

About this course

Operating system is the software that supports a computer's basic functions, such as scheduling tasks, executing applications, and controlling peripherals.

Specific topics covered include:

- Introduction to Operating Systems
- CPU Scheduling Concepts
- Concurrent Processes
- Memory Management

Required prior knowledge and skills

None

Learning Outcomes

Learners completing this course will be able to:

- Objective 1: Define the key components and terminologies in operating systems
- Objective 2: Distinguish between threads and processes
- Objective 3: Explain the mechanisms used in different OS components such as context switching, CPU scheduling, memory management and input output
- Objective 4: Analyze the efficiency and execution times of algorithms related to CPU scheduling, memory management, process synchronization, and deadlock handling

Estimated Workload/Time Commitment Per Week

- Module 1 (2 hours)
- Module 2 (3 hours)
- Module 3 (2 hours)
- Module 4 (3 hours)
- 90 minutes for Final Exam

Creator



Ayan Banerjee, Assistant Research Professor

Dr. Ayan Banerjee is an Assistant Research Professor at CIDSE, ASU. His research involves cyber physical systems and medical control systems with special focus on safety security and sustainability. He teaches Data Mining and Mobile Computing courses.