

PERANCANGAN INSTITUT TEKNIK DAN BISNIS DENGAN PENDEKATAN BIOPHILIC ARCHITECTURE DI KAWASAN PIK

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Abstract – Pantai Indah Kapuk (PIK) holds great potential as a location for a higher education institution that integrates academic and commercial functions while promoting sustainability and innovation. This final project presents the design of an Institute of Technology and Business, consisting of two main faculties: the Faculty of Engineering (offering Architecture and Civil Engineering programs) and the Faculty of Business (offering Management and Digital Business programs). The design aims to meet the growing need for collaborative, flexible, and technology-oriented learning environments in dense urban contexts. A Biophilic Architecture approach is adopted to enhance the quality of space by reconnecting people with nature through natural lighting, cross-ventilation, vertical gardens, rooftop green areas, and open public spaces. These features are intended to improve users' physical and psychological well-being while reducing energy consumption. The campus layout integrates academic zones with commercial areas such as co-working spaces and creative hubs to support entrepreneurial activities. The design also responds to tropical climatic conditions and urban dynamics through thoughtful massing and circulation strategies. This project envisions a modern campus model that promotes sustainability, creativity, productivity, and harmony between human activities and the natural environment.



MASSING CONCEPT



DESIGN CONCEPT



Air Pollution and Urban Heat.
PIK has high traffic and dense concrete development, leading to air pollution and urban heat island effect.



Need for Green Open Space.
Natural parks are limited in the commercial-heavy PIK area.



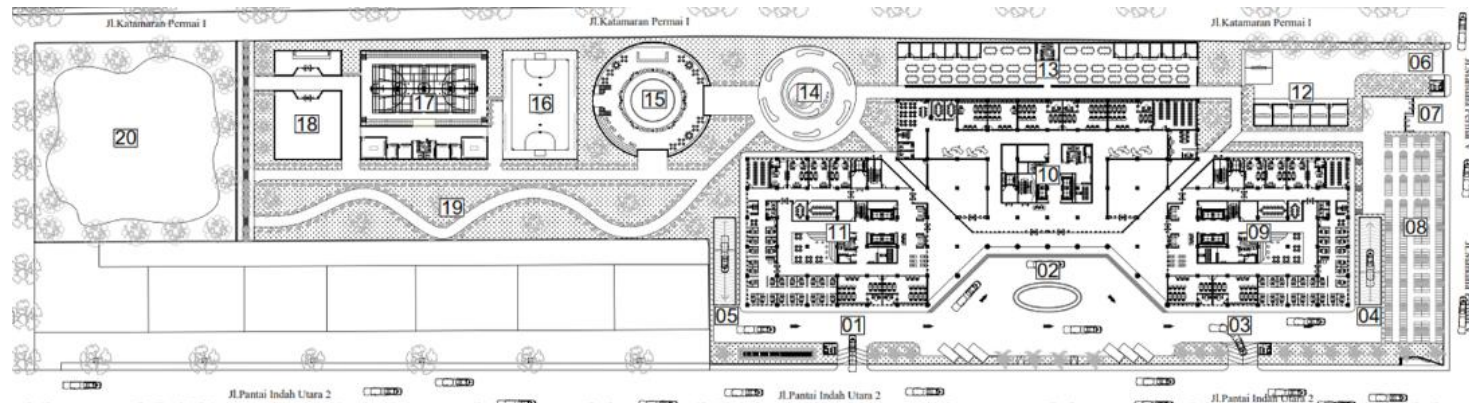
Adaptation to Flood Risks.
PIK is a lowland area prone to tidal flooding and waterlogging.



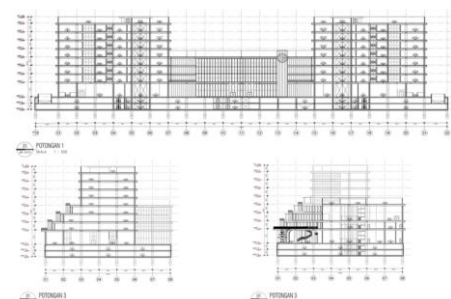
Health and Psychological Comfort.
Dense urban environments cause stress for students and lecturers.



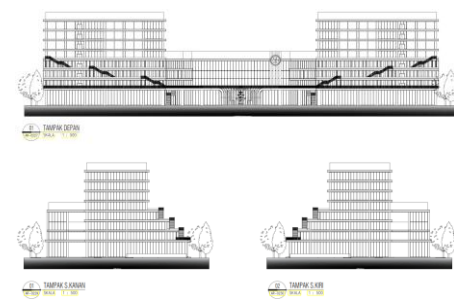
SITE PLAN



SECTION



ELEVATION



STRUCTURAL AXONOMETRIC

