

## LESSON PLAN


Sub Name : Advanced Computer Networks  
Branch: M.Tech CSE I Semester

Date:

17.1.2015

To 18.03.2016

S.No	Date	Topics to be covered	Unit No.	Teaching Method	Remarks
1	21/09/15	Introduction	I	BB	
2	23/09/15	Data transmission		BB	
3	23/09/15	Transmission impairments		BB	
4	24/09/15	Channel capacity		BB	
5	25/09/15	Wired transmission (twisted pair, coax)		BB	
6	28/09/15	Optical fiber		BB	
7	30/09/15	Wireless transmission		BB	
8	01/10/15	Wireless propagation		BB	
9	02/10/15	Line of sight transmission		BB	
10	03/10/15	Signal encoding (analog to analog)		BB	
11	05/10/15	Analog to digital		BB	
12	07/10/15	Digital to analog		BB	
13	07/10/15	Digital to digital		BB	
14	08/10/15	Tutorial		BB	
15	09/10/15	TCP/IP protocol architecture	II	BB	
16	12/10/15	Framing		BB	
17	14/10/15	Framing		BB	
18	14/10/15	Reliable transmission			
19	15/10/15	Error detection and correction		BB	
20	23/10/15	Ethernet			
21	14/10/15	Ethernet			
22	26/10/15	Token ring		BB	
23	28/10/15	Token ring		BB	
24	29/10/15	CRC		BB	
25	30/10/15	Hamming distance		BB	
26	02/11/15	tutorial		BB	
27	04/11/15	Connecting devices		BB	
28	05/11/15	ARP.RARP		BB	
29	06/11/15	IP addressing		BB	
30	09/11/15	Packet forwarding classful address	BB		
31	09/11/15	Classless address	BB		
32	09/11/15	Datagram fragmentation	BB		
33	15/11/15	Components in IP software	BB		
34	16/11/15	Private IP	BB		
35	18/11/15	NAT	BB		
36	18/11/15	ICMP	BB		
37	19/11/15	Distance vector routing	BB		
38	20/11/15	RIP	BB		
39	30/11/15	Link state routing	BB		

	<b>LESSON PLAN</b>	<b>Date:</b> <b>17.1.2015</b>  <b>To 18.03.2016</b>
	<b>Sub Name : Advanced Computer Networks</b> <b>Branch: M.Tech CSE I Semester</b>	


40	02/12/15	OSPF	IV	BB	
41	02/12/15	tutorial		BB	
42	03/12/15	UDP-Port addressing		BB	
43	04/12/15	UDP datagram		BB	
44	07/12/15	UDP operation		BB	
45	08/12/15	Udp Operation		BB	
46	08/12/15	TCP services and features		BB	
47	09/12/15	TCP segment		BB	
48	10/12/15	TCP connection		BB	
49	15/12/15	TCP state Transitions		BB	
50	15/12/15	TCP module algorithm		BB	
51	16/12/15	Flow and error control		BB	
52	17/12/15	Congestion control		BB	
53	18/12/15	SCTP services and features		BB	
54	22/12/15	Packet format		BB	
55	22/12/15	SCTP connection		BB	
56	23/12/15	State transitions		BB	
57	28/12/15	Flow and Error control		BB	
58	28/12/15	Tutorial	BB		
59	04/01/16	DNS-Distribution of name space	V	BB	
60	05/01/16	Name resolution		BB	
61	06/01/16	DNS messages		BB	
62	07/01/16	HTTP Achitecture		BB	
63	21/01/16	HTTP Achitecture(cont)		BB	
64	22/01/16	TTP Transction		BB	
65	23/01/16	DHCP Address allocation		BB	
66	21/09/15	Pacekt format			
67	23/09/15	Pacekt format			
68	23/09/15	SNMP-SMI		BB	
69	24/09/15	Mib		BB	
70	25/09/15	SNMP PDUs		BB	
71	28/09/15	Real time data transfer-RTP		BB	
72	30/09/15	RTCP		BB	
73	01/10/15	Voce over IP		BB	
74	02/10/15	Session Initiation Protocol		BB	
75	03/10/15	TTP Transction		BB	
76	05/10/15	tutorial			

