

**Course Code :** 0211300304  
**Course Title :** Enterprise Systems Management  
**Semester :** I  
**Credit :** 2  
**Duration :** 20 hours (75 minutes per session)  
**Course Faculty :**

**Course Description :**

This course is designed to cover an in-depth look at how today's business firms use information technologies and systems to achieve corporate objectives. The students will get a theory and practical knowledge of Information systems and to learn to use them for achieving operational excellence, developing new products and services, improving decision making, and achieving competitive advantage. The pedagogy is through cases, Moodle study material, class activities, & practical. At the end of this course, students will be able to learn the most up-to-date and comprehensive overview of information systems used by business firms today, able to participate in, and even lead, management discussions of information systems for their firms, how to use information systems and technologies for achieving bottom-line business results. Regardless of whether you are an accounting, finance, management, operations management, marketing, or information systems major, the students are trained to enhance their technological management skills and analytical skills which will be valuable throughout their career.

CO Code	CO Statements	Cognition Level	Remarks
<b><i>After the completion of course, students should be able to</i></b>			
0211300304.1	Demonstrate the variety of information systems and how they transform business processes, improve managerial decision making in global business today.	L3-Appling	
0211300304.2	Differentiate Business Intelligence and Business Analytics, how they support Decision Making, relate the components of IT infrastructure, tools & technologies for safeguarding information resources, & e-commerce business processes	L4-Analysing	
0211300304.3	Use these knowledges in business to improve business performance and decision making	L3-Appling	
0211300304.4	Implement an actionable plan with best	L3-Appling	

	technologies working in a team		
0211300304.5	Support value propositions for organizations to cope up with futuristic and challenging information systems concepts and technical tools.	L5-Evaluating	
0211300304.5	Formulate strategies with current technological tools & trends and develop the graduates in an integrated manner to adopt to new trends in information systems and apply those for their firms.	L6-Creating	

### Mapping COs with POs

**Scale** 1- low alignment, 2- Moderate alignment, 3 – high alignment, - – No alignment

COs / POs	PO 1	PO 2	PO 3	PO 4	PO 5
0211300304.1	3	3	-	-	2
0211300304.2	3	3	-	-	1
0211300304.3	2	3	1	-	1
0211300304.4	2	1	-	-	3
0211300304.5	1	2	3	-	-
0211300304.6	-	-	2	2	1
CO	2.2	2.4	2	2	1.6
CO EQ	2	2	2	2	2

### Contents:

- Introduction to Enterprise Systems Management
- The characteristics of ESM
- Enterprise system packages available in India
- An insight to ERP, SCM, KMS and CRM applications
- Scope of BPR and the importance of BPR in ERP implementation
- ERP Modules
- ERP System Configuration and Integration
- ERP System Administration
- Introduction to Business Intelligence & Business Analytics
- Introduction to Predictive Analytics
- Introduction to Big Data Analytics
- How do Business Intelligence and Business Analytics Support Decision Making?
- IT Infrastructure & Cloud Management
- Major challenges in managing IT Infrastructure
- Information Security Management
- E-Commerce

- Unique features of e-commerce, digital markets, and digital goods
- Types of E-Commerce
- E-Commerce Payment Systems
- Latest Technologies – Changing Business Trends

#### SESSION PLAN:

Session	Topics	Reference Reading	Topics Mapped with CO	Cognition Level
Session 1	<b>Introduction to Enterprise Systems Management</b>		0211300304.1	L3-Applying
	<ol style="list-style-type: none"> <li>1. How development in technology is defining the way business operate and the benefits &amp; challenges the business are facing</li> <li>2. The characteristics of ESM and the various concepts – how enterprise systems support business processes, information flows, reporting and data analytics in an organization.</li> <li>3. The Enterprise system packages available in India Enterprise Software - SAP, Oracle, Microsoft Dynamics, NetERP</li> <li>4. An insight to ERP, SCM, KMS and CRM applications</li> <li>5. Scope of BPR and the importance of BPR in ERP implementation</li> <li>6. The need for having an integrated information system availability in an organization</li> </ol>	<p>Case Study: Flipkart – Interactive Session</p> <p>Case Study: ERP Implementation . Failure at Hershey Foods Corporation</p>		
Session 2 & 3	<b>Enterprise Applications 1</b>		0211300304.1, 0211300304.2	L3-Applying & L4-Analysing
	<p><b>ERP Modules:</b> Major 4 Industries: (Sales &amp; Marketing, Finance &amp; Accounts, HR, Production &amp; Manufacturing)</p> <p><b>Transaction Processing Systems (TPS)</b>  <b>Management Information Systems (MIS)</b>  <b>Decision Support Systems (DSS)</b></p>	Case Study: ACH Food companies transforms its business with enterprise		

