

## ***ABSTRACT***

*Industrial Engineering Faculty of the Telkom University is a faculty at Telkom University. Data Center is an important component in ensuring the sustainability of Information Technology. At the current state of the Faculty of Industrial Engineering had several distributed servers that cause uncentralized management.*

*Based on the strategic plan of the Faculty of Industrial Engineering, Server that are in it will be combined into a single Data Center located in Karang building Faculty of Industrial Engineering Building 1st floor room C105. Therefore, it needs a new Data Center design. In designing Data Center Faculty of Engineering Industrial use TIA-942 heat dissipation best practices and methods PPDIOO Network Life-Cycle Approach on the first three stages, namely Prepare, Plan, Design. Use of the method PPDIOO Network Life-Cycle Approach is suitable for developing Data Center Faculty of Industrial Engineering because it has advantages possessed data phase cycle form, so it can accommodate continuous development.*

*The purpose of this study was to produce a design Data Center of Industrial Engineering Faculty and achieve appropriate standards in tier 2 levels with reference to TIA-942. The final result of the plan of a new location with a supporting area, Electrical Systems, Cooling Systems, Design Raised Floor, and the room layout.*

*Key Word : Data Center, Server, TIA-942 heat dissipation, PPDIOO Network Life-Cycle Approach*