#### TEXT BOOK

William Stallings,"Data and Computer Communications",Pearson Education

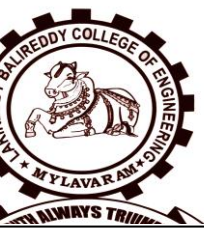
#### REFERENCES

1. Behrouz A Forouzan, "TCP/IP Protocol Suite",Tata Mcgraw-Hill.
2. Peterson and Davie , " Computer networks A systems approach", Elsevier.

	<b>LESSON PLAN</b>	<b>Date:</b>
	<b>Sub Name : Advanced Computer Networks</b> <b>Branch: M.Tech CSE I Semester</b>	<b>17.1.2015</b> <b>To 18.03.2016</b>

3. Kurose and Ross, "Computer networks A system approach", Pearson Education.
4. Behrouz A Forouzan, "Data Communications & Networking", 4<sup>th</sup> Edition, Mcgraw-Hill

	Prepared by	<b>Approved by</b>
<b>Signature</b>		
<b>Name</b>	<b>B SIVARAMAKRISHNA</b>	<b>HOD/CSE</b>
<b>Designation</b>	<b>Asst.Professor/CSE</b>	<b>Professor</b>



## LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING (Autonomous)

L.B.Reddy Nagar, Mylavaram-521 230. Andhra Pradesh, INDIA

Affiliated to JNTUK, Kakinada & Approved by AICTE New Delhi

NAAC Accredited with "A" grade, Accredited by NBA,

New Delhi & Certified by ISO 9001:2008, <http://www.lbrce.ac.in>

### DEPARTMENT OF COMPUTER SCIENCE ENGINEERING

#### LESSON PLAN

Dt:17-11-2014

Name of the faculty: K.NAGA PRASANTHI

Semester: I

A.Y:2014-15

Course Title: ADVANCED DATABASE MANAGEMENT SYSTEMS

SNo.	Tentative date	Topics to be covered	Actual date	Number of classes	Teaching Methodology
1	21/09/15	Introduction			DM1
2	23/09/15 23/09/15	Relational data model introduction			DM8
3	24/09/15 25/09/15	Entity relationship model			DM 1
4	28/09/15 23/09/15	Entity relationship model examples			DM9
5	23/09/15	Normalization			DM1
6	24/09/15	Various normal forms			DM1
7	30/09/15	Query processing			DM1
8	01/10/15	Query processing algorithms			DM1
9	02/10/15	Query optimization			DM1
10	03/10/15	Techniques for query optimization			DM1
11	05/10/15	Transaction Processing			DM2
12	07/10/15	Properties of transactions			DM1
13	07/10/15	Concurrency control			DM1
14	08/10/15	Concurrency control techniques-			DM1
15	09/10/15	Database recovery			DM1
16	12/10/15	Recovery techniques			DM1
17	14/10/15	Database tuning			DM1
18	14/10/15	Database tuning			DM1
19	15/10/15	Tutorial-1			DM2

