
Employability Skills of Mechanical Engineering Graduates in the Era of Industrial Revolution 4.0

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Abstract

The Industrial Revolution 4.0 has transformed the ecosystem of life, where the rapid development of technology has impacted job opportunities, with the mechanical industry being no exception. This is a result of the skills that recent graduates possess not matching the skills that the industry currently requires. In order to ensure that the skills of their job candidates match, employers should prioritise employability skills as a crucial factor. Therefore, the purpose of this study is to determine the level of technical and generic skills that employers in the mechanical industry prioritise. The research employs a quantitative approach using questionnaires. The questionnaire consists of 46 items; each needs to be rated on a 5-point Likert scale. A total of 87 participants from the mechanical industry sector around Johor Bahru were involved in this study. The data collected are analyzed using the Statistical Package for The Social Science (SPSS) software to obtain frequency, percent, mean and standard deviation. The results of the study revealed that system and technology skills, with a mean value of 4.73, are the most sought-after skills by employers in the mechanical industry. Personal quality follows the second-highest skill with a mean score of 4.70. With a mean value of 4.63, information skills are the third highest level of skills, while tool and machine handling, basic, thinking, resource, and interpersonal skills are at the lowest level and have mean values between 4.50 and 4.60. Overall, the technical skills and generic skills of employees at the service centres around Johor Bahru are at a high level

Keywords : Mechanical industry, employability skills, technical skills, generic skills
