

Digital Construction: Implementation & Impact of Mbkm Internship Civil Engineering Study Program in the Construction & Infrastructure Industry

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Abstract

The Independent Learning Policy of the Independent Campus (MBKM) is a framework to prepare students to become strong scholars who are relevant to the needs of the times and are ready to become leaders with a high national spirit. Regulation of the Minister of Education and Culture Number 3 of 2020, concerning National Standards for Higher Education, states that Universities must provide three semesters of study rights outside the study program. Students are given the freedom to take credits in the study program: one semester (equivalent to 20 credits) taking courses outside the study program at the same university and two semesters (equivalent to 40 credits) carrying out learning activities outside the university. Research results show that students in the Civil Engineering Study Program understand and are interested in the MBKM Internship activities. They have also made preparations to implement it. The survey results also indicate that these activities positively impact the quality of graduates in terms of competence and soft skills to face the challenges of the world of work. Implementing the internship program has also proven not to affect the study period plan. The obstacle to this program is the additional cost due to many off-campus activities. As a result, several percent of parents disagree. However, it can be anticipated by providing complete information to prepare in advance.

Keywords

MBKM, internship, obstacles, dan implementation

1. Introduction

So far, students have lacked work experience in the real industry/professional world, so they are not ready to work. Meanwhile, short-term internships (less than six months) are insufficient to provide students with industry experience and competence. Companies that accept internships also state that short-term internships are not helpful and even interfere with their activities. MBKM is a framework to prepare students to become strong scholars,

relevant to the needs of the times, and ready to become leaders with a high national spirit. Regulation of the Minister of Education and Culture Number 3 of 2020, concerning National Standards for Higher Education, states that Universities must provide three semesters of study rights outside the study program. Students are given the freedom to do one semester (equivalent to 20 credits) taking courses outside the study program at the same university and two semesters (equivalent to 40 credits) carrying out learning activities outside the university (Free Guide to MBKM, Directorate General of Higher Education, Ministry of Education and Culture 2020). There are obstacles in its application, so an evaluation is needed for improvement in the future. Courses are held off-campus as a medium for students to gain real experience in the industrial world. Funding Assistance for the MBKM Policy Research Program is a research and community service assistance scheme managed and developed by the Secretariat of the Directorate General of Higher Education, Research and Technology, Directorate General of Higher Education Research and Technology, Ministry of Education and Culture Research and Technology. It considers support to private universities in terms of research and community service as a form of the Three Obligations of Higher Education. Narotama University (Unnar) tries to shape its graduates into graduates who have good academic and technical skills in the field, supporting the program. For this reason, a survey of students, lecturers, and education staff was carried out on implementing the program, especially in the Civil Engineering Study Program.

2. Research Methodology

A research methodology is needed to achieve the outputs that have been formulated in the research background. Figure 1 explains how the output design is built.

