

## ABSTRAK

**Suhardi. Pengembangan Modul Ajar dan Jobsheet Praktikum Sebagai Media Pembelajaran Elemen Instalasi Motor Listrik Kelas XI Teknik Instalasi Tenaga Listrik SMK Negeri 1 Percut Sei Tuan. Skripsi. Program Studi Pendidikan Teknik Elektro, Jurusan Pendidikan Teknik Elektro, Fakultas Teknik, Universitas Negeri Medan, 2025.**

Penelitian ini bertujuan untuk mengembangkan Modul Ajar dan *Jobsheet* Praktikum Sebagai Media Pembelajaran Elemen Instalasi Motor Listrik Kelas XI Teknik Instalasi Tenaga Listrik SMK Negeri 1 Percut Sei Tuan. Latar belakang penelitian ini adalah modul ajar belum terdapat soal latihan evaluasi dan *jobsheet* praktikum tidak adanya keselamatan kerja, tugas refleksi, dan rangkaian motor tiga fasa belum bervariasi. Jenis penelitian ini adalah *Research and Development* (R&D). Metode dalam penelitian ini dilakukan melalui empat tahapan (*Four-D*), yaitu pendefinisian (*define*), perancangan (*design*), pengembangan (*develop*) dan penyebaran (*disseminate*). Hasil penelitian ini adalah: (1) Modul ajar yang dikembangkan dinyatakan sangat layak berdasarkan ahli materi mendapatkan skor 71 dengan persentase 88,75% pada kategori “Sangat Layak” digunakan dan *jobsheet* praktikum mendapatkan skor 89 dengan persentase 89% pada kategori “Sangat Layak” digunakan. (2) Modul ajar yang dikembangkan dinyatakan sangat layak berdasarkan ahli media mendapatkan skor 75 dengan persentase 93,75% pada kategori “Sangat Layak” digunakan dan *jobsheet* praktikum mendapatkan skor 85 dengan persentase 96,59% pada kategori “Sangat Layak” digunakan. (3) Modul ajar yang dikembangkan dinyatakan sangat layak berdasarkan validasi guru mendapatkan skor 60 dengan persentase 93,75% pada kategori “Sangat Layak” digunakan dan *jobsheet* praktikum mendapatkan skor 85 dengan persentase 92,39% pada kategori “Sangat Layak” digunakan. (4) Hasil uji coba pengembangan dilakukan responden (siswa) terhadap modul ajar mendapatkan keseluruhan persentase 87,11% dan *jobsheet* praktikum mendapatkan keseluruhan persentase 89,03%. Berdasarkan hasil tersebut media pembelajaran modul ajar dan *jobsheet* praktikum ini sangat layak untuk digunakan dalam pembelajaran. Oleh karena itu, modul ajar dan *jobsheet* praktikum ini dapat digunakan secara luas sebagai media pembelajaran di elemen instalasi motor listrik.

**Kata Kunci:** Pengembangan, Media Pembelajaran, Modul Ajar, *Jobsheet* Praktikum, dan Instalasi Motor Listrik.

## ABSTRACT

**Suhardi. *Development of Teaching Modules and Practical Jobsheets as Learning Media for Electric Motor Installation Elements of Class XI Electrical Power Installation Engineering SMK Negeri 1 Percut Sei Tuan. Thesis. Electrical Engineering Education Study Program, Department of Electrical Engineering Education, Faculty of Engineering, State University of Medan, 2025.***

*This study aims to develop Teaching Modules and Practical Worksheets as Learning Media for Electric Motor Installation Elements for Grade XI Electrical Installation Engineering at SMK Negeri 1 Percut Sei Tuan. The background of this study is that the teaching modules do not yet include evaluation exercises, and the practical worksheets lack safety procedures, reflection tasks, and varied three-phase motor circuits. This research is a Research and Development (R&D) study. The research method was carried out in four stages (Four-D), namely definition (define), design (design), development (develop), and dissemination (disseminate). The results of this study are: (1) The teaching module developed was declared highly feasible based on subject matter experts, obtaining a score of 71 with a percentage of 88.75% in the “Highly Feasible” category, and the practicum worksheet obtained a score of 89 with a percentage of 89% in the “Highly Feasible” category. (2) The developed teaching module was deemed highly feasible based on media experts' assessment, scoring 75 with a percentage of 93.75% in the “Highly Feasible” category, and the practicum worksheet scored 85 with a percentage of 96.59% in the “Highly Feasible” category. (3) The developed teaching module was declared very feasible based on teacher validation, scoring 60 with a percentage of 93.75% in the “Very Feasible” category, and the practical worksheet scored 85 with a percentage of 92.39% in the “Very Feasible” category. (4) The results of the development trial conducted by respondents (students) on the teaching module obtained an overall percentage of 87.11% and the practical worksheet obtained an overall percentage of 89.03%. Based on these results, the teaching module and practical worksheet learning media are very feasible for use in learning. Therefore, these teaching modules and practical worksheets can be widely used as learning media in electric motor installation elements.*

**Keywords:** *Development, Learning Media, Teaching Modules, Practical Worksheets, and Electric Motor Installation.*