

# HRIS 2-WEEK COURSE DESIGN WITH SIMULATION GAME

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## 1. COURSE OVERVIEW & LEARNING OUTCOMES

### Course Title

**Enterprise HRIS Architecture & Implementation: Systems, Strategy & Simulation**

### Course Description

This intensive 2-week course provides postgraduate students with technical backgrounds a comprehensive understanding of Human Resource Information Systems (HRIS/HRMS/HCM) from an enterprise architecture perspective. Through vendor-neutral instruction aligned with industry-leading platforms (Workday, SAP SuccessFactors, Oracle HCM Cloud, UKG, ADP), students will master the systems thinking, data modeling, workflow design, integration patterns, and governance frameworks essential for successful HRMS implementations.

The course features a continuous team-based simulation where students act as HRIS consultants implementing an enterprise system for a growing multinational company, navigating real-world challenges through sprint-based deliverables.

### Target Audience

- **Level:** Postgraduate (MBA, MS in Information Systems, MTech, MCA)
- **Background:** Technical aptitude in IT, Computer Science, Information Systems, Engineering, or Data Science
- **Prerequisites:** Basic understanding of databases, systems architecture, and HR fundamentals

### Duration & Format

- **Total Hours:** 40 hours over 10 business days
  - **Daily Schedule:** 4 hours per day
    - Theory & Concept Discussion: 90 minutes
    - Simulation Sprint Work: 120 minutes
    - Debrief & Planning: 30 minutes
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## **Learning Outcomes**

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

### **Systems Architecture & Design**

1. Design comprehensive HRMS data models encompassing core HR, organizational hierarchies, time, payroll, talent, and analytics
2. Architect integration patterns between HRMS and enterprise systems (ERP, finance, IT service management)
3. Model complex HR business processes as system workflows with appropriate approval chains and business rules

### **Module Expertise**

4. Evaluate and design implementations across all major HRMS modules: Core HR, Recruiting, Onboarding, Time & Attendance, Payroll, Benefits, Performance, Learning, Succession, Compensation, Service Delivery, and Analytics
5. Design security models implementing role-based access control (RBAC), data privacy controls, and audit frameworks

### **Integration & Technical Architecture**

6. Design API strategies for HRMS integrations including authentication, data synchronization patterns, error handling, and monitoring
7. Architect data warehousing and analytics solutions for people data, including star schema design and reporting hierarchies

### **Governance & Compliance**

8. Implement data governance frameworks addressing privacy regulations (GDPR, CCPA), audit requirements, and data retention policies
9. Design change management and testing strategies for HRMS implementations

### **Strategic Thinking**

10. Evaluate build vs. buy vs. configure decisions for HRMS functionality
11. Conduct vendor evaluation using structured criteria aligned to business requirements
12. Develop business cases for HRMS investments including TCO analysis

### **Applied Consulting Skills**

13. Facilitate requirements gathering sessions with diverse stakeholders
  14. Manage competing priorities in multi-stakeholder HRMS projects
  15. Present technical architecture decisions to executive audiences
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## **2. TWO-WEEK / 10-DAY AGENDA**

### **DAY 1: HRIS Foundations & System of Record Architecture**

#### **Morning Session (2 hours): Core Concepts**

- The evolution of HRIS: From personnel files to intelligent systems
- HRIS vs. HRMS vs. HCM: Taxonomy and scope
- Enterprise architecture perspective: HRIS as system of record
- Major platform landscape: Workday, SAP SuccessFactors, Oracle HCM, UKG, ADP
- Implementation lifecycle: Strategy → Design → Build → Test → Deploy → Support

#### **Key HRMS Modules Covered**

- Core HR (Employee Master Data)
- System of Record concepts
- Data architecture fundamentals

#### **Afternoon Session (2 hours): Simulation Sprint 1**

##### **Simulation Introduction: "GlobalTech Expansion"**

- Company scenario reveal
- Team formation (4-5 students per team)
- Role assignment: Project Manager, Data Architect, Integration Architect, Security Lead, Change Manager
- Initial stakeholder interviews (provided as case documents)

##### **Sprint 1 Deliverable: Foundation Assessment**

- Current state analysis document
- HRMS requirements matrix (functional & non-functional)
- High-level system architecture diagram
- Project charter and governance structure

#### **Tools Used**

- Google Docs/Microsoft Word: Documentation

- Draw.io/Lucidchart: Architecture diagrams
  - Google Sheets: Requirements tracking
  - Miro/Mural: Collaborative brainstorming
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## **DAY 2: Data Modeling & Organizational Architecture**

### **Morning Session (2 hours): Core Concepts**

- Employee data model: Worker types, employment types, worker IDs
- Organizational architecture: Legal entities, business units, cost centers, departments, teams
- Matrix organizations and dual reporting
- Job architecture: Job families, job profiles, positions vs. jobs
- Effective dating and temporal data management
- Master data management (MDM) principles for HR data

### **Key HRMS Modules Covered**

- Organization Management
- Job & Position Management
- Reporting Structures

### **Afternoon Session (2 hours): Simulation Sprint 2**

#### **Event Card #1: "Acquisition Announcement"**

GlobalTech acquires a 500-person European company—requires org structure integration.