20	23/10/15	Tutorial-2			DM2
21	14/10/15	Revision of unit-I			DM1
22	26/10/15	Introduction to distributed databases			DM1
23	28/10/15	Parallel databases overview			DM1
24	29/10/15	architectures of parallel databases			DM1
25	30/10/15	Inter query parallelism			DM1
26	02/11/15	Intra query parallelism			DM1
27	04/11/15	Distributed database features			DM1
28	05/11/15	Tutorial-3			DM2
29	06/11/15	Distributed database Architecture			DM1
30	09/11/15	Fragmentation			DM1
31	09/11/15	Types of fragmentation			DM1
32	09/11/15	Distributed query processing			DM1
33	15/11/15	Distributed transaction processing			DM1
34	16/11/15	Concurrency control in distributed			DM1
35	18/11/15	recovery			DM1
36	18/11/15	Commit protocols			DM1
37	19/11/15	Tutorial-4			DM2
38	20/11/15	Introduction to object oriented databases			DM1
39	30/11/15	Approaches			DM1
40	02/12/15	Modelling and design			DM1
41	02/12/15	persistence			DM1
42	03/12/15	Query languages			DM1
43	04/12/15	transaction			DM1
44	07/12/15	concurrency			DM1
45	08/12/15	Tutorial-5			DM2
46	08/12/15	Multi version locks			DM1
47	09/12/15	recovery			DM1
48	10/12/15	POSTGRESS			DM1
49	15/12/15	JASMINE			DM1
50	15/12/15	GEMSTONE			DM1
51	16/12/15	ODMG Model			DM1
52	17/12/15	Revision of unit-3			DM1
53	18/12/15	Emerging systems			DM1
54	22/12/15	Enhanced data models			DM1
55	22/12/15	Client/server model			DM1
56	23/12/15	Data warehousing			DM1
57	28/12/15	Data mining			DM1

58	28/12/15	Web databases			DM1
59	04/01/16	Web databases			DM1
60	05/01/16	Mobile databases			DM1
61	06/01/16	Mobile databases			DM1
62	07/01/16	XML and web databases			DM1
63	21/01/16	Tutorial-6			DM1
64	22/01/16	Revision of unit-4			DM1
65	23/01/16	Current issues			DM1
66	24/01/16	rules			DM1
67	25/01/16	Knowledge bases			DM8
68	27/01/16	Active and deductive databases			DM8
69	28/01/16	Multimedia databases			DM8
70	24/01/16	Multimedia data structures			DM8
71	25/01/16	Multimedia query languages			DM8
72	27/01/16	Multimedia query languages			DM8
73	28/01/16	Spatial databases			DM8
74	24/01/16	Spatial databases			DM8

**NOTE: DELIVERY METHODS:DM1:** Lecture interspersed with discussions/BB, **DM2:** Tutorial, **DM3:** Lecture with a quiz, **DM4:** Assignment/Test, **DM5:** Demonstration ( laboratory, field visit ), **DM6:** Group Discussion, **DM7:** Group Assignment/ Project, **DM8:** Presentations/PPT, **DM9:**Asynchronous Discussion..

Signature		
	Name of the faculty	HOD



## LESSON PLAN

**Course Name:** ADVANCED DATA STRUCTURES  
**Programme:** M.TECH

**CODE:** MCS 101  
**Department:** CSE

### COURSE EDUCATIONAL OBJECTIVES

1. Introduce the student to the concept of data structures through abstract data structures including list ADT such as singly linked, doubly linked, Circular linked, Stacks and queues.
2. Implementing binary search trees, *M*-way search trees, AVL trees, and Splay trees.
3. Introduce the student to algorithms design including greedy, divide-and-conquer, random and backtracking algorithms and dynamic programming; and specific algorithms including, for example, resizing arrays, balancing search trees, shortest path, and spanning trees.

### COURSE OUTCOMES:

After the completion of the course, students should be able to,

**CO1:** design ADT such as single, double, circular, stack and queue and carryout the applications.

**CO2:** Construct trees such as AVL, Red-Black, Splay, B, B+, M-Way Search trees.

**CO3:** know priority queues, leftist, binomial, Fibonacci, symmetric min-max heaps and sorting techniques such as insertion, heap, merge, quick.

**CO4:** design and analyze various Greedy methods and dynamic programming methods

**CO5:** implement advanced topics like Branch and bound methods and Back tracking methods.

### Prerequisites:

- Knowledge in C and C++ programming languages and algorithm design.

