

**PERANCANGAN *E-LEARNING* BERBASIS *WEBSITE* (STUDI KASUS:
POLITEKNIK PENERBANGAN INDONESIA (PPI) CURUG)**

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ABSTRAK

Saat ini hampir seluruh kegiatan belajar mengajar pada Politeknik Penerbangan Indonesia Curug masih menggunakan sistem konvensional yang mana memiliki berbagai kekurangan, diantaranya jika ada taruna yang berhalangan hadir saat tatap muka sulit untuk mendapatkan informasi materi yang disampaikan beserta informasi *assignment* yang ada saat itu, lalu pengumpulan *assignment*, pengerjaan *exam* dan *quiz* yang masih manual, dan beberapa kekurangan-kekurangan lainnya. Maka dari itu dibuatlah *E-Learning* untuk mempermudah dosen dalam pendistribusian materi, *assignment*, soal *exam*, membuat *quiz*, mengisi laporan kegiatan perkuliahan, dan mengisi daftar hadir taruna, lalu mempermudah taruna dalam membuka materi, meng-*input assignment*, meng-*input exam*, dan mengisi *quiz*, serta mempermudah staff pengelola pendidikan dalam mengatur proses belajar mengajar. Pengembangan *e-learning* menggunakan metode *waterfall*, pada fase analisis akan dilakukan menggunakan analisis PIECES, arsitektur *e-learning* dimodelkan menggunakan diagram UML, dan pengujian menggunakan metode *black box*. *e-learning* ini dibuat dengan bahasa pemrograman PHP yang didukung dengan *database* MySQLi. Hasil penelitian ini *E-Learning* berbasis *website* Politeknik Penerbangan Indonesia (PPI) Curug yang diharapkan dapat mempermudah dosen, taruna, dan staff pengelola pendidikan serta meningkatkan efektifitas dan efisiensi kegiatan belajar mengajar.

Kata kunci: *E-Learning, Website, Waterfall.*

WEBSITE-BASED E-LEARNING DESIGN (CASE STUDY: INDONESIAN AVIATION POLYTECHNIC (PPI) CURUG)

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ABSTRACT

Currently, almost all teaching and learning activities at the Indonesian Aviation Polytechnic Curug still use the conventional system which has various shortcomings, including if there are cadets who are unable to attend face-to-face it is difficult to get material information submitted along with existing assignment information, then collect assignments, manual exams and quizzes, and several other shortcomings. Therefore, E-Learning was made to make it easier for lecturers to distribute materials, assignments, exam questions, quizzes, filling out lecture activity reports as well as the cadet attendance list, then make it easier for cadets to open materials, input assignments, input exams, and fill out quizzes, as well as make it easier for education management staff in managing the teaching and learning process. The method used for the development of e-learning is the waterfall method, in the analysis phase will be carried out using PIECES analysis, the e-learning architecture is modeled using UML diagrams, and testing using the black box method. This e-learning is made using the PHP programming language and is supported by the MySQLi database. The results of this study are E-Learning based on the Indonesian Aviation Polytechnic (PPI) Curug website which is expected to facilitate lecturers, cadets, and education management staff and increase the effectiveness and efficiency of teaching and learning activities.

Keywords: *E-Learning, Website, Waterfall.*