#### **Sprint 2 Deliverable: Data Model & Org Design**

- Comprehensive entity-relationship diagram (ERD) for Core HR
- Organizational hierarchy design (3-5 levels)
- Job architecture framework (10-15 job families)
- Data dictionary with field definitions, data types, validation rules
- Effective dating strategy document

### **Tools Used**

- [dbdiagram.io/Lucidchart](https://dbdiagram.io/Lucidchart): ERD creation
  - Google Sheets: Data dictionary
  - Draw.io: Organizational charts
  - Excel: Job architecture matrix
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## **DAY 3: Talent Acquisition Systems (ATS & Onboarding)**

### **Morning Session (2 hours): Core Concepts**

- Recruiting lifecycle: Requisition → Sourcing → Screening → Interviewing → Offer → Hire
- ATS architecture: Job posting, candidate management, interview scheduling
- Integration points: Job boards, background check vendors, assessment tools
- Candidate experience design and employer branding
- Onboarding workflows: Preboarding, Day 1, 30-60-90 day journeys
- I-9, e-Verify, and compliance automation
- Conversion from candidate to employee (data model transition)

### **Key HRMS Modules Covered**

- Recruiting & Applicant Tracking
- Onboarding & Orientation
- Candidate Relationship Management

### **Afternoon Session (2 hours): Simulation Sprint 3**

#### **Sprint 3 Deliverable: Talent Acquisition Blueprint**

- End-to-end recruiting workflow diagram (15-20 steps)
- Integration architecture: ATS ↔ Core HR ↔ External vendors
- Onboarding workflow with conditional logic (contract vs. FTE, remote vs. onsite)
- Candidate-to-employee data mapping
- Compliance checklist and audit trail design

### **Tools Used**

- Draw.io/Lucidchart: Process flow diagrams
  - Google Sheets: Integration mapping table
  - Miro: User journey mapping
  - Swimlane diagrams for cross-functional workflows
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## **DAY 4: Time, Attendance & Workforce Management**

### **Morning Session (2 hours): Core Concepts**

- Time collection methods: Biometric, web, mobile, badge
- Time entry vs. time sheet vs. clock in/out models
- Schedule management and shift planning
- Absence management: PTO, sick leave, FMLA, parental leave
- Overtime rules, break compliance, and labor law automation
- Timecard approval workflows and exception management
- Integration with payroll: Time → Payroll calculation engine

### **Key HRMS Modules Covered**

- Time & Attendance
- Absence Management
- Workforce Management
- Schedule Optimization

### **Afternoon Session (2 hours): Simulation Sprint 4**

#### **Event Card #2: "Labor Law Compliance Audit"**

New regulations require detailed time tracking for remote workers across 15 countries.

#### **Sprint 4 Deliverable: Time & Attendance Architecture**

- Time collection architecture supporting multiple input methods
- Business rules engine design (15-20 rules covering overtime, breaks, rounding)
- Absence accrual algorithm documentation

- Time-to-payroll integration flow with error handling
- Compliance matrix by country/region (provided template to complete)
- Mobile app wireframes for time entry

### **Tools Used**

- Figma/Balsamiq: Mobile wireframes
  - Decision table format: Business rules documentation
  - Google Sheets: Rules matrix, integration specification
  - BPMN notation: Workflow diagrams
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## **DAY 5: Payroll Architecture & Benefits Integration**

### **Morning Session (2 hours): Core Concepts**

- Payroll calculation engines: Gross-to-net architecture
- Earning codes, deduction codes, and tax calculation
- Pay groups, pay calendars, and off-cycle processing
- Benefits enrollment: Life events, open enrollment, new hire enrollment
- Benefits administration platforms and carrier integrations
- Healthcare (medical/dental/vision), retirement (401k), FSA/HSA
- COBRA, ACA compliance, and benefits reporting
- HRIS ↔ Payroll ↔ Benefits data flow patterns
- Privacy considerations in sensitive data handling

### **Key HRMS Modules Covered**

- Payroll (integration perspective)
- Benefits Administration
- Compensation Management (base pay component)

### **Afternoon Session (2 hours): Simulation Sprint 5**

### **Sprint 5 Deliverable: Payroll & Benefits Integration Design**

- Payroll integration architecture diagram with data flow sequences
- Error handling and reconciliation procedures
- Benefits enrollment workflow (with life event logic)
- Carrier file feed specifications (mock EDI/API design)
- ACA reporting data model
- Security model for sensitive payroll/benefits data
- Disaster recovery and backup procedures

### **Tools Used**

- Draw.io: Integration sequence diagrams
  - Google Sheets: Data mapping tables, carrier feed specs
  - Flowcharts: Enrollment logic
  - API documentation template: Mock endpoints
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## **DAY 6: Performance, Goals & Continuous Feedback**

