

**STUDENT PERFORMANCE MONITORING SYSTEM WITH PREDICTIVE  
ANALYTICS**

EASTERN VISAYAS STATE UNIVERSITY ORMOC CITY CAMPUS

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## **Introduction**

In today's academic environment, it is essential to monitor and evaluate students' academic performance accurately and efficiently. Traditional methods of tracking performance through manual grading and reporting are time-consuming and prone to human error. With advancements in data analytics and system automation, institutions can now utilize digital tools to streamline this process. This study proposes the development of a Student Performance Monitoring System with integrated predictive analytics that helps educators track and forecast student outcomes based on historical and real-time data.

## **Project Objective**

This system provides a meaningful contribution to both educators and students. For teachers, it simplifies performance tracking, enabling early identification of students who may be at risk of failing. For students, it offers transparency and insight into their academic progress, fostering motivation and accountability. Additionally, school administrators can use predictive reports for decision-making and resource allocation.

## **Significance of Study**

The system is designed as a web-based platform built using PHP and MySQL for the backend, and JavaScript for interactivity. It features secure user login for teachers and students, a performance dashboard, data input forms, and report generation tools. The predictive analytics module uses basic regression models to forecast performance trends. The database schema includes tables for student records, grades, subjects, and user roles. The user interface is designed for simplicity and usability to ensure that faculty can adopt the system with minimal training.

## **System Analysis and Design**

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