



Key Performance Indicators (KPI 1) Achievement and Development Efforts for the Bachelor of Mechanical Engineering Education Study Program with Tracer Study

Ali Hasbi Ramadani^{1*}, Wahyu Dwi Kurniawan², Heru Arizal³, Yuli Sutoto Nugroho⁴, Revi Safitri⁵

^{1,2,3}Universitas Negeri Surabaya, Surabaya, Indonesia

⁴Queen Mary University of London, London, UK

⁵Newcastle University, Newcastle upon Tyne, UK



DOI: <https://doi.org/10.53621/ijocer.v4i1.438>

Sections Info

Article history:

Submitted: December 7, 2024

Final Revised: March 27, 2025

Accepted: April 26, 2025

Published: June 30, 2025

Keywords:

Graduate Profile;

KPI;

Tracer Study.



ABSTRACT

Objective: The purpose of this study is to determine the profile of S1 Mechanical Engineering Education graduates and the competencies needed by graduate users. Additionally, it will be analyzed in terms of achieving Key Performance Indicators (KPI 1). **Method:** This research employs a qualitative descriptive approach. This research uses an instrument in the form of a questionnaire. The results of the questionnaire are then processed and analyzed in a qualitative descriptive manner. This data analysis technique involves data reduction, data presentation, and conclusion. **Results:** The results indicate that the required competencies encompass both soft skills and hard skills. Those who need to strengthen their graduate competencies to suit the needs of the world of work require soft skills, with the results achieving KPI 1 at 63.93%. **Novelty:** This study examines in depth the condition of graduates in the workforce, focusing on job suitability, soft skills, and specialized hard skills within the Mechanical Engineering Education Study Program. Analyzing soft skills and hard skills that need to be improved and maintained in curriculum development in the Mechanical Engineering education study program adjusted to the current technological developments.

INTRODUCTION

The Key Performance Indicator (KPI) is an implementation of the Independent Learning, Independent Campus policy, as outlined in Permendikbud No. 3 of 2020 on National Higher Education Standards and the Decree of the Minister of Education and Culture of the Republic of Indonesia No. 754/P/2020 on the Key Performance Indicators of State Universities, which are divided into eight indicators. KPI 1 focuses on graduate outcomes, emphasizing the need for graduates to secure decent employment. To support this, each study program must ensure that its graduates attain competencies aligned with the demands of the workforce. A graduate tracer study is essential to measure these achievements. A Tracer Study, commonly known as a track record study or graduate survey, is a study of higher education graduates (Handajani et al., 2020). It provides valuable information for evaluating higher education outcomes, which can then be used for institutional improvement and quality assurance (Dzomeku et al., 2024). Tracer studies are among the most effective methods for gathering input from the workforce to assess the relevance of graduate competencies in the job market. Susiku et al. (2024) and Albina and Sumagaysay (2020) effectively measure and track graduate performance, helping to identify clear indicators for future work profiles and necessary training. Through tracer studies, higher education institutions can develop appropriate curricula to ensure graduates are well-prepared for the workforce (Dzomeku et al., 2024). Additionally, these studies provide insights

1. 438-Ali Hasbi et al 1-12.doc

ORIGINALITY REPORT

11 %	9 %	7 %	2 %
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	www.journal.iel-education.org Internet Source	1 %
2	ojs.unm.ac.id Internet Source	1 %
3	download.atlantis-press.com Internet Source	1 %
4	Sandoval, Evenne. "The Efficacy of Work-Based Learning", Marymount University Publication	1 %
5	Submitted to Universitas Negeri Surabaya Student Paper	<1 %
6	journal.staihubbulwathan.id Internet Source	<1 %
7	Farid Noor Romadlon, Muhammad Arifin. "Improving Graduate Profiles Through Tracer Studies at University", KnE Social Sciences, 2021 Publication	<1 %
8	Khaeroni Khaeroni, Sabri Sabri. "Implementation of Independent Learning-Independent Campus at the Department Level of Islamic Religious Higher Education", Tarbawi: Jurnal Keilmuan Manajemen Pendidikan, 2022 Publication	<1 %
9	ejournal.unwaha.ac.id Internet Source	<1 %