### **Morning Session (2 hours): Core Concepts**

- Performance management evolution: Annual reviews → continuous feedback
- Goal cascading: Corporate → Department → Team → Individual (OKRs, SMART goals)
- 360-degree feedback architecture and anonymity controls
- Performance document types: Self-review, manager review, calibration
- Ratings scales, forced distribution, and calibration sessions
- Development plans and growth conversations
- Performance-compensation linkage
- Analytics: Flight risk, high-potential identification

### **Key HRMS Modules Covered**

- Performance Management
- Goals & Objectives (OKRs)



- Feedback & Check-ins
- 9-Box Talent Grid

### **Afternoon Session (2 hours): Simulation Sprint 6**

#### **Event Card #3: "Performance System Overhaul"**

Executive leadership wants to move from annual reviews to quarterly check-ins with continuous feedback.

#### **Sprint 6 Deliverable: Performance System Design**

- Goal architecture: Cascading logic and alignment mapping
- Performance cycle calendar (quarterly vs. annual hybrid model)
- Workflow design: Self-review → Manager review → Calibration → Communication
- 360-feedback configuration with privacy controls
- Ratings model and calibration framework
- Performance-to-compensation linkage rules
- Dashboard mockup: Manager view of team performance

#### **Tools Used**

- Draw.io: Goal cascading visualization
- Google Sheets: Performance cycle calendar, ratings distribution
- Figma/Balsamiq: Dashboard wireframes
- Workflow diagrams: Review process steps

## **DAY 7: Learning, Skills & Succession Planning**

### **Morning Session (2 hours): Core Concepts**

- Learning Management Systems (LMS) integration with HRMS
- Competency models and skills taxonomies
- Required vs. elective training and compliance tracking
- Learning paths and curriculum design
- Skills ontologies and AI-powered skill inference

- Succession planning: Critical roles, readiness assessments, talent pools
- Talent review (9-box) meetings and succession heat maps
- Career development and internal mobility
- Skills-based talent marketplace architecture

### **Key HRMS Modules Covered**

- Learning Management
- Skills & Competencies
- Succession Planning
- Career & Development Planning

### **Afternoon Session (2 hours): Simulation Sprint 7**

#### **Sprint 7 Deliverable: Learning & Succession Architecture**

- Skills taxonomy (100+ skills organized by categories)
- Competency model for 5 critical role families
- Learning-to-HRMS integration design (SSO, course enrollment, completion tracking)
- Succession planning data model: Critical roles, successors, readiness levels
- 9-box talent review configuration
- Internal mobility workflow (internal application → interview → transfer)
- Analytics dashboard: Skills gaps, succession bench strength

### **Tools Used**

- Mind mapping tools: Skills taxonomy visualization
- Google Sheets: Competency matrices, succession bench data model
- Draw.io: Integration architecture
- Tableau/Power BI mockup: Analytics dashboard

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## **DAY 8: Compensation Management & Total Rewards**

### **Morning Session (2 hours): Core Concepts**

- Compensation planning cycles: Merit, bonus, equity, promotion
- Salary structures: Grades, bands, ranges, compa-ratios
- Market data integration and benchmarking
- Budget allocation and cascading
- Compensation eligibility rules and proration logic
- Equity management: Stock options, RSUs, ESPP
- Total rewards statements
- Executive compensation and long-term incentives
- Pay equity analytics and remediation workflows

### **Key HRMS Modules Covered**

- Compensation Management
- Merit & Bonus Planning
- Equity Management
- Pay Equity Analytics

### **Afternoon Session (2 hours): Simulation Sprint 8**

#### **Event Card #4: "Pay Equity Audit & Merit Cycle"**

Board requests pay equity analysis before annual merit cycle. Budget: 3% of payroll.

#### **Sprint 8 Deliverable: Compensation System Design**

- Salary structure design: 10 grades with min-mid-max ranges
- Merit planning workflow: Budget allocation → Manager recommendations → HR approval → Offers
- Compensation eligibility rules engine (hire date, performance rating, promotion flags)
- Pay equity analysis approach: Regression model specification
- Total rewards statement template
- Compensation-to-payroll integration flow
- Analytics: Compa-ratio distribution, budget utilization, pay equity metrics

## **Tools Used**

- Google Sheets: Salary structure model, merit calculation simulator
  - Draw.io: Workflow diagrams
  - Statistical analysis pseudocode: Pay equity regression
  - Dashboard mockup: Compensation analytics
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## **DAY 9: HR Service Delivery, Security & Compliance**

### **Morning Session (2 hours): Core Concepts**

- HR case management and ticketing systems
- Employee self-service and manager self-service design
- Knowledge base and chatbot integration
- Security architecture: Authentication, authorization, RBAC
- Security groups, permission sets, and role hierarchy
- Data privacy: GDPR, CCPA, right to be forgotten, data portability
- Audit logging and compliance reporting
- Data retention and archival policies
- Business continuity and disaster recovery
- Change management and release management
- Testing strategies: Unit, integration, UAT, regression

### **Key HRMS Modules Covered**

- HR Service Delivery / Case Management
- Employee/Manager Self-Service
- Security & Privacy
- Audit & Compliance

### **Afternoon Session (2 hours): Simulation Sprint 9**

## **Event Card #5: "Data Breach Response"**

Simulated security incident requires immediate security review and remediation plan.

