

# **ABSTRACT**

There is no operating system designed with an engineering student as its primary user, a student has to go out of his way to download and install any required application, an operating system has to be designed with the intention to be easy efficient to use by the engineering student. This project describes the design and implementation of a Linux-based, Web-oriented operating system, designed with a focus on required engineering tools and student operating system for colleges and universities. The operating system is based on the monolithic UNIX kernel consisting of various pre-installed tools like: Electric, Gmsh Mesh Generator, Blender, KTorrent, Dragon Player, Audacity, LibreOffice, IPython etc. used for various branches of engineering. IA-32, ARM, and x86\_64 are the targeted processor platforms and API used is POSIX.

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## **SYMBOLS AND ABBREVIATIONS**

GITOS	GITAM Institute of Technology Operating System
FOSS	Free and Open Source Software
OS	Operating System
PC	Personal Computer
USB	Universal Serial Bus
CD	Compact Disc
GB	Gigabyte
MB	Mega Byte
ISO	Image File Extension
RAM	Random Access Memory
VGA	Video Graphics Array
VMDK	Virtual Machine Disk