

Employability Skills Of The Students Of Mechanical Engineering In Industrial Revolution Era 4.0.

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ABSTRACT

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Abstract

This study aims to: 1) determine the level of employability skills of students of Mechanical Engineering FT-UNY, 2) describe variations in the aspects of employability skills of students of Mechanical Engineering, FT-UNY, 3) formulate the competencies needed so that students have employability skills in accordance with demands of the industrial revolution era 4.0 in the machining field, and 4) determine the appropriate learning model applied to strengthen the employability of student skills in accordance with the demands of the industrial revolution era 4.0 in the machining field.

This research is a survey research with a quantitative approach, which was carried out in the Diploma III Mechanical Engineering Program, Faculty of Engineering, Yogyakarta State University and industrial partners in the machining sector, namely PT. Bukaka Teknik, PT. Pindad, PT, Cokro Group Brothers, PT. Boma Bisma Indra, PT Mega Andalan Kalasan (MAK), and CV. Karya Hidup Sentosa (KHS). The population of this study were 84 students. All the populations were sampled. The techniques of collection data used questionnaire, interview, and observation. The content validity of instrument uses expert opinion and construct validity uses Confirmatory Factor Analysis (CFA) test. The data analysis technique used descriptive analysis. The results of this study indicate that: 1) The level of employability skills of students in the high category (78.20%); 2) Variation of the aspects of the employability skills of students if sorted from the largest to the smallest values, namely managing themselves (3,31), collaborating (3,265), using technology (3,252), communication (3,200), problem-solving (3,061), planning and organizing activities (3,004), taking initiative and trying (3,002), and learning (2,967); 3) graduates of the Mechanical Engineering Study Program are required to have level 5 competence based on the Indonesian National Qualifications Framework in reading and drawing product design competencies, selecting materials, analyzing strengths, planning machining processes, welding processes, non-ferrous metal casting processes, and metal forming processes; and 4) work based learning model is a learning model that can strengthen the employability of the students of Mechanical Engineering FT-UNY related to the demands of the industrial revolution era 4.0.

Kata Kunci: *Keywords: employability skills, industrial revolution era 4.0, Diploma III in Mechanical Engineering.*