

# Gujarat University

K. S. School of Business Management and Information Technology  
[Five Years' (Full – Time) M.Sc. (CA&IT) Integrated Degree Course]  
First Year M.Sc. (CA&IT) (Semester - I)

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**Course Name: Fundamental of Open Source Technology**

**Course code:** SEC-IMSCIT-116

**Course Credit:** 2

**Course Outcomes:**

Upon completing this course, students will be:

- Aware of the concepts, history, and philosophy behind open source technology.
- Able to understand and differentiate various open-source operating systems, software, and licensing models.
- Familiar with the communities, communication, and contribution to open-source projects.
- Introduced to the basics of implementing and working with open-source technology and tools.

Unit No.	Course Content	Hours	Credits
1	<b>Introduction to Open Source</b> <ul style="list-style-type: none"><li>• Definition and Overview of Open Source.</li><li>• History and Evolution of Open Source.</li><li>• Benefits and Challenges of Open Source.</li><li>• Overview of Open Source Licensing.</li></ul>	15	1
2	<b>Open Source Software and Operating Systems</b> <ul style="list-style-type: none"><li>• Overview of Open Source Software.</li><li>• Introduction to Various Open Source Operating Systems (e.g., Linux, Ubuntu).</li><li>• Open Source Software Examples (e.g., LibreOffice, GIMP).</li><li>• Installing and Configuring Open Source Software.</li></ul>	15	1

**Reference Books:**

**The Open Source Way" by The Open Source Way community**

1. Producing Open Source Software  
By Karl Fogel
2. Open Source Licensing: Software Freedom and Intellectual Property Law  
By Lawrence Rosen
3. Understanding Open Source and Free Software Licensing  
By Andrew M. St. Laurent
4. Introduction to Linux - A Hands on Guide  
By Machtelt Garrels

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**Accomplishments of the student after completing the Course:**

After completion of this course Student would be able to

**Understand the Open-Source Ecosystem:**

- Students will have an in-depth understanding of the history, philosophies, and various licensing types in the open-source world.

**Identify and Use Open-Source Software:**

- Students will be familiar with various open-source software and operating systems, and will be proficient in installing, configuring, and using them effectively.
- Participate in Open Source Communities:
- Apply Open Source Principles:
- Problem-Solving Skills