



# **SNS COLLEGE OF TECHNOLOGY**



(An Autonomous Institution)

Accredited by NBA – AICTE and Accredited by NAAC – UGC with ‘A++’ Grade  
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

## **DEPARTMENT OF COMPUTER APPLICATIONS**

### **ETHICS IN COMPUTING**

I YEAR - II SEM

#### **UNIT – IV – SOFTWARE DEVELOPMENT AND SOCIAL NETWORKING**

##### **TOPIC 3: QUALITY MANAGEMENT STANDARDS**

Quality management standards are frameworks and guidelines that organizations follow to ensure that their products, services, and processes meet or exceed established quality requirements. These standards provide a systematic approach to quality assurance, quality control, and continuous improvement. Here are some prominent quality management standards:

1. **ISO 9001:2015:** The International Organization for Standardization (ISO) developed the ISO 9001 standard, which focuses on quality management systems (QMS). It outlines requirements for organizations to establish and maintain effective quality management processes, enhance customer satisfaction, and continually improve their processes.
2. **ISO 13485:2016:** This standard is specifically designed for the medical device industry. ISO 13485 outlines quality management requirements for organizations involved in the design, development, production, and distribution of medical devices.
3. **ISO 14001:2015:** ISO 14001 addresses environmental management systems (EMS). It provides a framework for organizations to establish and maintain practices that minimize the environmental impact of their operations and promote sustainability.
4. **ISO 45001:2018:** Formerly known as OHSAS 18001, ISO 45001 is the international standard for occupational health and safety (OH&S) management



systems. It helps organizations create safe and healthy work environments by identifying and mitigating risks and improving safety practices.



5. **ISO 27001:2013:** This standard focuses on information security management systems (ISMS). ISO 27001 provides a systematic approach to identifying, managing, and reducing information security risks within an organization.
6. **CMMI (Capability Maturity Model Integration):** CMMI is a framework that helps organizations improve their processes and achieve higher levels of maturity in various areas, including software development, systems engineering, and service delivery.
7. **Six Sigma:** Six Sigma is a methodology that aims to minimize defects and variations in processes to achieve consistent and high-quality results. It involves using statistical analysis and improvement methodologies to identify and eliminate process inefficiencies.
8. **Lean Management:** Lean principles focus on eliminating waste, improving efficiency, and delivering value to customers. Lean management aims to optimize processes and resources to create a streamlined and effective workflow.
9. **Total Quality Management (TQM):** TQM is a comprehensive approach to quality management that involves the entire organization. It emphasizes continuous improvement, customer focus, and the involvement of all employees in maintaining and improving quality.
10. **ITIL (Information Technology Infrastructure Library):** ITIL provides best practices for IT service management (ITSM). It offers a set of guidelines for planning, designing, delivering, and supporting IT services to meet business needs.
11. **Baldrige Excellence Framework:** Developed by the U.S. National Institute of Standards and Technology, the Baldrige framework provides a comprehensive approach to organizational performance excellence, including quality management, leadership, strategy, and results.
12. **GxP Standards:** In industries like pharmaceuticals and biotechnology, GxP refers to various regulations and guidelines that ensure product quality, safety, and compliance with regulatory requirements. Examples include GMP (Good Manufacturing Practice) and GLP (Good Laboratory Practice).



Organizations can choose the relevant quality management standards based on their industry, business goals, and the specific areas they aim to improve. Implementing these standards can help organizations enhance their processes, increase customer satisfaction, reduce risks, and achieve a culture of continuous improvement.