### **Sprint 9 Deliverable: Security & Governance Framework**

- RBAC matrix: Roles × Permissions (30+ roles, 50+ permissions)
- Security group design and inheritance model
- Data privacy impact assessment (DPIA) for new features
- Audit log specification: What to log, retention periods
- Incident response playbook for HR data
- Change management process: Request → Approval → Testing → Deployment
- Testing strategy document with test case examples
- Compliance checklist: GDPR, SOX, HIPAA (where applicable)

### **Tools Used**

- Google Sheets: RBAC matrix, compliance checklist
- Flowcharts: Incident response procedures
- Documentation templates: Security policies
- Draw.io: Role hierarchy diagrams

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## **DAY 10: Integrations, APIs & People Analytics**

### **Morning Session (2 hours): Core Concepts**

- Integration architecture patterns: Point-to-point vs. hub-and-spoke vs. ESB
- API design: REST, SOAP, GraphQL considerations for HRMS
- Authentication: OAuth 2.0, SAML, API keys
- Data synchronization patterns: Real-time vs. batch, delta vs. full refresh
- Common integration points: Identity (AD/Okta), Finance (ERP), IT (ServiceNow), Benefits vendors
- Error handling, logging, and monitoring for integrations
- People analytics architecture: Operational reporting vs. strategic analytics

- Data warehouse design for HR: Star schema, dimension tables (employee, time, org)
- Predictive analytics use cases: Attrition, performance, hiring
- Dashboard design principles and KPI selection
- Data governance for analytics: Data quality, lineage, stewardship

### **Key HRMS Modules Covered**

- Integration Platform
- API Management
- People Analytics & Reporting
- Data Warehouse

### **Afternoon Session (2 hours): Simulation Sprint 10 + Final Presentation Prep**

#### **Sprint 10 Deliverable: Integration & Analytics Capstone**

- Enterprise integration architecture diagram showing all system connections
- API specification document for 5 critical endpoints (mock OpenAPI/Swagger style)
- Integration monitoring and alerting strategy
- Data warehouse star schema design for people analytics
- Executive dashboard design with 15-20 KPIs across all modules
- Predictive analytics roadmap (attrition model, succession model, diversity model)
- Data governance charter

#### **Final Capstone Presentation (30 minutes prep)**

Teams prepare 20-minute executive presentation covering:

1. Overall HRMS architecture
2. Key design decisions and trade-offs
3. Integration strategy
4. Security and compliance approach
5. Analytics and business value
6. Implementation roadmap and risks

## Tools Used

- Draw.io: Enterprise integration architecture
  - Swagger Editor: Mock API specs
  - dbdiagram.io: Data warehouse schema
  - Tableau/Power BI mockup: Executive dashboards
  - Google Slides/PowerPoint: Final presentation
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## 3. SIMULATION GAME DESIGN

### Game Overview: "GlobalTech HRMS Transformation"

#### Scenario Background

GlobalTech Solutions is a rapidly growing technology services company that has expanded from 500 to 5,000 employees over 3 years through organic growth and acquisitions. The company operates in 15 countries across North America, Europe, and APAC. Their current HR systems are a patchwork of legacy platforms, spreadsheets, and acquired companies' systems. The CEO has approved a \$8M budget for comprehensive HRMS transformation over 18 months.

#### Student Role

Teams of 4-5 students act as external HRMS consulting firms competing for (and then executing) this implementation. Each team must design the complete HRMS architecture while managing competing stakeholder demands, technical constraints, and unexpected events.

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### Team Structure & Rotating Roles

Each team has 5 roles that **rotate every 2 days** to ensure every student experiences multiple perspectives:

1. **Project Manager:** Leads team coordination, manages deliverable timelines, facilitates stakeholder communication
2. **Data Architect:** Owns data models, ERDs, data dictionary, data migration strategy
3. **Integration Architect:** Designs all system integrations, APIs, middleware, error handling

- 4. **Security & Compliance Lead:** Ensures RBAC design, privacy controls, audit requirements, regulatory compliance
- 5. **Change Manager:** Focuses on user experience, training needs, communication strategy, adoption metrics

**Rotation Schedule:**

- Days 1-2: Initial role assignment
- Days 3-4: First rotation
- Days 5-6: Second rotation
- Days 7-8: Third rotation
- Days 9-10: Final rotation for capstone

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**Sprint-Based Structure**

The simulation is organized into **10 sprints** (one per day), each aligned with that day's module content:

