITATION REPORT AT IOWA STATE UNIVERSITY**

Action Requested: Receive the accreditation report for the Bachelor of Science Program in Agricultural Systems Technology – Agriculture and Biosystems Management (Option 1); Bachelor of Science Program in Agricultural Systems Technology – Machine Systems (Option 2); Bachelor of Science Program in Industrial Technology – Manufacturing (Option 1); and Bachelor of Science Program in Industrial Technology – Occupational Safety (Option 2) in the Department of Agricultural and Biosystems Engineering in the College of Engineering at Iowa State University.

Executive Summary: The programs (1) underwent a self-study that addressed the standards of accreditation defined by the accrediting body; and (2) had an on-site visit by peer evaluators. The programs were accredited for the maximum six-year period through November 2020.¹ However, one standard (program title, mission, and general outcomes) was in partial compliance. This accreditation report addresses the Board of Regents Strategic Plan priorities for “access, affordability, and student success; educational excellence and impact; and economic development and vitality.”

Background:

- ◇ **Description of program.** The Bachelor of Science Program in Agricultural Systems Technology is the applied side of engineering. It prepares graduates to manage, use, and troubleshoot technology (instead of engineering design) by applying their knowledge of technology, agriculture, and processing systems. This program has two options – Agricultural and Biosystems Management and Machine Systems. The Bachelor of Science Program in Industrial Technology is the study of manufacturing and related technologies, including Lean Manufacturing, Six Sigma, automation, electronics, computer numerical control, safety management, loss prevention, and industrial hygiene. It develops technical, supervisory and management skills in technical settings. This program has two options – Manufacturing and Occupational Safety.
- ◇ **Purpose of accreditation.** An accredited educational program is recognized by its peers as having met state and national standards for its development and evaluation. To employers, graduate schools, and licensure, certification, and registration boards, graduation from an accredited program signifies adequate preparation for entry into the profession. In fact, many of these groups require graduation from an accredited program as a minimum qualification. Accreditation is also intended to protect the interests of students, benefit the public, and improve the quality of teaching, learning, research, and professional practice.
- ◇ **Accrediting agency.** The accrediting body is the Association of Technology, Management, and Applied Engineering (ATMAE).

¹ The University was granted an extension for reaccreditation from 2014 to 2015; therefore, the current accreditation period will be for five years instead of six.

- ◇ Review process. The self-study prepared by the Agricultural Systems Technology and Industrial Technology programs contained the responses to the appropriate standards required by the accrediting body – program title, mission, and general outcomes; competency identification and validation; transfer course work; identification of competency measures; program structure and course sequencing; student admission and retention standards; student enrollment; administrative support and faculty qualifications; facilities, equipment, and technical support; program goals; program operation; graduate satisfaction with program; employment of graduates; employer satisfaction with job performance; advisory committee approval of program; and outcome measures used to improve program.
- ◇ On-Site Team Report. In April 2015, the visiting team determined that the Hospitality Management programs met the requirements for accredited status, although one standard was identified as being in partial compliance.
- ◇ Standard in partial compliance.
 - ☑ Program title, mission, and general outcomes (7.1). “The programs outcomes as stated in the self-study report are to be measured 2-5 years after graduation. The team does not find the outcomes that would be measured upon graduation. The stated mission and general outcomes for the Agricultural Systems Technology – Agriculture and Biosystems Management Program are similar to the mission and general outcomes of the Agricultural Systems Technology – Machine Systems. Also, the stated mission and general outcomes are similar for the Industrial Technology – Manufacturing and Industrial Technology – Occupational Safety options.”
- ◇ Implemented or planned changes by the institution.
 - ☑ “The programs have extensive outcome assessment plans, mapped to specific competencies at graduation. The programs will work to more clearly articulate and increase the visibility of the outcomes expectations for students ‘at graduation’ in addition to the outcomes at 2-5 years after graduation.
- ◇ Accreditation Status. In December 2015, the Association of Technology, Management, and Applied Engineering awarded accreditation to the Bachelor of Science Programs in Agricultural Systems Technology – Agriculture and Biosystems Management; and Machine Systems; and the Bachelor of Science Programs in Industrial Technology – Manufacturing and Occupational Safety for a six-year period through November 2022. No additional reporting is required.