

## **ABSTRACT**

*Android platform technology that is growing and increasingly complex functions into engineering applications pushing the benefits of learning about the various fields of science . As well as in applications in the field of mathematics , language , health , telecommunications , and others . One example in the field of telecommunications , specifically in optical fiber communication systems which will be beneficial for the region Telkom University and field technicians , especially in the field of fiber optics .*

*One of the methods used to design optical fiber network is Optical Drafter . Then created an application that is integrated with android platform that helps network design optical fiber communication systems . Applications created entirely using the Eclipse IDE application Luna program that starts from the programming interface and the continued manufacture JAVA program . Users will log in using Gmail's account to access Google Drive folder on the manufacture of the design . Conducting the process of tagging and naming the fiber node automatically stored in the form of .gmap on Google Drive online storage . With the additional function database program that uses Bill Of Quantity codenamed Optical fiber node based method Drafter .*

*This application program has a 90.9% accuracy rate parameter by doing a comparison output data in accordance with the real conditions in the field to design early stage. Comparison of output data includes longitude and latitude on condition tolerance distance measurement accuracy. As well as the suitability of the existing fiber node in the topology FTTH (Fiber To The Home), the type of cable used and the price of unity of each component in the design. Testing the application system using test results obtained Blackbox 100% successful (no error). Drafter Optical Network applications intended for the University Telkom and field technicians who need a portable device makes it easy when in locations designing FTTH (Fiber To The Home).*

*Keywords : Android, Fiber Optik, Optical Drafter, FTTH.*