Sprint Day Focus Area			Key Deliverable
1	1	Foundation	Requirements & Architecture Vision
2	2	Data & Org Design	ERD & Organizational Hierarchy
3	3	Talent Acquisition	ATS/Onboarding Workflows
4	4	Time & Attendance	Time Management Architecture
5	5	Payroll & Benefits	Integration Design
6	6	Performance	Performance System Design
7	7	Learning & Succession	Talent Management Architecture
8	8	Compensation	Merit Planning System
9	9	Security & Service	RBAC & Governance Framework
10	10	Integration & Analytics	Enterprise Architecture + Dashboards



Each sprint includes:

- **Input:** New requirements from stakeholders (provided as case documents)
  - **Activity:** Design work aligned to daily module
  - **Output:** Documented deliverable added to cumulative project portfolio
  - **Review:** Brief team self-assessment (last 10 minutes of day)
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### **Event Cards: Disruptions & Challenges**

Throughout the simulation, teams encounter **Event Cards**—unexpected scenarios that require adaptation of their designs. These simulate real-world project disruptions:

#### **Event Card #1 (Day 2): Acquisition Announcement**

- GlobalTech acquires European competitor with 500 employees
- Challenge: Integrate disparate org structures, different job architectures, 8 new countries
- Impact: Data model must accommodate new legal entities, currencies, employment types

#### **Event Card #2 (Day 4): Labor Law Compliance Audit**

- Government audit reveals gaps in time tracking for remote workers
- Challenge: Retrofit compliance controls for 15 countries with varying labor laws
- Impact: Time & attendance rules must be redesigned with country-specific logic

#### **Event Card #3 (Day 6): Performance System Overhaul**

- New CHRO mandates shift from annual reviews to continuous feedback
- Challenge: Redesign performance architecture mid-project
- Impact: Performance workflows, data model, and manager training all change

#### **Event Card #4 (Day 8): Pay Equity Audit**

- Board requests comprehensive pay equity analysis before merit cycle
- Challenge: Design pay equity analytics and remediation process
- Impact: Compensation module must include equity analysis capabilities

### Event Card #5 (Day 9): Simulated Data Breach

- Security incident exposes employee PII through misconfigured permissions
- Challenge: Immediate security review and remediation plan required
- Impact: Security model must be audited and strengthened; incident response documented

### Event Card #6 (Day 10): Budget Cut

- CFO reduces implementation budget by 20%
- Challenge: Reprioritize features, consider phased rollout
- Impact: Final presentation must justify ROI and defend scope decisions

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### Stakeholder Personas

Teams interact with fictional stakeholders (played by instructor or provided as documents):

1. **Sarah Chen, CHRO:** Strategic vision, employee experience focus, worried about change management
2. **Raj Patel, CFO:** Budget oversight, ROI focus, wants tight financial controls
3. **Marcus Johnson, CIO:** Technical architecture approval, security requirements, integration standards
4. **Elena Rodriguez, VP Talent Acquisition:** Recruiting efficiency, candidate experience, time-to-hire metrics
5. **Tom Anderson, VP Operations:** Workforce management needs, time tracking, compliance
6. **Lisa Wu, Legal Counsel:** Privacy compliance (GDPR/CCPA), audit trails, data retention
7. **James Mitchell, SVP Sales:** Strong opinions about performance management, compensation transparency
8. **Priya Sharma, Head of HR Technology:** Day-to-day system administrator perspective, usability concerns

Stakeholder inputs are provided as:

- Written memos/emails
  - Recorded video messages (optional)
  - Requirements documents
  - Meeting transcripts
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## **Cumulative Portfolio**

Each team maintains a **comprehensive project portfolio** that grows throughout the course:

### **Portfolio Structure:**

1. Executive Summary (updated Days 1, 5, 10)
2. Business Case & Requirements (Days 1-2)
3. Architecture & Design
  - Overall Architecture Diagram (Day 1, updated daily)
  - Data Models (Days 2, 3, 4, 5, 6, 7, 8)
  - Workflow Designs (Days 3-9)
  - Integration Architecture (Days 3-10)
  - Security Model (Days 2-9)
4. Module-Specific Designs (Days 2-9, one section per module)
5. Analytics & Reporting Strategy (Days 6-10)
6. Governance & Compliance (Days 9)
7. Implementation Roadmap (Days 1, 5, 10)
8. Risk Register (Days 1-10, updated continuously)
9. Change Management Plan (Days 1-10)
10. Appendices (all supporting documents)

This portfolio serves as both the working document and final deliverable.

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## **Gamification Elements**

To increase engagement:

### **Team Competition (Optional)**

- Teams earn points for deliverable quality, creativity, addressing event cards effectively
- Peer review scoring (teams review each other's work, instructor moderates)
- Final presentation winner determined by panel (instructor + guest industry professionals)

### **Achievement Badges**

- "Data Wizard": Exceptional ERD design
- "Integration Master": Comprehensive API documentation
- "Security Champion": Thorough RBAC model
- "Analytics Guru": Insightful dashboard design
- "Adaptability Award": Best response to event cards

### **Progress Tracking**

- Visual board showing each team's completion of modules (gamified progress)
- Daily standup: 2-minute team updates on progress and blockers

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## **Final Capstone: Executive Presentation (Day 10)**