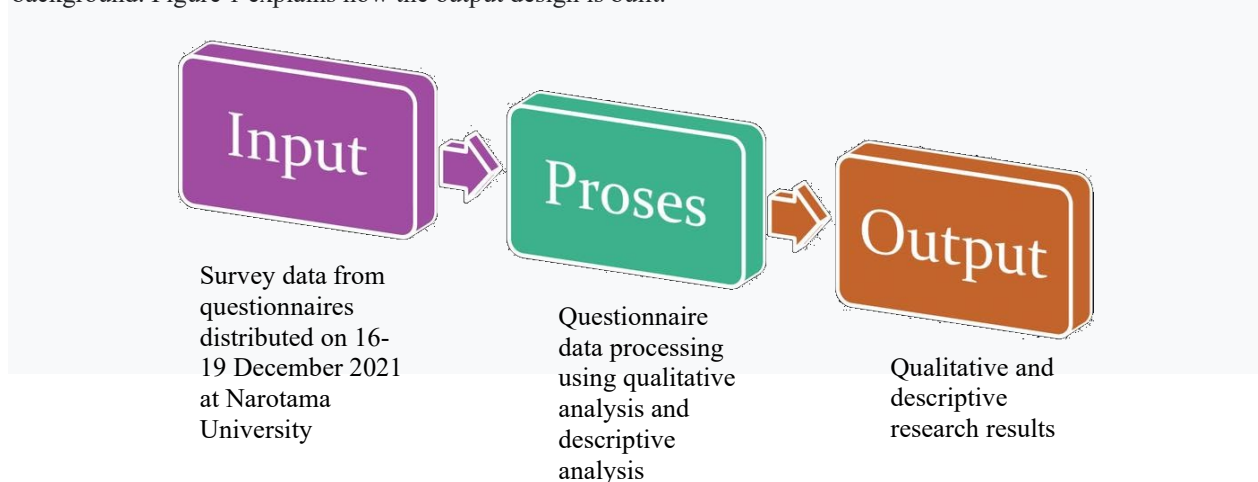


Figure 1: Research Framework

2.1. Data Collection

Researchers conducted a study of related literature and a direct survey of the Unnar academic community, particularly 329 students of the Civil Engineering Study Program as respondents. The questionnaires are related to knowledge about the MBKM internship program, its implementation, and its impact on the Faculty of Civil Engineering.

2.2. Data Analysis

Based on the data that has been collected and recorded, the researchers conducted a description, interpretation, and data analysis, as well as hypothesis testing. The researchers also conducted a field review during the survey. The data collected will be made in tables and graphs to clarify the research results.

3. Hasil Pembahasan

3.1. Survey Results

The survey results that have been analyzed descriptively are:

- a. Most of the Unnar Civil Engineering Study Program students have understood the MBKM policy implemented. The bar chart below shows that most students are very interested in the program.

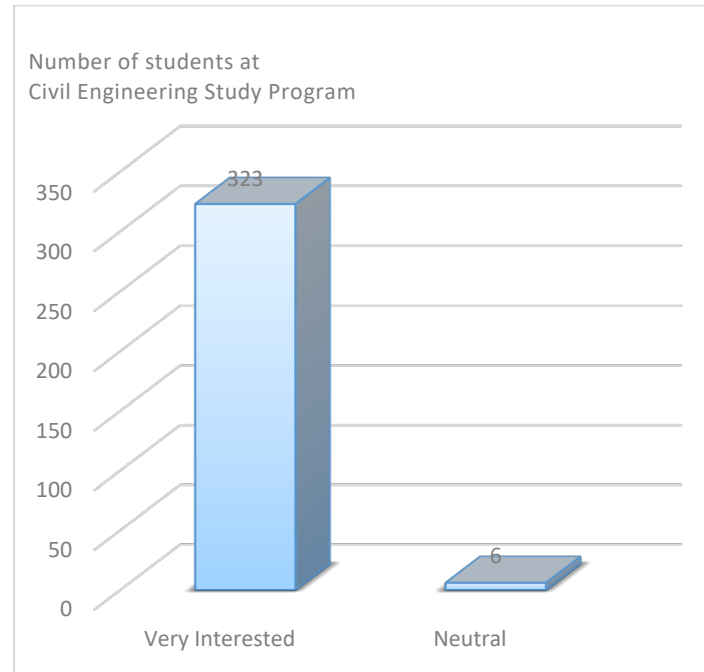


Figure 2: Student Interest in the MBKM Program

- b. Most of the Unnar Civil Engineering Study Program students have understood the MBKM policy implemented. The bar chart below shows that most students are very interested in the program.

