B.S. in Biological and Agricultural Engineering (BAE)/Biological Systems Engineering (BSE)
Assessment Summary

The Department of Biological and Agricultural Engineering (BAE) has established 11 student learning outcomes (SLOs) or program outcomes for the B.S. program in Biological and Agricultural Engineering (BAE) and Biological Systems Engineering (BSE). Assessment involves student work (e.g., specific problems in homework assignments, laboratory reports, technical reports, specific exam questions, presentations) and performance of students in the fundamentals of engineering exam as the primary means of assessment. Other assessment measures, including senior exit interviews and significant accomplishments of undergraduates, are used as secondary evidence or indirect measures. A three-year assessment cycle is used such that all outcomes are assessed twice in the six-year ABET accreditation cycle. This is in keeping with the ABET outcomes assessment plan that is a part of the process for maintaining accreditation of the degree program by the Engineering Accreditation Commission. Both direct measures and indirect measures indicate that our students are attaining the SLOs. As such, no corrective actions are being implemented. As part of the overall curriculum improvement, the BAE Department implemented curriculum changes in Fall 2007, including the design series BAE 131, 231, 331, and 536. These courses will now serve as the core assessment for the program along with the introductory course (BAE 101) and two engineering design courses (BAE 545 and BAE 640) that are required for all curriculum options. To further enhance the assessment process, the BAE Department also has identified two to four performance criteria or indicators for each SLO.