

# LEARNING ESSENTIALS



## *Department of Information Technology*

*JIS College of Engineering, Kalyani  
NAAC 'A' Accredited Autonomous Institution*

A

**Engineering knowledge:** Graduates will be able to apply the basic knowledge in Mathematics, Science and Engineering fundamentals in the domain of Information Technology.

B

**Problem analysis:** Graduates will demonstrate the ability to design, develop and test systems corresponding to real life problems under consideration including the physical models, interpret and analyze data, and report results and use experimental results for further expansion.

C

**Design/development of solutions:** Graduates will demonstrate the ability to design a digital system or a computational system or a process that meets demand driven specifications and requirements in Information Technology and research areas.

D

**Conduct investigations of complex problem:** Graduates will have the ability to identify, formulate and solve service oriented architectural problems

E

**Modern tool usage:** Graduates will be familiar with state-of-the-art software tools and to analyze relevant engineering problems.

F

**The engineer and society:** Graduates will be broadly educated and will have an understanding of the impact of engineering on society and demonstrate awareness of contemporary and emergent issues.

G

**Environment and sustainability:** Graduates will have the confidence to apply engineering solutions in global and societal contexts.

H

**Ethics:** Graduates will demonstrate an understanding of their professional and ethical responsibilities

I

**Team work:** Graduates will foster team spirit and elevate the enthusiasm in teamwork-concept of sharing in demonstrating their ability in technological solution as a part of specialized engineering and science laboratory teams, as well as on multidisciplinary design teams.

J

**Communication:** Graduates will be able to communicate effectively in both verbal and written forms

K

**Project Management and Finance:** Understand the engineering and management principles and apply these to one's own work as a member and leader of a team to manage projects and multidisciplinary environment

L

**Life-long learning:** Graduates should be capable of self-learning and clearly understand the value of lifelong learning.