### Mapping of CO-PO:

Course outcomes	a	b	c	d	e	f	g	h	i	j	k
CO1	1	2			3			2		2	1
CO2	1	2			1			2	3		1
CO3	1	2	1		1			2			1
CO4	1	2	1		1			2	2		1
CO5	1	2			1			2		3	1

1- Strongly correlated 2-Moderately correlated 3-Lightly correlated



**LESSON PLAN**

**Course Name:** ADVANCED DATA STRUCTURES  
**Programme:** M.TECH

**CODE:** MCS 101  
**Department:** CSE

No.	Tentative Date	Topics to be covered	Actual Date	Num. of classes	Content Delivery Methods
<b>UNIT-I:Introduction</b>					
1.	8/3/2016	Data Structures Introduction		1	DM1
2.	9/3/2016	List ADT		1	DM1,DM5
3.	10/3/2016	Single linked list ( create, insertion )		1	DM1
4.	11/3/2016	Single linked list (deletion ,traverse)		1	DM1
5.	14/3/2016	double linked list ( create, insertion )		1	DM1
6.	15/3/2016	double linked list (deletion ,traverse)		1	DM1
7.	16/3/2016	Circular linked list(Creation , insertion)		1	DM1
8.	17/3/2016	Circular linked list(deletion ,traverse)		1	DM1
9.	18/3/2016	Stack ADT		1	DM1,DM6
10.	21/3/2016	Stack Applications		1	DM1
11.	22/3/2016	Queue ADT, Circular queue		1	DM1,DM6
12.	23/3/2016	Binary trees		1	DM1
13.	24/3/2016	Binary search trees		1	DM1,DM6
14.	28/3/2016	Threaded Binary Trees, Forests		1	DM1
15.	29/3/2016	Heaps, Selection Trees		1	DM1,DM6
16.	30/3/2016	Test/Assignment/Quiz-1		1	DM2,DM3
31/3/2016		<b>UNIT-II Efficient Binary Search Trees and Searches in Graphs</b>			
17.	1/4/2016	AVL trees rotations		1	DM1,DM6
18.	4/4/2016	Insertion and deletion		1	DM1
19.	5/4/2016	Red-Black trees rotations		1	DM1,DM6
20.	6/4/2016	Insertion and deletion		1	DM1
21.	7/4/2016	Splay trees		1	DM1,DM6
22.	11/4/2016	M-Way search trees		1	DM1,DM6
23.	12/4/2016	Example (operations)		1	DM1
24.	13/4/2016	B-Trees		1	DM1,DM6
25.	14/4/2016	Operations (insertion and deletion)		1	DM1
26.	18/4/2016	B+ Trees		1	DM1
27.	19/4/2016	Depth First Search		1	DM1
28.	20/4/2016	Breadth First Search		1	DM1,DM6
29.	21/4/2016	Test/Assignment/Quiz-2		1	DM2,DM3
30.	21/4/2016	Single Double ended priority queues		1	DM1
31.	22/4/2016	Leftist trees		1	DM1,DM6
32.	22/4/2016	Binomial heaps		1	DM1





## LESSON PLAN

**Course Name:** ADVANCED DATA STRUCTURES  
**Programme:** M.TECH

**CODE:** MCS 101  
**Department:** CSE

33	2/5/2016	Operations on heaps		1	DM1,DM6
34	3/5/2016	Fibonacci heaps		1	DM1
35	4/5/2016	Symmetric min-max heaps		1	DM1
36	5/5/2016	Insertion sort		1	DM1,DM6
37	6/5/2016	Heap sort		1	DM1
38	9/5/2016	Merge sort		1	DM1
39	10/5/2016	Quick sort		1	DM1
40	11/5/2016	Test/Assignment/Quiz-3		1	DM2,DM3
	12/5/2016	<b>UNIT-IV Greedy methods and Dynamic programming</b>			
41	13/5/2016	Container loading		1	DM1
42	14/5/2016	Knapsack problem		1	DM1,DM6
43	6/6/2016	Example		1	DM1,DM6
44	7/6/2016	Minimum cost spanning trees (Prims algorithm)		1	DM1,DM6
45	8/6/2016	Krushkals algorithm		1	DM1,DM6
46	9/6/2016	0/1 knapsack Algorithm		1	DM1,DM6
47	10/6/2016	Travelling Salesperson problem		1	DM1
48	13/6/2016	Optimal binary search trees		1	DM1,DM6
49	14/6/2016	Test/Assignment/Quiz-4		1	DM2,DM3
	15/6/2016	<b>UNIT-V Branch and Bound and Back Tracking</b>			
50	16/6/2016	The general methods LC and FIFO		1	DM1
51	17/6/2016	0/1 knapsack		1	DM1,DM6
52	20/6/2016	Example		1	DM1,DM6
53	21/6/2016	Travelling salesperson problem		1	DM1,DM6
54	22/6/2016	Example		1	DM1,DM6
55	23/6/2016	N-Queens problem		1	DM1
56	24/6/2016	State space tree		1	DM1
57	27/6/2016	Hamilton cycle		1	DM1
58	28/6/2016	Sum and Subsets problem		1	DM1
59	29/6/2016	State space tree		1	DM1
60	30/6/2016	Test/Assignment/Quiz-5		1	DM2,DM3
			<b>Total</b>	60	
<b>Total number of classes required to complete the syllabus</b>					<b>60</b>
<b>Total number of classes available as per Schedule</b>					<b>60</b>

