

**PEMBUATAN MODUL PRAKTIKUM BLENODE32
UNTUK MEDIA PEMBELAJARAN JARAK JAUH
MATA KULIAH SISTEM TERTANAM DAN IOT**

SKRIPSI

*Diajukan Untuk Memenuhi Syarat Memperoleh Gelar Sarjana Pendidikan
Departemen Pendidikan Teknik Elektro*



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2021**

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Sebuah skripsi yang diajukan untuk memenuhi salah satu syarat memperoleh gelar
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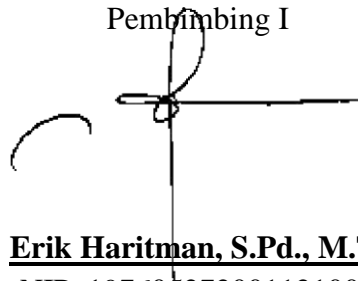
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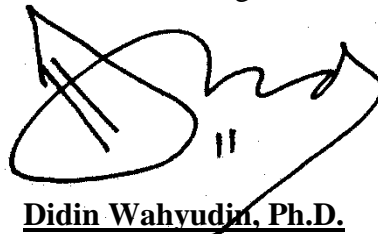
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PERNYATAAN

Dengan ini saya menyatakan bahwa skripsi dengan judul “**PEMBUATAN MODUL PRAKTIKUM BLENODE32 UNTUK MEDIA PEMBELAJARAN JARAK JAUH MATA KULIAH SISTEM TERTANAM DAN IOT**” ini beserta seluruh isinya adalah benar – benar karya saya sendiri. Saya tidak melakukan penjiplakan atau pengutipan dengan cara – cara yang tidak sesuai dengan etika ilmu yang berlaku dalam masyarakat keilmuan. Atas pernyataan ini, saya siap menanggung resiko/sanksi apabila di kemudian hari ditemukan adanya pelanggaran etika keilmuan atau ada klaim dari pihak lain terhadap keaslian karya saya ini.

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Yang membuat pernyataan,



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ABSTRAK
PEMBUATAN MODUL PRAKTIKUM BLENODE32
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Abstrak : Dewasa ini sistem pendidikan harus dapat menyesuaikan dan memanfaatkan perkembangan teknologi yang ada, ditambah pandemi COVID-19 mengakibatkan kegiatan pendidikan menjadi terganggu dan merubah cara pendidikan secara serentak menjadi pendidikan jarak jauh. Namun dalam pendidikan jarak jauh terdapat rintangan yang harus dihadapi yaitu materi dan pembelajaran harus bisa tersampaikan dengan baik dan peserta didik harus mendapat pengalaman belajar yang maksimal. Untuk memenuhi kebutuhan pembelajaran dan mengatasi keterbatasan proses pembelajaran yang sedang terjadi pada mata kuliah sistem tertanam dan *internet of things* di konsentrasi ELIND Pendidikan Teknik Elektro UPI pada masa pandemi, diperlukan inovasi dan pemanfaatan terhadap teknologi yang relevan untuk proses belajar dan mengajar seperti pembuatan media pembelajaran jarak jauh. Penelitian ini memiliki tujuan yaitu (1) membuat media pembelajaran atau modul praktikum dari *trainer* BLENode32 (2) mengetahui tanggapan responden dari modul yang dibuat sebagai media pembelajaran mahasiswa konsentrasi ELIND DPTE UPI untuk mata kuliah Sistem Tertanam dan Internet Of Things. Penelitian ini menggunakan pendekatan kuantitatif deskriptif dengan model pengembangan ADDIE (*Analyze, Design, Develop, Implement, and Evaluation*). Responden pada penelitian ini adalah 31 orang mahasiswa konsentrasi ELIND DPTE UPI angkatan 2018. Berdasarkan hasil penelitian yang dilakukan diketahui bahwa modul praktikum *trainer* BLENode32 berhasil dikembangkan dengan model pengembangan ADDIE dan pengguna secara mayoritas memberikan penilaian yang sangat baik terhadap produk media pembelajaran yang dikembangkan.

Kata Kunci: *Remote Laboratory, Modul Praktikum, Media Pembelajaran, Bluetooth Low Energy, Wireless Sensor Network, ADDIE.*

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