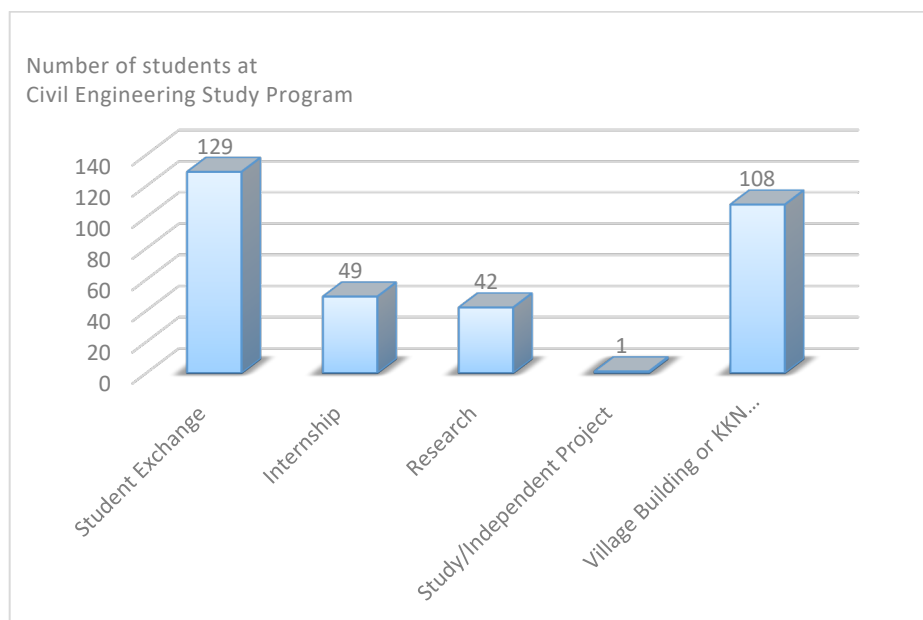


Figure 3: Types of Student Activities that students are interested in taking.

- c. Most of the Civil Engineering Study Program students have understood the MBKM policy. The bar chart below indicates that students know the overall policy.

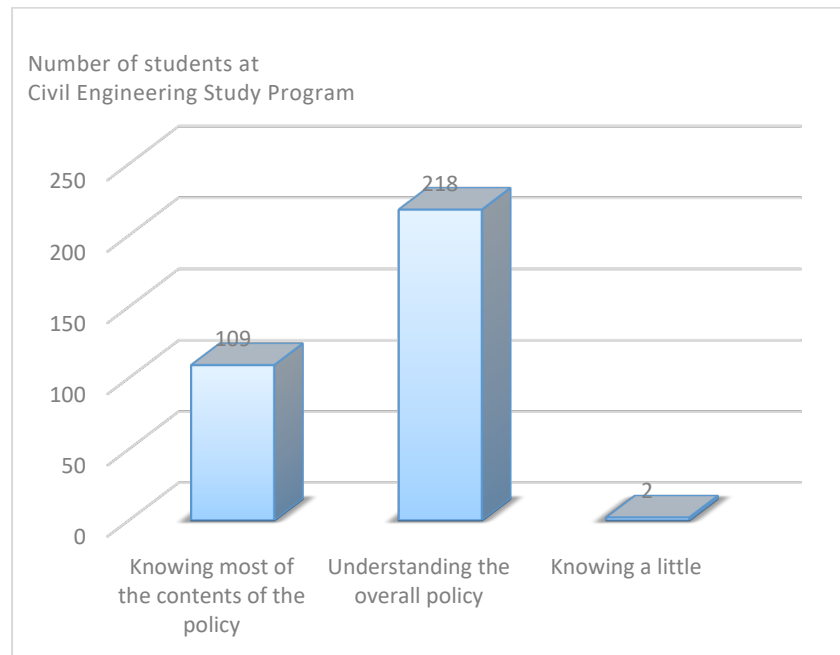


Figure 4: MBKM Knowledge

d. Civil Engineering Study Program students have made the preparations shown in the bar chart below.