**Format:** 20-minute presentation + 10-minute Q&A

**Audience:** Instructor + invited guest evaluators (HR tech professionals, if available)

### **Required Content:**

1. **Company Understanding** (2 min): Demonstrate grasp of GlobalTech's business, challenges, and stakeholders
2. **Architecture Overview** (5 min): High-level system design with visual architecture diagram

- 3. **Key Design Decisions** (5 min): 3-5 critical choices made, trade-offs considered, rationale
- 4. **Integration & Security Strategy** (3 min): How systems connect and data is protected
- 5. **Business Value & Analytics** (3 min): ROI, KPIs, and how analytics will drive decisions
- 6. **Implementation Approach** (2 min): Phasing, timeline, risk mitigation

**Evaluation Criteria:**

- Comprehensiveness of architecture (30%)
- Quality of technical design decisions (25%)
- Responsiveness to stakeholder needs and event cards (20%)
- Presentation clarity and professionalism (15%)
- Innovation and strategic thinking (10%)

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**4. TOOLS USED PER DAY / SPRINT**

**Tool Categories & Recommendations**

Category	Tools (Free/Academic-Friendly)	Purpose
Documentation	Google Docs, Microsoft Word, Notion	Requirements, policies, procedures
Spreadsheets	Google Sheets, Excel	Data dictionaries, matrices, calculations
Diagramming	Draw.io, Lucidchart (free tier), Miro	Architecture diagrams, flowcharts, workflows
Data Modeling	dbdiagram.io, Lucidchart, ERDPlus	Entity-relationship diagrams, schemas
Wireframing	Figma (free), Balsamiq, MockFlow	UI mockups, dashboard designs

Category	Tools (Free/Academic-Friendly)	Purpose
Collaboration	Miro, Mural, Google Jamboard	Brainstorming, journey mapping
Analytics Visualization	Google Data Studio, Tableau Public, Power BI Desktop (free)	Dashboard mockups, chart prototypes
API Documentation	Swagger Editor, Postman	Mock API specifications
Project Management	Trello (free), Asana (free), Notion	Task tracking, sprint boards
Presentation	Google Slides, PowerPoint, Canva	Final capstone presentation

### Day-by-Day Tool Mapping

Day	Module Focus	Primary Tools	Specific Uses
1	Foundations & System of Record	Draw.io, Google Docs, Miro	Architecture diagrams, requirements doc, stakeholder mapping
2	Data Modeling & Org Architecture	dbdiagram.io, Google Sheets, Draw.io	ERD, data dictionary, org charts
3	Talent Acquisition	Draw.io, Google Sheets, Miro	Process flows, integration maps, candidate journey
4	Time & Attendance	Draw.io, Google Sheets, Figma	Workflows, rules matrices, mobile wireframes
5	Payroll & Benefits	Draw.io, Google Sheets, Docs	Integration sequence diagrams, data mappings, security docs
6	Performance Management	Draw.io, Figma, Google Sheets	Goal cascading, dashboard mockups, workflow diagrams

Day	Module Focus	Primary Tools	Specific Uses
7	Learning & Succession	Miro, Google Sheets, Figma	Skills taxonomy (mind map), competency matrices, dashboards
8	Compensation	Google Sheets, Draw.io, Tableau/Power BI	Salary modeling, merit workflows, analytics mockups
9	Security & Compliance	Google Sheets, Draw.io, Docs	RBAC matrix, flowcharts, policy documentation
10	Integrations & Analytics	Draw.io, Swagger, dbdiagram.io, Tableau/Power BI	Enterprise architecture, API specs, data warehouse, dashboards

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### Tool Setup Guide (Pre-Course)

#### For Students:

- Create Google Workspace account (free personal account)
- Sign up for Draw.io (no account needed, can use with Google Drive)
- Register for Figma free account
- Download Tableau Public or Power BI Desktop
- Optional: Create Miro education account (free)

#### For Instructor:

- Prepare template folders in Google Drive with starter files
  - Create shared Miro boards for collaborative activities
  - Set up sample data files (mock employee records, org structures)
  - Prepare event card decks (digital or printed)
  - Configure any classroom collaboration tools (Slack channel, Teams, etc.)
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## 5. ASSESSMENT & EVALUATION BREAKDOWN

Overall Grading Distribution

Component	Weight	Description
Daily Sprint Deliverables	40%	Quality, completeness, and timeliness of 10 sprint outputs
Cumulative Portfolio	25%	Comprehensive project documentation and architecture
Final Capstone Presentation	20%	Executive presentation and Q&A performance
Peer Contribution & Collaboration	10%	Peer evaluations, role performance, teamwork
Individual Reflection Paper	5%	Personal learning synthesis (2-3 pages, submitted end of Week 2)

Detailed Rubrics

1. Daily Sprint Deliverables (40% total, 4% per sprint)

Evaluated Criteria per Sprint:

- **Completeness** (40%): All required elements included
- **Technical Quality** (30%): Accuracy of design, appropriate use of modeling techniques
- **Clarity** (20%): Professional documentation, clear diagrams, well-organized
- **Stakeholder Alignment** (10%): Addresses stated requirements and event card challenges

Grading Scale:

- **Excellent** (90-100%): Exceeds requirements, innovative solutions, exceptional clarity
- **Proficient** (80-89%): Meets all requirements, solid technical approach, clear documentation
- **Developing** (70-79%): Most requirements met, some technical gaps, adequate documentation



- Beginning (Below 70%): Significant gaps, unclear design decisions, poor documentation

**Submission:** End of each day via shared portfolio link (Google Drive folder or GitHub repository)

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## 2. Cumulative Portfolio (25%)

### Evaluated Dimensions:

Criterion	Weight	Description
Architecture Coherence	35%	Overall system design is comprehensive, integrated, and logical
Technical Depth	30%	Demonstrates mastery of data modeling, workflows, integrations, security
Coverage	20%	All required HRMS modules adequately addressed
Documentation Quality	15%	Professional formatting, consistent terminology, executive-ready

### Specific Checklist:

- Complete architecture diagram showing all system components
- Data models for all major modules (min. 8 ERDs)
- At least 15 workflow diagrams across modules
- Integration architecture with 10+ integration points
- Comprehensive RBAC matrix (30+ roles)
- Analytics dashboard designs (minimum 3 dashboards)
- Risk register with 20+ risks and mitigations
- Implementation roadmap with phases and milestones

**Submission:** Final portfolio due end of Day 10 (before presentation)

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## 3. Final Capstone Presentation (20%)

### Evaluation Matrix:

Criterion	Weight	Excellent (A)	Proficient (B)	Developing (C)
<b>Architecture Clarity</b>	30%	Compelling visual, easy to understand, comprehensive	Clear architecture, covers key areas	Confusing or incomplete architecture
<b>Technical Rigor</b>	25%	Deep technical decisions, trade-offs well-explained	Solid technical approach, adequate justification	Superficial technical discussion
<b>Stakeholder Focus</b>	20%	Clearly addresses business needs, ROI articulated	Mentions stakeholders and value	Weak connection to business value
<b>Presentation Skills</b>	15%	Professional, engaging, smooth delivery, excellent slides	Clear delivery, good slides	Unclear, poor visuals, unorganized
<b>Q&amp;A Performance</b>	10%	Confident, thorough answers to questions	Adequate responses	Struggles with questions

### Format Requirements:

- Maximum 20 slides
- Maximum 20 minutes (strict time limit)
- All team members must present
- Must include live demo of at least one design artifact (e.g., walking through dashboard mockup)

### Audience Q&A Topics May Include:

- "Why did you choose this integration pattern?"
- "How does your security model handle European subsidiaries under GDPR?"
- "Walk us through what happens when an employee gets promoted."
- "How will you handle payroll integration failure?"
- "What's your approach to change management for this scale of transformation?"

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#### **4. Peer Contribution & Collaboration (10%)**

##### **Evaluation Method:**

Each student completes **peer evaluation forms** at mid-point (end of Day 5) and final (end of Day 10).

##### **Peer Evaluation Questions** (5-point scale):

1. Contributed meaningfully to team discussions and decisions
2. Completed assigned work on time and at high quality
3. Demonstrated expertise in assigned role(s)
4. Communicated effectively with team members
5. Showed flexibility and adaptability when challenges arose
6. Helped resolve conflicts or roadblocks
7. Overall, I would want to work with this person again

##### **Scoring:**

- Average peer rating across all team members
- Instructor may adjust based on observed participation
- Significant discrepancies trigger private conversation

##### **Red Flags:**

- Non-participation in team activities
- Consistently late or incomplete role deliverables
- Unprofessional behavior
- Failure to rotate into new roles effectively

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#### **5. Individual Reflection Paper (5%)**

##### **Prompt:**

Write a 2-3 page reflection addressing:

1. **Technical Learning:** What were your 3 biggest technical takeaways from the course?
2. **Role Experience:** Compare the different roles you played. Which was most challenging and why?
3. **Design Decisions:** Describe one design decision your team made that you initially disagreed with. How did the team resolve it? In hindsight, was it the right choice?
4. **Real-World Application:** How will you apply this learning in your career (as consultant, in-house HRIS professional, product manager, etc.)?
5. **Course Improvements:** What would you change about the simulation to make it more effective?