**NOTE: DELIVERY METHODS:** DM1: Lecture interspersed with discussions/BB, **DM2:** Tutorial, **DM3:** Lecture with a quiz, **DM4:** Assignment/Test, **DM5:** Demonstration (laboratory, field visit), **DM6:** Presentations/PPT



## LESSON PLAN

**Course Name:** ADVANCED DATA STRUCTURES  
**Programme:** M.TECH

**CODE:** MCS 101  
**Department:** CSE

At the End of the course, students attained the **Course Outcomes: CO1, CO2, CO3, CO4, CO5**& sample proofs are enclosed in Course file.

<b>Signature</b>			
	<b>Name of the Faculty</b>	<b>Name of Course Co-ordinator</b>	<b>HOD</b>
	K.Rangachary		Dr.N.Ravi Sankar



## LESSON PLAN

Course Code & Course Name: M.TECH AI ARTIFICIAL INTELLIGENCE

SEM: I

Programme: M.TECH 15-16YEAR

Department: CSE

Faculty Name : M.SRI BALA, ASSIST. PROFESSOR

Subject Name : ARTIFICIAL INTELLIGENCE

Code :

Year : I

Semester : I

Degree : M.Tech

Programme : C.S.E

### COURSE EDUCATIONAL OBJECTIVES

1. This course is used to provide the description of agents and various types of agents and how they used to solve various AI problems, solving various problems using various problem solving techniques and constraint satisfaction problems
2. This gives a clear view of issues of knowledge representation, propositional and predicate logic unification, resolution process, types of logic and its algorithms.
3. This course gives better understanding of reasoning, bayes theorem, certainty factors and fuzzy logic etc.
4. It gives a clear view of planning, planning in state search, types of learning, learning decision trees, learning neural net learning and genetic learning.
5. It provides a clear view of various advanced topics like game palying, expert systems, Robotics and swarm intelligence.

### COURSE OUTCOMES:

After the completion of the course, students should be able to,

**CO1:** Ability to understand AI problems and techniques of solving problems, agents and their types.

**CO2:** Ability to understand knowledge and its representation techniques, logic and algorithms implementation in different kinds of logic.

**CO3:** Students able to know uncertainty and certainty, factors and theories and appropriate examples.

**CO4:** Student can understand various planning techniques and learning techniques.

**CO5:** 5. He can able to know various advanced topics like expert systems, robotics and swarm intelligent systems.





### LESSON PLAN

Course Code& Course Name:M.TECH AI ARTIFICIAL INTELLIGENCE

SEM: I

Programme: M.TECH 15-16YEAR

Department:CSE

swarm intelligent systems.

