Implementation of Quality Enhancement Plant (QEP) through Experiential Learning at The Engineering Technology Department, Northwestern State University

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Abstract

The capstone or senior design course is used by Engineering Technology at Northwestern State University (NSU) programs to provide students in their final year of training an opportunity to integrate knowledge from coursework and other sources in order to provide a solution for a real-world-engineering problem from industry. All senior design projects at NSU are project-based and done in collaboration with industry. This presentation will focus on the implementation of Quality Enhancement Plan (QEP) which has been recently adopted by the NSU and focuses on experiential learning in all disciplines. The Experiential learning in the ET department has set an excellent example at NSU. Examples from different aspects of experiential learning will be presented and discussed in detail.

Presenter

Dr. Jafar Farhan Al-Sharab is the Head of Engineering Technology Department at Northwestern State University. He received BS In Industrial Engineering from the University of Jordan, and PhD from Vanderbilt University/Nashville, TN. Prior joining NSU, Dr. Al-Sharab was an Instructional and Research Faculty at Rutgers University where he was heavily involved in research and teaching at both graduate and undergraduate levels. Dr. Al-Sharab was a visiting professor in the Department of Mechanical and Aerospace Engineering at New York University Tandem School of Engineering and also at AlBalqa Applied University/Jordan. In addition, Dr. Al-Sharab served as a consultant of various technological companies especially in the areas of structure-propertycorrelations and advanced characterizations. Dr. Al-Sharab's research interests are in the areas of Nanotechnology, and structure-property correlations. He is an active member of professional organizations related to his professional career and research interests. He has authored more than 63 technical papers, most of which in high impact journals.