

**THE DEVELOPMENT OF PORTABLE ELECTRICITY LEARNING MEDIA  
BASED ON AUTOMATIC CONTROL IN ELECTRICAL INSTALLATION  
BASICS COURSE IN ELECTRICAL ENGINEERING EDUCATION  
BACHELOR DEGREE STUDY PROGRAM**

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**ABSTRACT**

This study aims to create and develop a learning media in the form of a Portable Electric Trainer Based on Automatic Control for the Electrical Installation Basics course in the Undiksha Electrical Engineering Education Bachelor Degree Study Program. This study is belong to the R&D (research and development) type of research. This study used statistical analysis techniques percentages to process data from content experts, media experts, and testing on students. This study used a questionnaire as an instrument for data collection of content experts, media experts, and students. The result of the content expert validation test was 97.7% with very decent qualifications, the media expert validation test was 98.21% with very decent qualifications, small group trial of 6 respondents showed very high qualifications, and large group trial of 20 respondents found very high qualifications. The learning media in the form of a Portable Electric Trainer Based on Automatic Control for the Electrical Installation Basics course in the Undiksha Electrical Engineering Education Bachelor Degree Study Program is feasible to be used in the learning process for the Electrical Installation Basics course.

**Keywords:** learning media, Automatic Control, basics of electrical installation.

**PENGEMBANGAN MEDIA PEMBELAJARAN  
INSTALASI LISTRIK *PORTABLE* BERBASIS AUTOMATIC CONTROL  
PADA MATA KULIAH DASAR-DASAR INSTALASI LISTRIK  
DI PROGRAM STUDI S1 PENDIDIKAN TEKNIK ELEKTRO UNDIKSHA**

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**ABSTRAK**

Penelitian ini bertujuan untuk membuat suatu media pembelajaran berupa Trainer Instalasi Listrik *Portable* Berbasis *Automatic Control* untuk mata Kuliah Dasar-Dasar Instalasi Listrik di Program Studi S1 Pendidikan Teknik Elektro Undiksha. Penelitian ini termasuk dalam jenis penelitian *R&D* (*research and development*). Penelitian ini menggunakan teknik analisa statistik persentase untuk mengolah data ahli isi, ahli media, dan uji coba kepada mahasiswa. Penelitian ini menggunakan kuesioner sebagai instrumen pengambilan data ahli isi, ahli media, dan mahasiswa. Hasil penelitian dilakukan: uji validasi ahli isi sebesar 97.7% dengan kualifikasi sangat layak, uji validasi ahli media sebesar 98.21% dengan kualifikasi sangat layak, uji coba kelompok kecil dari 6 orang responden mendapatkan hasil dengan klasifikasi sangat tinggi, dan uji coba kelompok besar dari 20 orang responden mendapatkan hasil dengan klasifikasi sangat tinggi. Media pembelajaran berupa Trainer Listrik *Portable* Berbasis *Automatic Control* untuk mata Kuliah Dasar-Dasar Instalasi Listrik di Program Studi S1 Pendidikan Teknik Elektro Undiksha layak digunakan dalam proses pembelajaran mata kuliah Dasar-Dasar Instalasi Listrik.

**Kata Kunci:** media pembelajaran, *Automatic Control*, dasar-dasar instalasi listrik.