#### **Evaluation Criteria:**

- Depth of reflection (not just summary)
- Connection to course concepts
- Honest self-assessment
- Clear writing and organization

**Submission:** Due 48 hours after course conclusion (allows time for synthesis)

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#### **Grade Boundaries**

Letter Grade	Percentage	Description
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A (Excellent)	90-100%	Exceptional work across all dimensions, innovative solutions, ready for industry implementation
B (Proficient)	80-89%	Strong work, solid technical understanding, comprehensive deliverables, professional quality
C (Developing)	70-79%	Acceptable work, basic technical competence, some gaps in deliverables or understanding
D (Beginning)	60-69%	Significant gaps, incomplete deliverables, struggles with core concepts
F (Failing)	Below 60%	Does not meet minimum standards, major deficiencies

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## **Formative Feedback Throughout Course**

### **Daily Feedback:**

- Instructor reviews each sprint deliverable same evening
- Provides brief written feedback (2-3 sentences) highlighting strengths and gaps
- Posted in shared team folder by next morning

### **Mid-Course Check-In (End of Day 5):**

- 15-minute team meetings with instructor
- Review of portfolio progress
- Identification of any technical misunderstandings
- Adjustment recommendations for second week

### **Peer Review Exercise (Day 8):**

- Teams exchange portfolios
- Review peer team's work using provided rubric
- Provide constructive feedback
- Builds ability to critique and learn from others' approaches

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## **Academic Integrity**

### **Collaboration Policy:**

- Teamwork within assigned groups is required and encouraged
- Collaboration between teams is prohibited (each team is a competing consulting firm)
- Use of AI tools (ChatGPT, Claude, etc.) is permitted for research and drafting but must be disclosed in documentation
- All external sources (articles, vendor documentation, templates) must be cited

### **Plagiarism:**

- Copying another team's architecture or designs is academic misconduct

- Use of online templates is acceptable but must be customized and cited
  - Instructor checks for inappropriate similarity between team submissions
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## **APPENDIX: COURSE DELIVERY CONSIDERATIONS**

### **Instructor Preparation**

#### **Pre-Course (2 weeks before):**

- Finalize GlobalTech scenario details (org chart, financial data, tech stack)
- Create all event cards and stakeholder personas
- Prepare template files and starter documents
- Record or script stakeholder messages (if using multimedia)
- Set up shared drives and collaboration platforms
- Recruit guest evaluators for final presentations (optional)

#### **Daily Preparation:**

- Review previous day's submissions and prepare feedback
  - Load that day's event cards and requirements documents
  - Prepare mini-lectures (slides, examples, references to actual platforms)
  - Set up any live demos or system walkthroughs
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### **Guest Speaker Opportunities**

Invite industry professionals for 30-minute sessions (optional enrichment):

- **Day 2:** HRIS Architect from major platform (Workday, SAP)
  - **Day 5:** Payroll/Benefits integration specialist
  - **Day 7:** Talent Analytics leader
  - **Day 9:** HRIS Security & Compliance expert
  - **Day 10:** Panel of evaluators for final presentations
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## **Adaptation for Different Contexts**

### **Corporate L&D Version:**

- Replace student teams with cross-functional employee teams
- Use company's actual HR challenges as scenario basis
- Extend to 4 weeks with implementation pilot phase
- Focus assessment on business case and ROI justification

### **Shorter Executive Education (1 week / 20 hours):**

- Reduce to 5 modules: Foundations, Core HR+Org, Talent Acquisition, Performance+Compensation, Analytics+Integration
- Simplify simulation to 5 sprints
- Focus on strategic decisions rather than detailed technical design

### **Fully Online/Asynchronous:**

- Use recorded lectures instead of live instruction
- Provide asynchronous collaboration via Slack/Teams
- Weekly synchronous check-ins (2 hours each)
- Extend timeline to 4 weeks with more flexible submission deadlines

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## **Recommended Pre-Reading**

### **Required** (Week before course):

- Article: "The HRMS Implementation Lifecycle" (provide or assign)
- Watch: 2-3 vendor demo videos (Workday, SAP SuccessFactors intro)
- Review: Sample company org charts and HR processes

### **Optional Deeper Dive:**

- Bersin, Josh. "HR Technology Disruptions 2024"
- Industry reports from Gartner, Forrester on HCM platforms
- Academic papers on HR data architecture

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## **Success Metrics for Course Itself**

### **Student Learning Outcomes (measured via pre/post assessment):**

- Ability to create ERDs for HR domains
- Understanding of integration patterns
- Knowledge of security and compliance requirements

### **Student Satisfaction (measured via end-of-course survey):**

- Relevance to career goals
- Quality of simulation experience
- Clarity of instruction and expectations
- Adequacy of tools and resources

### **Post-Course Impact (measured 3-6 months later):**

- Percentage of students working in HRIS/HR Tech roles
- Percentage who report using course concepts in their work
- Employer feedback on graduate preparedness

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## **CONCLUSION**

This 2-week intensive course provides postgraduate students with technical backgrounds a comprehensive, vendor-neutral understanding of HRIS architecture through immersive simulation. By combining daily theoretical modules with continuous hands-on consulting simulation, students develop both technical expertise and strategic consulting skills essential for HRMS implementation roles.

The course is designed to be immediately applicable in industry, whether students pursue careers as:

- HRIS Consultants (Deloitte, Accenture, Big 4)
- In-house HRIS Managers or Architects
- Product Managers at HR tech vendors



- People Analytics professionals
- HR Transformation leaders

The simulation-based approach ensures students don't just learn concepts—they apply them under realistic constraints, building muscle memory for complex decision-making in ambiguous situations.