	<b>Executive Support Systems (ESS)</b> <b>Partner Relationship Management (PRM)</b> <b>Employee Relationship Management (ERM)</b>	systems		
<b>Session 4 &amp; 5</b>	<b>Enterprise Applications 2</b>		0211300304.2, 0211300304.3	L4- Analysing & L3- Applying
	<ol style="list-style-type: none"> <li><b>Supply Chain Management (SCM)</b></li> <li>Sales Force Automation (SFA)</li> <li><b>Customer Relationship Management (CRM)</b> – would include Customer Life Cycle Management (Acquisition &amp; Retention, Operation &amp; Analytical System, Selection of CRM Tools &amp; Technologies, CRM Project Design &amp; Planning Process, Success factors of a good CRM. How to leverage CRM technology to enhance and manage high value customers</li> <li>Scope to include aspects such as Planning, Design, Development and Evaluation.</li> <li>Vendor management – selection of vendor for Enterprise systems</li> <li><b>Knowledge Management Systems</b></li> <li><b>ERP System Configuration and Integration</b> Designing and implementing practices for business process in ERP systems – system configuration could be looked from finance, SCM or CRM perspective</li> <li><b>ERP System Administration</b> ERP system administration and performance monitoring aspects.</li> </ol>	<p>Case Study: CRM Tools Aid -Airtel in the efficient handling of customer support processes</p> <p>Case Study: The Domino's PULSE™ System: Reading the pulse of the customer</p>		
<b>Session 6 &amp; 7</b>	<b>Strategic Enterprise Management System (SEM)</b>		0211300304.3	L3- Applying
	Leveraging SEM to study and understand existing business plans and development in them if any, definition of Key Performance Indicators (KPI)	Case Study:		

	<b>Enhancing Decision Making</b> <ol style="list-style-type: none"> <li>1. Types of decisions</li> <li>2. Introduction to Business Intelligence</li> <li>3. Introduction to Business Analytics</li> <li>4. Introduction to Predictive Analytics</li> <li>5. Introduction to Bid Data Analytics</li> </ol>	<p>Does Big Data Bring Big Rewards?</p> <p>Case Study: The Analytics behind Matrimony.com</p> <p>Case Study: Identifying market niches in the age of Big Data</p>		
<b>Session 8 &amp; 9</b>	<b>How do Business Intelligence and Business Analytics Support Decision Making?</b> <ol style="list-style-type: none"> <li>1. Difference between Business Intelligence and Business Analytics</li> <li>2. Relevance of Business Intelligence for an organization</li> <li>3. Future of Business Intelligence</li> <li>4. Leveraging Business Intelligence: What is Artificial Intelligence and Data Mining? Application of the same to business decision making. Usage of various tools to access, analyse and identify trends in data, forecasting and scheduling.</li> <li>5. Scope and Importance of Business Analytics to an organization</li> <li>6. What are the major capabilities of database management systems and why is a relational DBMS so powerful?</li> <li>7. Ensuring Data Quality</li> <li>8. The challenge of Big Data &amp; Business Intelligence Infrastructure</li> </ol>	<p>Practical Sessions – SQL through MS-Access</p> <p>Case Study: HDFC Banking on business intelligence and analytics technology</p> <p>Case Study: How much does Data-Driven Planting Help Farmers?</p>	0211300304.4	L3-Applying
<b>Session 10 &amp; 11</b>	<b>Internal Evaluation I</b> <b>IT Infrastructure &amp; Cloud Management</b>		0211300304.4, 0211300304.5	L3-Applying & L5-Evaluating

	<ul style="list-style-type: none"> <li>● Data Centre Management</li> <li>● Cloud Computing</li> <li>● SaaS &amp; PaaS</li> <li>● Amazon Web Services – Practical Exposure</li> <li>How to deal with project migration &amp; how to move to cloud using AWS</li> <li>● Major challenges in managing IT Infrastructure</li> </ul>	<p>Practical Session – AWS</p> <p>Case Study: The challenge of mobile application development</p>		
Session 12	<b>Information Security Management</b>		0211300304.4, 0211300304.5	L3-Applying & L5-Evaluating
	<ul style="list-style-type: none"> <li>● Why are information systems vulnerable to destruction, error, and abuse?</li> <li>● What is the business value of security and control?</li> <li>● Legal and Regulatory Requirements for Electronic Records Management</li> <li>● Components of an organizational framework for security and control.</li> <li>● The most important tools and techniques for safeguarding information resources</li> </ul>	Case Study: Hackers Attack Singapore's Telecom Infrastructure		
Session 13 & 14	<b>E-Commerce</b>		0211300304.5	L5-Evaluating
	<p>How does E-commerce information systems impact the business process design of an organization (B2B and B2C)</p> <p><b>What are the unique features of e-commerce, digital markets, and digital goods</b></p> <p>E-Commerce Today &amp; Why E-Commerce is different</p> <p>Key Concepts of E-Commerce</p> <p>Digital Markets and Digital Goods in a Global Marketplace</p> <p><b>What are the principal e-commerce business and revenue models?</b></p> <p><b>Types of E-Commerce</b></p>			

