

ABSTRACT

Study of Planning and Arrangement of Car Parking Space Requirements at Universitas Pembangunan Jaya

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Universitas Pembangunan Jaya (UPJ) is one of the private universities in South Tangerang City which has a total number of active students in 2023 of 3,783 students divided into 10 study programs. Parking space for cars at UPJ is inadequate so it is necessary to carry out an analysis of car parking space units so that parking space needs can be met effectively. The research was carried out by analyzing the performance of existing car parks, calculating parking characteristics, predicting SRP needs, and carrying out design planning to meet the SRP needs of car vehicles. The research was carried out by surveying the volume of cars parked in the UPJ parking lot. The results of the analysis based on survey data show that the parking characteristics have a parking capacity of 172 cars, a maximum volume of 232 cars, the highest accumulation of 104 vehicles, a parking index of 65%, and a parking turnover rate of 1.48. It is known that the need for UPJ car parking is 1,035 – 1,242 m² based on calculation results. Through regression analysis, it shows that the number of students attending lectures has a greater influence on parking accumulation and student growth predictions are made based on growth trendlines and optimistic schemes and it is known that the need is 2,300 – 4,404 m². Design planning for car parking space requirements was carried out by adding a parking building measuring 35 x 35 m with 6 floors and can accommodate 283 cars.

Keywords: *Parking Space Unit, Car Parking, Parking Building*