2



**LESSON PLAN**

**Course Code& Course Name:M.TECH AI ARTIFICIAL INTELLIGENCE**

**SEM: I**

**Programme: M.TECH 15-16YEAR**

**Department:CSE**

S No.	Tentative Date	Topics to be covered	Actual Date	Num. of classes	Content Delivery Methods
<b>UNIT-I:Introduction</b>					
1.	21/9/15	History of AI		1	DM1,DM1
2.	22/9/15	History of AI		1	DM1
3.	23/9/15	Intelligent systems		1	DM1
4.	26/9/15	Structure of agents		1	DM1
5.	28/9/15	Functions of agents		1	DM1
6.	39/9/15	Heuristic search techniques		1	DM1
7.	30/9/15	Heuristic search techniques		1	DM1
8.	2/10/15	<b>TUTORIAL-1</b>		1	DM2
9.	4/10/15	Best first search		1	DM1,DM1
10.	7/10/15	Best first search		1	DM1
11.	9/10/15	Problem reduction		1	DM1
12.	11/10/15	Problem reduction		1	DM1
13.	14/10/15	<b>TUTORIAL-2</b>		1	DM2
14.	16/10/15	Constrain satisfaction problem		1	DM1
15.	26/10/15	Constrain satisfaction problem		1	DM1
16.	27/10/15	Means ends analysis		1	DM1
17.	28/10/15	<b>Test-1</b>		1	DM4
			23		
18	30/10/15	Approachees of knowledgerepresentation and issues		1	DM1
19	2/11/15	Knowledge based agents		1	DM1
20	3/11/15	Knowledge based agents		1	DM1
21	4/11/15	Propositional logic		1	DM2
22	6/11/15	Propositional logic		1	DM1
23	9/11/15	Predicate logic		1	DM1
24	10/11/15	Predicate logic		1	DM1
25	11/11/15	Unification		1	DM1
26	13/11/15	Resolution		1	DM1
27	16/11/15	Resolution		1	DM1
28	17/11/15	Weak slot filler structures		1	DM1
29	18/11/15	Strong slot filler structures		1	DM2
30	20/11/15	Strong slot filler structures		1	DM1
<b>23-11-2015 TO 28-11-2015 IS I MID EXAMINATIONS</b>					
<b>UNIT-III:REASONING UNDER UNCERTAINTY</b>					
31	30/11/15	Logics of non monotonic reasoning		1	DM1
32	1/12/15	Logic implementation		1	DM1
33	2/12/15	Probability notation		1	DM1
34	4/12/15	Bayes theorem		1	DM1



**LESSON PLAN**

**Course Code& Course Name:**M.TECH AI ARTIFICIAL INTELLIGENCE

**SEM:** I

**Programme:** M.TECH 15-16YEAR

**Department:**CSE

35	7/12/15	Bayes rules and networks		1	DM1
36	8/12/15	<b>TUTORIAL-5</b>		1	DM2
37	9/12/15	certainty factors and rules		1	DM1
38	11/12/15	Rule based systems		1	DM1
39	14/12/15	Dempster shafer theory		1	DM1
40	15/12/15	Fuzzy logic		1	DM1
41	16/12/15	<b>TUTORIAL-6</b>		1	DM2
42	18/12/15	Comparison of various above mentioned methods		1	DM1
43	21/12/15	<b>Assignment</b>		1	DM4
<b>UNIT-IV:PLANNING AND LEARNING</b>					
44	22/12/15	Planning with state space search		1	DM1
45	23/12/15	Conditional planning		1	DM1
46	25/12/15	Continuous planning		1	DM1
47	28/12/15	Planning types		1	DM1
48	29/12/15	Multi agent planning		1	DM1
49	1/1/16	Types of learning ,inductive learning		1	DM1
50	4/1/16	<b>TUTORIAL-7</b>		1	DM2
51	5/1/16	Reinforcement learning		1	DM1
52	6/1/16	Learning decision trees		1	DM1
53	8/1/16	Neural net learning and genetic learning		1	DM1
<b>UNIT-V: ADVANCED TOPICS</b>					
54	18/1/16	Game playing, min max procedure		1	DM1
55	19/1/16	Adding alpha-beta cut offs		1	DM1
56	20/1/16	Expert systems, representation, shells		1	DM1
57	22/1/16	Knowledge acquisition		1	DM1
58	25/1/16	Robotics hardware robotic perception		1	DM1
59	26/1/16	Planning application domains		1	DM1
60	27/1/16	Swarm intelligent systems		1	DM1
61	29/1/16	Application and working of ant colony system		1	DM1
				<b>Total</b>	61
<b>Total number of classes required to complete the syllabus</b>					<b>61</b>
<b>Total number of classes available as per Schedule</b>					<b>60</b>
<b>01-02-2016 to 06-02-2016</b>					