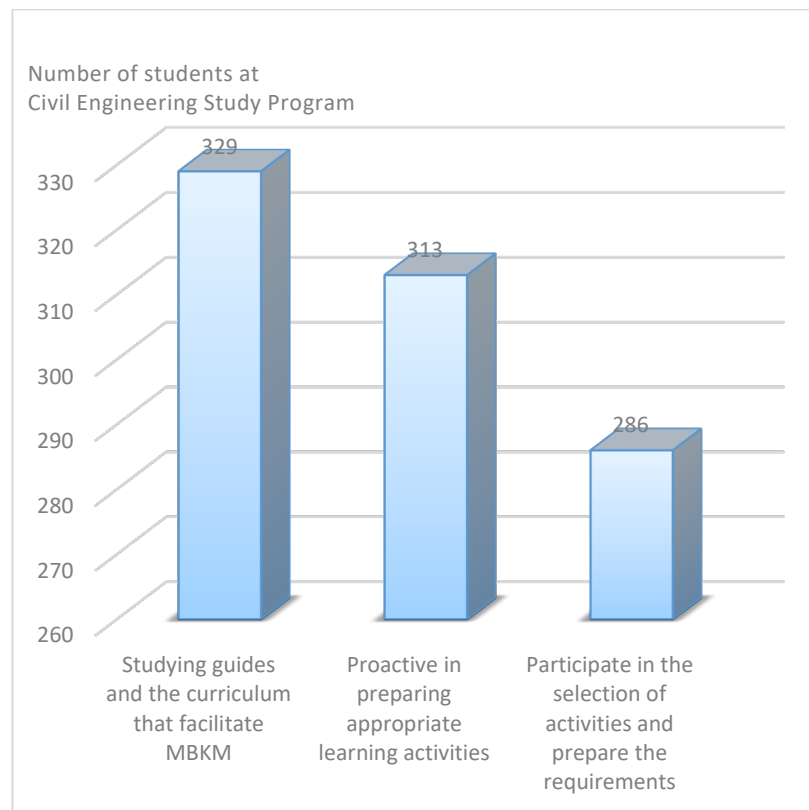


Figure 5: Student Preparation to Support MBKM

- e. Students of the Civil Engineering Study Program understand that the implementation of MBKM does not affect the length of study time. The bar chart below shows the dominant survey results are the study period remains on time

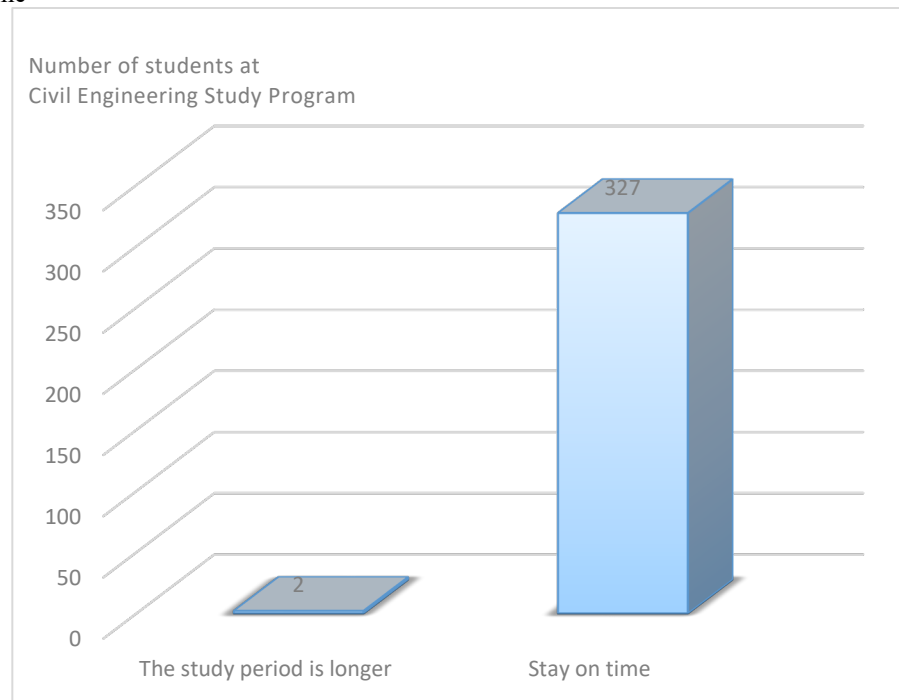


Figure 6: Implications of Learning Activities to The Length of Study

- f. The survey results state that MBKM is following the needs of future graduates. The bar chart below reveals the results.