	<b>E-Commerce Payment Systems</b>  <b>How has e-commerce transformed marketing?</b>  <b>How has e-commerce affected B2B transactions?</b>  <b>What is the role of m-commerce in business and what are the most important m-commerce applications?</b>  <b>What issues must be addressed when building an e-commerce presence?</b>	Case Study: Can Pandora succeed with freemium?  Case Study: Mobile Commerce with Airtel Money		
<b>Session 15 &amp; 16</b>	<b>Latest Technologies – Changing Business Trends</b>  Internet of Things – Examples, applications, use cases in real life Block Chain technology Intelligent Devices in Business  <b>Smart Coins</b>  Artificial Intelligence Machine Learning & Deep Learning The popularity of standalone credit card machines The revolution of chatbots  <b>Internal Evaluation II</b>	Newspaper articles & Computer Magazines	0211300304.6	L6- Creating

### Pedagogy

1. Lecture
2. Case Study
3. News/Article Analysis
4. Live Activity/Exercise
5. Videos

### Evaluation:

Internal	20%
External	30%
Total	50%

### Parameters of Internal Assessment:

1. Class Assignment
2. Class Test
3. Class Room Discussion

4. Case Study Analysis
5. Class Participation
6. Presentation

Text Book:

1. Management Information Systems - Managing the digital firm-Kenneth C. Laudon & Jane P. Laudon - 15<sup>th</sup> edition, Pearson

Reference Books:

1. Management Information Systems: - James A O'Brien, George M Marakas & Ramesh Behl ,12th Edition, Tata McGraw-Hill.
2. Enterprise Resource Planning - Alexis Leon – Second Edition – Tata Demystified McGraw Hill
3. Management Information system - James A O'brien, 5th Edition, Tata McGraw- Hill
4. Enterprise Resource Planning - Mary Sumner - Pearson
5. Management Information Systems - Davis and Olson, 2nd Edition, McGraw-Hill, India, 1985.
6. Management Information Systems: - Effy oz - 6th edition – Cengage Learning

E-Books

1. MIS - <http://www.uotechnology.edu.iq/dep-cs/mypdf/subjects/4is/4mis.pdf>
2. MIS- [http://www.academia.edu/5275161/Management Information Systems 12th Edition](http://www.academia.edu/5275161/Management_Information_Systems_12th_Edition)
3. MIS -<https://drive.google.com/file/d/1Arp1vggiOgxjksUrIScOBIt7b5Q8vvNF/view>
4. Introduction to MIS- [https://drive.google.com/file/d/1DQ48mt\\_EbzBRRCX\\_Zyzmtz6SOhdsoagL/view](https://drive.google.com/file/d/1DQ48mt_EbzBRRCX_Zyzmtz6SOhdsoagL/view)
5. MIS- Basic concepts - <https://drive.google.com/file/d/1xhxT8ReGYpmlfApE8lBXij0cCGH7Ji9F/view>
6. MIS -<https://www.sigc.edu/departement/mba/studymet/ManagmentInformationSystem.pdf>
7. MIS -[http://dinus.ac.id/repository/docs/ajar/Kenneth C.Laudon,Jane P .Laudon - Management Information Sysrem 13th Edition .pdf](http://dinus.ac.id/repository/docs/ajar/Kenneth_C.Laudon,Jane_P_.Laudon_-_Management_Information_Sysrem_13th_Edition_.pdf)
8. MIS -<http://www.pearsonmiddleeastawe.com/pdfs/SAMPLE-MIS.pdf>
9. MIS- Managing the digital firm - [http://iefb.weebly.com/uploads/1/4/2/4/14240576/libri\\_per\\_msi.pdf](http://iefb.weebly.com/uploads/1/4/2/4/14240576/libri_per_msi.pdf)
10. ERP - Making it happen - <http://www.labee.ufsc.br/~luis/egcec/livros/ERP/ERP%20-%20Making%20It%20Happen.pdf>
11. ERP - Global opportunities ans challenges - [http://www.csbdu.in/csbdu-old/pdf/Enterprise Resource Planning.pdf](http://www.csbdu.in/csbdu-old/pdf/Enterprise_Resource_Planning.pdf)



12. Thinking about ERP -<https://www.syspro.com/dl/EB/SYSPRO-Thinking-About-ERP-ALL-EB.pdf>
13. Open ERP- <http://brochures.sisalp.fr/openerp-book-v6.pdf>
14. Business Analysis - Best Practices for Success – Steven P. Blais