

### **Abstrak**

*Implementasi media pembelajaran otomatisasi industri yang dikemas dalam bentuk prototipe trainer PLC dan SCADA melalui beberapa tahapan meliputi : Analisis kebutuhan, Perancangan model, Implementasi, Pengujian dan Revisi Produk.*

*Secara keseluruhan kelayakan prototipe trainer PLC dan SCADA berdasarkan hasil uji kelayakan yaitu validasi ahli media dinyatakan sangat layak dengan persentase bernilai 86,67%, validasi ahli materi dinyatakan sangat layak dengan persentase bernilai 88,33%, sedangkan dalam pretest dan posttest dengan nilai rata-rata pretest 67,19 dan post test 72,72. Hasil uji-t menyatakan nilai  $t_{hitung} > t_{tabel}$  ( $8,288 > 2,042$ ) dan signifikansi ( $0,000 < 0,05$ ), artinya terdapat perbedaan yang signifikan rata-rata skor nilai prestasi belajar Taruna pretest dengan posttest dengan peningkatan persentase belajar 82,30 %. Hal ini dapat disimpulkan bahwa implementasi prototipe simulator trainer PLC dan SCADA pengajaran mekatronika ini termasuk dalam kategori sangat baik dan layak digunakan sebagai media pembelajar dalam rangka untuk memberikan bekal awal materi pengajaran otomatisasi industri.*

***Kata kunci:*** *Implementasi Media, Prototipe Simulator Trainer PLC dan SCADA.*

### **Abstract**

Implementation of industrial automation learning media are packaged in the form of a prototype trainer PLC and SCADA through several stages include: needs analysis, design models, Implementation, Testing and Product Revision.

Overall feasibility prototype trainer PLC and SCADA based on the results of the validation test of the feasibility of media experts expressed very feasible with the percentage of 86.67% valued, expert validation revealed the material is well worth the percentage worth 88.33%, while in the pretest and posttest with a mean value The average pretest and post test 67.19 72.72. T-test results stated  $t_{count} > t_{table}$  ( $8.288 > 2.042$ ) and significant ( $0.000 < 0.05$ ), meaning that there is a significant difference in average learning achievement scores pretest to posttest Midshipman with 82.30% increase in the percentage of study. It can be concluded that the implementation of a prototype simulator trainer teaching mechatronics PLC and SCADA is included in the category of very good and fit for use as a medium of learning in order to give the initial provision of teaching materials industrial automation.

**Keywords:** Implementation of Media, Prototype Simulator Trainer PLC and SCADA.