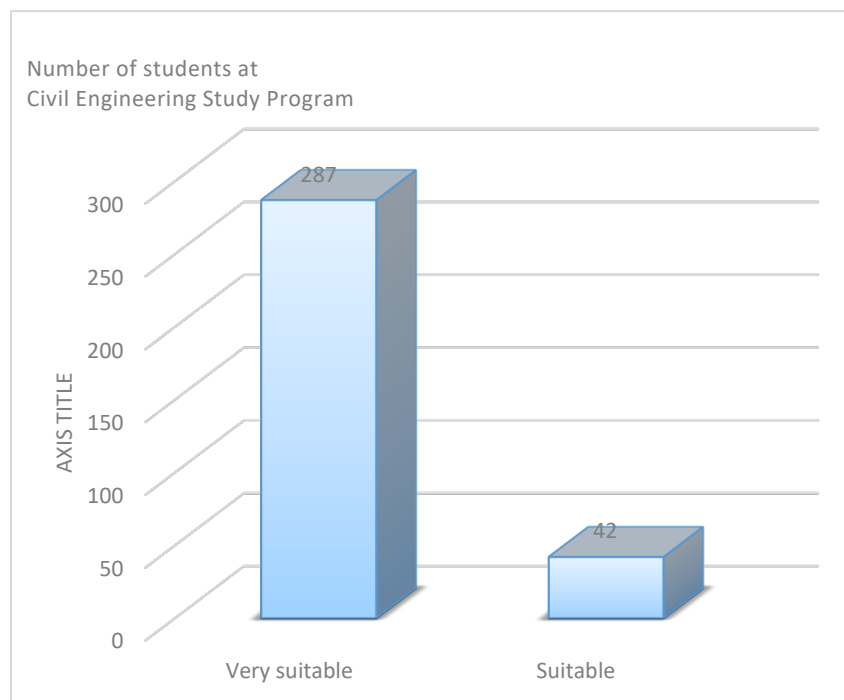


Figure 7: MBKM Suitable to The Needs of Future Graduates

- g. MBKM supports the development of competence/skills as a provision for work after graduation. It is evidenced by the survey results, which explain that MBKM is very useful.

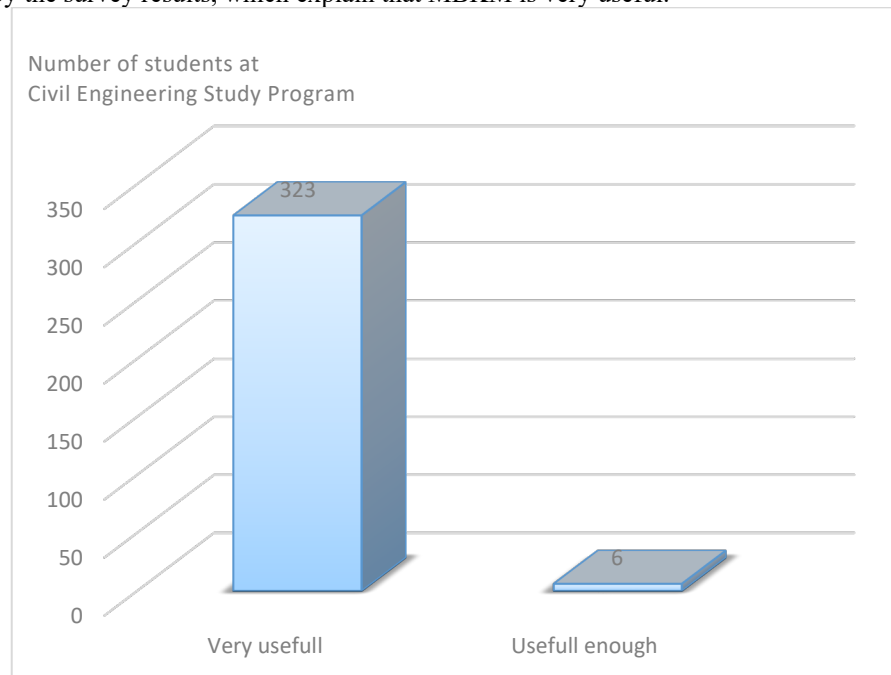


Figure 8: The Benefits of MBKM in Developing Competence/Skills as a Provision for Work After Graduation

- h. Students get an increase in soft skills after participating in MBKM. The following survey results describe an increase in soft skills after the activities.

