

## ABSTRAK

**Henri Hasudungan Sinaga. NIM 5181131005: Pengembangan Bahan Ajar Inovatif Pada Mata Pelajaran Sistem Kontrol Elektromekanik Dan Elektronik Jurusan Teknik Otomasi Industri Smk N 13 Medan. Skripsi. Fakultas Teknik – Universitas Negeri Medan. 2022.**

Penelitian ini bertujuan untuk: Mengembangkan media pembelajaran Bahan Ajar Inovatif Pada Mata Pelajaran Sistem Kontrol Elektromekanik Dan Elektronik Jurusan Teknik Otomasi Industri Smk N 13 Medan, melalui Mengetahui tingkat validitas media pembelajaran yang dikembangkan sebagai media pembelajaran bagi siswa. Penelitian ini menggunakan metode penelitian pengembangan model ADDIE, meliputi tahapan *analyze* (analisis), *design* (perancangan), *development* (pengembangan), *implementation* (implementasi), *evaluation* (evaluasi). Instrumen yang digunakan berupa angket. Angket digunakan untuk menguji kelayakan media bahan ajar melalui validasi ahli materi dan ahli media. Penilaian bahan ajar juga dilakukan oleh pengguna (guru dan siswa).

Berdasarkan hasil penelitian diketahui bahwa Bahan Ajar Inovatif Sistem Kontrol Elektromekanik Dan Elektronik sebagai media pembelajaran pada Mata Pelajaran Sistem Kontrol Elektromekanik Dan Elektronik mengacu pada kurikulum 2013 revisi yang terdiri dari 4 sub Bab materi pelajaran atau 4 kali pertemuan. Hasil pengujian kelayakan oleh ahli materi mendapat skor 90,6% dengan kategori sangat layak, dan hasil pengujian kelayakan oleh ahli media mendapat skor 96,1% dengan kategori sangat layak. Berdasarkan angket pengguna yang di isi oleh satu orang guru, memperoleh tingkat kelayakan 90,03% dengan kategori sangat layak dan 15 siswa, memperoleh tingkat kelayakan 91,48% dengan kategori sangat layak. Hasil penelitian menunjukkan bahwa bahan ajar Sistem Kontrol Elektromekanik Dan Elektronik layak digunakan siswa kelas XI Sistem Kontrol Elektromekanik Dan Elektronik Jurusan Teknik Otomasi Industri SMK N 13 Medan

**Kata Kunci :**Pengembangan Media, Bahan ajar,Sistem Kontrol Elektromekanik Dan Elektronik

## ABSTRACT

*Henri Hasudungan Sinaga. NIM 5181131005: Development of Innovative Teaching Materials in the Subjects of Electromechanical and Electronic Control Systems, Department of Industrial Automation Engineering, SMK N 13 Medan. Essay. Faculty of Engineering – Medan State University. 2022.*

*This study aims to: Develop learning media for Innovative Teaching Materials in the Subjects of Electromechanical and Electronic Control Systems, Industrial Automation Engineering Department at Smk N 13 Medan, by knowing the level of validity of the learning media developed as learning media for students. This study uses the ADDIE model development research method, including the analyze, design, development, implementation, evaluation stages. The instrument used is a questionnaire. Questionnaires are used to test the feasibility of teaching material media through the validation of material experts and media experts. Assessment of teaching materials is also carried out by users (teachers and students).*

*Based on the research results, it is known that the Innovative Teaching Materials for Electromechanical and Electronic Control Systems as learning media in the Subjects of Electromechanical and Electronic Control Systems refers to the revised 2013 curriculum which consists of 4 sub-chapters of subject matter or 4 meetings. The results of the feasibility test by the material expert got a score of 90.6% in the very feasible category, and the result of the feasibility test by the media expert got a score of 96.1% in the very feasible category. Based on a user questionnaire filled out by one teacher, it obtained a 90.03% eligibility level in the very feasible category and 15 students, obtained a 91.48% eligibility level in the very feasible category. The results showed that the teaching materials for Electromechanical and Electronic Control Systems were suitable for use by class XI students of Electromechanical and Electronic Control Systems, Department of Industrial Automation Engineering, SMK N 13 Medan.*

**Keywords** :Media Development, Teaching Materials, Electromechanical And Electronic Control Systems