



## Workshop on Computer Fundamentals: Avionics Lab – Computer Networking

A workshop on Computer Fundamentals: Hardware Components was organized for the students of KCSA. The session was delivered and conducted by Mr. Apurva Tikone, system Engineer IT Department, Calibehr, Navi Mumbai. During the session fundamental of computers such as basic parts of a computer system and the functions of components like CPU, monitor, keyboard, mouse, and storage devices were explained. Students got an opportunity hands-on experience with actual computer parts and benefitted by this program.

The CPU, or Central Processing Unit, is often called the brain of the computer because it carries out all the instructions of a computer program. It performs essential tasks such as arithmetic calculations, logical decisions, and managing data flow between components. Studying the CPU involves understanding its architecture, including parts like the Arithmetic Logic Unit (ALU), control unit, and registers. This knowledge helps in analyzing how computers process information efficiently. A strong grasp of CPU operations is crucial for improving system performance and designing faster, smarter computing systems.

By studying the CPU, learners gain a deeper understanding of how a computer functions at its core. They learn about the internal components such as the ALU, control unit, and registers, and how these work together to execute instructions. This knowledge helps develop problem-solving and analytical skills, especially in areas like programming, system design, and performance optimization. It also lays the foundation for more advanced topics in computer science and engineering. Overall, learning about the CPU enhances technical competence and opens up pathways for innovation in computing technology.