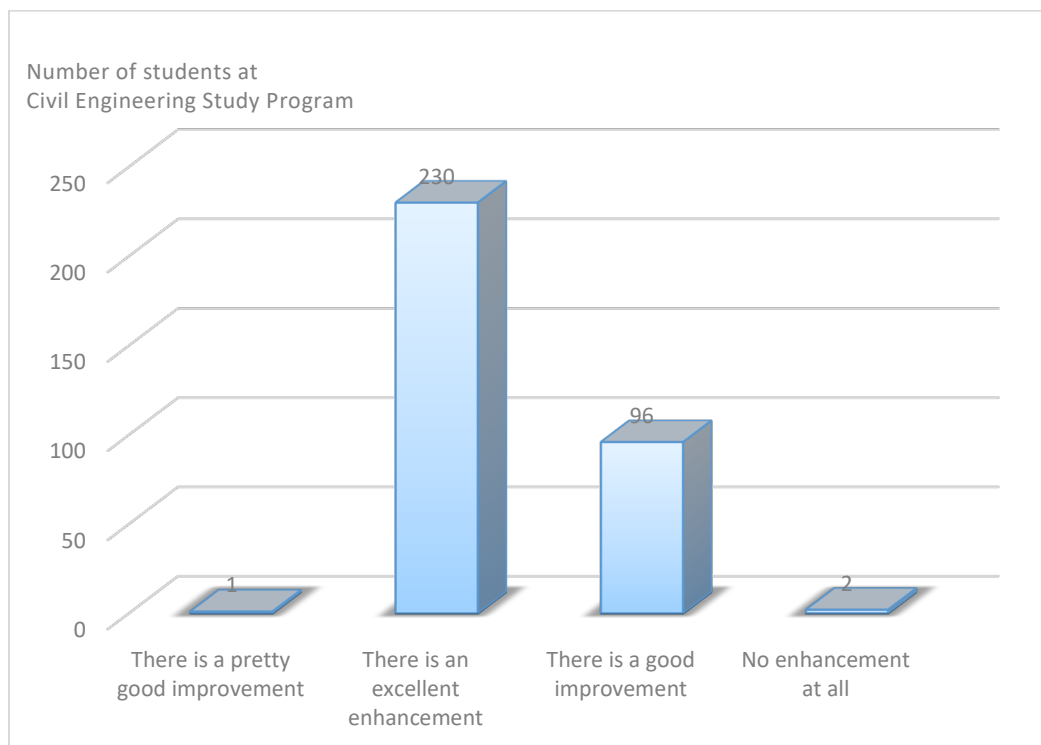


Figure 9: Improved Soft-Skill Acquired After MBKM

- i. Students stated the importance of MBKM activities to prepare for the future, as shown in the following survey results.

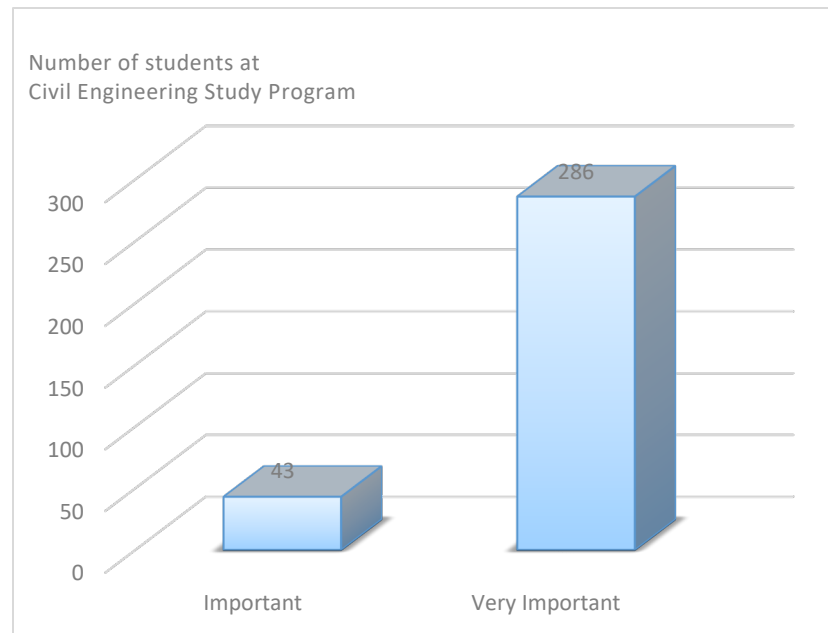


Figure 10: The Importance of MBKM Activities to Prepare for The Post-Campus Period

- j. In addition to the positive results from its implementation, there are also negative results of MBKM. Based on the survey results, the biggest obstacle for MBKM is the need for funds because many are carried out outside the campus, so parents disapprove of it.

