

SYSTEMS DESIGN & ANALYSIS

"Design Efficient, Scalable, and Reliable Systems Through Structured Analysis and Innovative Thinking."

Schedule

Venue (InHouse)	Fees
At Your Organization Premises	Ask For The Quotation

► **Available delivery methods:** In-House Training

Introduction

In today's technology-driven organizations, effective system design and analysis are critical for building solutions that meet user requirements, improve performance, and support business objectives. The Systems Design & Analysis course provides participants with a solid foundation in analyzing, designing, and implementing information systems that solve real-world business problems efficiently.

This course emphasizes structured and object-oriented approaches to system analysis, user requirement gathering, process modeling, and system architecture design. Participants will gain practical skills in tools, techniques, and documentation methods essential for developing reliable and adaptable IT systems that align with organizational goals.

Objectives

By the end of this course, participants will be able to:

- Understand the principles and stages of system analysis and design.
- Conduct requirement gathering and stakeholder analysis effectively.
- Develop logical and physical models of information systems.
- Apply process modeling, data flow diagrams (DFDs), and use case analysis.
- Design user interfaces, databases, and system architectures.
- Evaluate system feasibility, performance, and integration challenges.
- Use modeling and documentation tools for system development.
- Apply best practices for testing, implementation, and maintenance.

Why Attend

As systems become more complex, IT professionals must master analytical and design methodologies to ensure projects meet user needs and business goals. This course equips participants with practical frameworks and industry-recognized techniques used in modern software and systems engineering.

Target Audience

This course is suitable for:

- Systems Analysts and Designers
- Software Engineers and Developers
- Business Analysts and IT Consultants
- Project Managers and Solution Architects
- Database Designers and IT Planners
- Anyone involved in system development or process improvement

Individual Benefits

- Gain hands-on experience in system analysis and design methods.
- Learn to bridge the gap between business needs and technical solutions.
- Improve problem-solving and documentation skills.
- Build expertise in modeling tools and design techniques.
- Enhance career prospects in systems development and IT architecture.

Organizational Benefits

- Improve efficiency in system development and implementation.
- Enhance communication between technical teams and business stakeholders.
- Reduce project risks through structured analysis and clear design documentation.
- Ensure systems are scalable, maintainable, and aligned with business goals.
- Promote consistency and quality across system development projects.

Instructional Methodology

- Interactive lectures and real-life case studies.
- Practical exercises in requirement analysis and modeling.
- Group projects focused on system design and documentation.
- Hands-on training using modeling tools and templates.
- Instructor-led sessions with Q&A and performance feedback.

Course Outline

- Module 1: Introduction to Systems Analysis and Design Concepts
- Module 2: The Systems Development Life Cycle (SDLC)
- Module 3: Requirement Gathering and Stakeholder Analysis
- Module 4: Process Modeling and Data Flow Diagrams (DFDs)
- Module 5: Object-Oriented Analysis and Use Case Design
- Module 6: Database Design and Data Modeling (ERDs)
- Module 7: System Architecture and Interface Design
- Module 8: System Evaluation, Testing, and Implementation Planning
- Module 9: Documentation, Maintenance, and Change Management
- Module 10: Capstone Project – End-to-End System Design Exercise

Certification

Upon successful completion, participants will receive a Certificate in Systems Design & Analysis, recognizing their ability to analyze, design, and document effective information systems that support business goals and technological advancement.

Why Choose MAWA Events

- **Global Expertise:** More than 17 years of experience in professional training and consulting.
- **Industry-Leading Faculty:** Courses delivered by seasoned professionals with hands-on experience.
- **Practical Insights:** Learn to turn theory into actionable strategies for real-world business impact.
- **Client-Focused Solutions:** Customized programs designed to achieve your organisation’s unique goals.

In-House / Customized Training

Interested in running this course for your team?

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