

UNIVERSITY OF MADRAS
B.Sc. DEGREE COURSE IN SOFTWARE APPLICATION
SYLLABUS WITH EFFECT FROM 2020-2021

BSA-CSC15

CORE-XV: OPEN SOURCE TECHNOLOGIES

(Common paper to BCA-IV Sem.)

III YEAR / VI SEM

OBJECTIVES:

- To provide a basic idea of Open source technology, their software development process to understand the role and future of open source software in the industry along with the impact of legal, economic and social issues for such software.

OUTCOMES:

- To recognize the benefits and features of Open Source Technology and to interpret, contrast and compare open source products among themselves

UNIT- I

Introduction – Why Open Source – Open Source –Principles, Standards Requirements, Successes – Free Software – FOSS – Internet Application Projects

UNIT- II

Open source – Initiatives, Principles, Methodologies, Philosophy, Platform, Freedom, OSSD, Licenses – Copy right, Copy left, Patent, Zero Marginal Technologies, Income generation opportunities, Internalization

UNIT- III

Case Studies – Apache, BSD, Linux, Mozilla (Firefox), Wikipedia, Joomla, GCC, Open Office.

UNIT- IV

Open Source Project –Starting, Maintaining –Open Source – Hardware, Design, Teaching & Media

UNIT- V

Open Source Ethics – Open Vs Closed Source – Government – Ethics – Impact of Open source Technology – Shared Software – Shared Source

TEXT BOOK:

1. Kailash Vadera, Bhavyesh Gandhi, “*Open Source Technology*”, Laxmi Publications Pvt Ltd 2012, 1st Edition.

REFERENCE BOOK:

1. Fadi P. Deek and James A. M. McHugh, “*Open Source: Technology and Policy*”, Cambridge Universities Press 2007.

WEB REFERENCES:

- Coursera online course – Open Source Software Development Methods - <https://www.coursera.org/learn/open-source-software-development-methods>