

Introduction to Capstone Project in

Information Systems Management

Introduction to Capstone Project in Information Systems Management
Designed as a quick-reference guide for students and instructors.

1. What Is a Capstone Project?

Aspect	Description
Purpose	Integrates theory, tools, and methods learned throughout the ISM program into a real-world solution.
Scope	Typically 12–20 weeks, culminating in a deliverable (software system, process redesign, research report, or a combination).
Outcome	Demonstrates professional competence, problem-solving ability, and communication skills to employers or academic panels.
Stakeholders	Student, faculty advisor, industry sponsor (optional), end-users, and evaluation committee.

2. Core Components of a Capstone

Component	Typical Content	Key Deliverables
Problem Definition	Business context, pain points, objectives, success criteria.	Problem statement, project charter.
Literature & Technology Review	Current research, best-practice frameworks, relevant IS tools (e.g., ERP, BI, cloud platforms).	Annotated bibliography, technology selection matrix.
Methodology	Systems development life cycle (SDLC), agile Scrum, Design Thinking, or hybrid approaches.	Process diagram, sprint plan, risk-mitigation log.
Solution Design	Architecture diagrams, data models, UI/UX mock-ups, workflow diagrams.	High-level design document, prototype.
Implementation	Coding, configuration, integration, testing (unit, integration, UAT).	Source code repository, test scripts, test results.
Evaluation & Validation	Performance metrics, cost-benefit analysis, user satisfaction surveys.	Evaluation report, KPI dashboard.

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Component	Typical Content	Key Deliverables
Documentation	Final report, executive summary, slides, demo video.	Project charter, oral defense.
Presentation		

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3. Typical Project Lifecycle (Week?by?Week)

Week(s)	Phase	Main Activities
1–2	Initiation	Identify sponsor, sign project charter, define scope and constraints.
3–4	Planning	Choose methodology, develop schedule, allocate resources, risk assessment.
5–7	Analysis & Design	Gather requirements (interviews, surveys), create models (ERD, BPMN), approve design.
8–12	Development	Build prototype, conduct iterative sprints, perform continuous testing.
13–14	Testing & Refinement	Execute test plan, fix defects, obtain user acceptance.
15	Deployment	Install solution in target environment, train users, produce user manual.
16	Evaluation	Measure outcomes against success criteria, document lessons learned.
17–18	Closure	Compile final report, prepare presentation, submit artifacts, reflect on experience.

4. Project Management Tools Frequently Used

Tool	Typical Use	Why It Fits Capstone
Jira / Azure Boards	Sprint planning, backlog grooming, issue tracking.	Supports agile iteration and transparent progress reporting.
Microsoft Project / Smartsheet	Gantt charts, resource allocation, milestone tracking.	Helps visualize timeline and dependencies.
GitHub / GitLab	Version control, code review, CI/CD pipelines.	Ensures reproducibility and collaborative development.

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Tool

Typical Use

Why It Fits Capstone

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Miro / Lucidchart

Collaborative diagramming

(process flows, UI wireframes).

Facilitates stakeholder transforming and

stakeholder sign-off.