

## ABSTRAK

Judul : Rancang Bangun Aplikasi Seleksi Penerimaan Beasiswa Dengan Pendekatan Metode *Analytical Hierarchy Process* dan Metode *Technique for Order of Preference by Similarity to Ideal Solution* (Studi Kasus: Universitas Esa Unggul)  
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Program Studi : Sistem Informasi

Beasiswa merupakan bantuan yang diberikan kepada mahasiswa yang berprestasi atau bagi orang tuanya yang kurang mampu. Di dalam pelaksanaannya, proses seleksi mahasiswa masih dilakukan secara manual dengan cara membandingkan masing-masing berkas pendaftar beasiswa yang mengakibatkan proses seleksi menjadi kurang efektif dan mengalami kesulitan apabila terlalu banyaknya mahasiswa yang mengikuti penyeleksian beasiswa tersebut serta memerlukan waktu yang cukup lama dalam proses tersebut. Tujuan dari penelitian ini adalah untuk membantu dan mempermudah pihak kampus dalam menyeleksi pendaftar beasiswa agar tidak memerlukan waktu yang lama. Aplikasi Seleksi Penerimaan Beasiswa akan mengolah data kriteria penerima beasiswa dengan pendekatan metode *Analytical Hierarchy Process* (AHP) dan *Technique for Order of Preference by Similarity to Ideal Solution* (TOPSIS). Hasil Analisa dari metode *Analytical Hierarchy Process* (AHP) dan Metode *Technique for Order of Preference by Similarity to Ideal Solution* (TOPSIS) akan menentukan urutan kandidat yang bisa menerima beasiswa berdasarkan besarnya bobot kriteria. Aplikasi ini dibangun dengan menggunakan perangkat lunak *Hypertext Preprocessor* (PHP) dan *database My Structured Query Language* (MySQL). Perancangan Sistem menggunakan *Object Oriented Design* dengan *Unified Modeling Language* (UML) *Tools*.

Kata kunci : .Seleksi, Beasiswa, *Analytical Hierarchy Process*, *Technique for Order of Preference by Similarity to Ideal Solution*

## **ABSTRACT**

**Title** : *Design and Build Scholarship Admission Selection Applications With Approach of Analytical Hierarchy Process Method and Technique for Order of Preference Method by Similarity to Ideal Solution (Case Study: Esa Unggul University)*

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**Study Program** : Information Systems

Scholarships are assistance given to outstanding students or their parents who are less able. In practice, the student selection process is still done manually by comparing each scholarship applicant file which results in the selection process being less effective and experiencing difficulties if too many students take part in the scholarship selection and it takes a long time in the process. The purpose of this research is to assist and facilitate the campus in selecting scholarship applicants so that it does not take a long time. The Scholarship Admissions Selection Application will process data on the criteria for scholarship recipients using the Analytical Hierarchy Process (AHP) and Technique for Order of Preference by Similarity to Ideal Solution (TOPSIS) approach. The results of the analysis of the Analytical Hierarchy Process (AHP) method and the Technique for Order of Preference by Similarity to Ideal Solution (TOPSIS) method will determine the order of candidates who can receive scholarships based on the weight of the criteria. This application was built using Hypertext Preprocessor (PHP) software and My Structured Query Language (MySQL) database. System Design using Object Oriented Design with Unified Modeling Language (UML) Tools.

**Keywords** : *Selection, Scholarship, Analytical Hierarchy Process, Technique for Order of Preference by Similarity to Ideal Solution*