

## **ABSTRACT**

### ***DECISION SUPPORT SYSTEM FOR DETERMINING ELECTIVE COURSE USING WEIGHTED PRODUCT METHOD***

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*Visual Communication Design students at Telkom Institute of Technology Purwokerto are required to take electives based on student's interests and abilities upon entering 6th and 7th semesters. The selection of courses causes difficulties due to lack of socialization and consultation with supervising lecturers is less than optimal. As a result, students have no understanding of how to choose courses in accordance with their interests and abilities. Therefore, an efficient and simple elective course selection system for visual communication design is needed. This research uses the weighted product method using the criteria are interest, ability, value, work interest from the course. The language used is PHP language with codeigniter framework. The application of the weighted product method is more efficient because of the use of simple and relatively short calculations. The built system is tested using black box testing to test the functionality of the system and manual comparison to test the calculations on the weighted product method. The results of the black box testing show that the system can work as expected presentage is 97.5% and the system has applied the weighted product method well with the calculation of the system and the manual comparison is 100%.*

***Keywords: Black Box Testing, Communication Visual Design, Decision Support System, Elective Courses, Weighted Product Method***