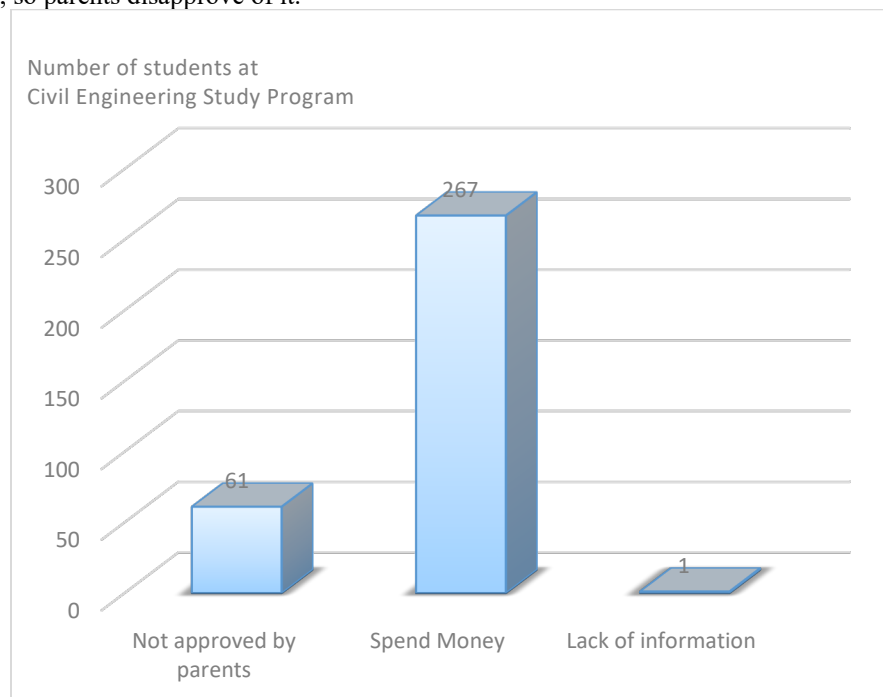


Figure 11: MBKM Implementation Constraints

4. Conclusions

Research proves that Narotama Civil Engineering Study Program students are interested and have understood the MBKM Internship program implemented at Unnar. Students have also made preparations to implement it. The survey results show that this activity positively impacts soft skills competence to face the challenges of the world of work. The implementation of this program also proved not to affect the planned study period. The problem lies in the additional costs because they are primarily off-campus activities so that several percent of parents disagree. However, these obstacles can be anticipated by providing complete information to prepare in advance.

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Biographies

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Sri Wiwoho Mudjanarko, Starting his career in construction services since 1991, since 2000 he has worked as a Lecturer in Civil Engineering at Narotama University, Surabaya and as an Extraordinary Lecturer in the Master of Civil Engineering at the 17 August 1945 University of Surabaya. Diploma III Civil Engineering at Petra Christian University, Surabaya, Undergraduate Civil Engineering Narotama University, Surabaya, Magister Civil Engineering at Sepuluh Nopember Institute of Technology, Surabaya, Doctoral Civil Engineering at Brawijaya University, Malang, Engineerin g Professional Program (Ir) Universitas Gadjah Mada (UGM) and in the professional field of Railways. The author is currently serving as the Chancellor of Narotama University, the Head of the Narotama University LPPM, a member / professional committee of the Inter-College Transportation Study Forum (FSTPT), the Indonesian Railroad Society (MASKA) and the Chair of the LPPM Association in Surabaya and its surroundings. He has been awarded Research Grants from the Government of Indonesia on various schemes since 2009 until now.

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