

## **ABSTRACT**

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*Title* : *Vertical Student Housing Design through Bioclimatic Architecture Approach in Medan*

*The population in Indonesia is the 4<sup>th</sup> rank for the most populated country in the world. The large number of students in Indonesia has been increasing from year to year as well as the increasing demands for higher education standards in the field of work require students to continue their studies to a higher level. The Central Bureau of Statistics in 2019 recorded that there were 7 million students in 2018, not to mention the issue of global warming and limited land, especially in the city of Medan. Vertical housing for students is the right solution to the limited land problem and congestion issue in Medan so that student activity and productivity are not disturbed. Student housing is a residence intended for students, which functions as a residence for both Medan students and students outside Medan, so there is no need to worry about finding a place to live. The application of the bioclimatic architecture theme to the design of the Student Housing building is designed to improve the quality of life of the student. The research method was carried out quantitatively by analyzing micro climate and site context, mapping zone functions based on climate analysis, simulating the mass and choose the one that using the least amount of energy by its conceptual mass. The results are expected to create climate-friendly and good quality housing for students with facilities that support student activities.*

**Keywords:** *Student housing, population growth, bioclimatic architecture*