**NOTE: DELIVERY METHODS :**DM1: Lecture interspersed with discussions/BB, **DM2:** Tutorial, **DM3:** Lecture with a quiz, **DM4:** Assignment/Test, **DM5:** Demonstration ( laboratory, field visit ), **DM6:** Presentations/PPT

At the End of the course, students attained the **Course Outcomes:CO1,CO2,CO3,CO4,CO5**& sample proofs are enclosed in Course file.

<b>Signature</b>			
	<b>Name of the Faculty</b>	<b>Name of Course Co-ordinator</b>	<b>HOD</b>
	M.Sri Bala		



## LESSON PLAN

**Course Code& Course Name:**M.TECH AI ARTIFICIAL INTELLIGENCE

**SEM:** I

**Programme:** M.TECH 15-16YEAR

**Department:**CSE





## LESSON PLAN

**Course Code& Course Name:** Data Mining **SEM:** I  
**Programme:** M.Tech

**Course Code& Course Name:** Data Mining **SEM:** I  
**Programme:** M.Tech **Department:** CSE

S No.	Tentative Date	Topics to be covered	Actual Date	Content Delivery Methods
<b>UNIT-I</b>				
1	21/09/15	Introduction to data mining	21/09/15	DM1,DM8
2	23/09/15	Types of Data	23/09/15	DM1
3	23/09/15	Types of Data,	23/09/15	DM1
4	24/09/15	Data Quality	24/09/15	DM1
5	25/09/15	Data Quality	25/09/15	DM1
6	28/09/15	Data processing techniques	28/09/15	DM1
7	30/09/15	Data processing techniques	30/09/15	DM1
8	01/10/15	Measures of similarity & Dissimilarity	01/10/15	DM1
9	02/10/15	Measures of similarity & Dissimilarity, Tutorial	02/10/15	DM1
10	03/10/15	Exploring data	03/10/15	DM1
11	05/10/15	Dataset	05/10/15	DM1
12	07/10/15	Summary of statistics	07/10/15	DM1
13	07/10/15	Visualization	07/10/15	DM1
14	08/10/15	OLAP	08/10/15	DM1
15	09/10/15	Multi dimensional data analysis	09/10/15	DM1
16	12/10/15	Multi dimensional data analysis	12/10/15	DM1
17	14/10/15	Tutorial-1	13/10/15	DM2
18	14/10/15	Classification: Basic concepts	14/10/15	DM1
19	15/10/15	Decision tree introduction & Model evaluation	14/10/15	DM1,DM8
20	23/10/15	General approach for solving classification problem	15/10/15	DM1
21	14/10/15	Decision tree introduction	23/10/15	DM1



## LESSON PLAN

**Course Code & Course Name:** Data Mining **SEM:** I

**Programme:** M.Tech

Course Code & Course Name: Data Mining Programme: M.Tech		SEM: I	Department: CSE	
22	26/10/15	Decision tree induction	26/10/15	DM1
23	28/10/15	Model over fitting: presence of noise & Lack of samples	28/10/15	DM1
24	29/10/15	Evaluating performance of classifier	29/10/15	DM1
25	30/10/15	Alternative techniques for classification	30/10/15	DM1
26	02/11/15	Nearest neighbourhood classifier,	02/11/15	DM2
27	04/11/15	Bayesian classifier	04/11/15	DM1
28	05/11/15	Support vector machines	05/11/15	DM1
29	06/11/15	Linear SVM	06/11/15	DM1
30	09/11/15	Support vector machines- separable & Non separable case,	09/11/15	DM1
31	09/11/15	Support vector machines- separable & Non separable case	09/11/15	DM1
32	09/11/15	Tutorial-2	09/11/15	DM 2
33	15/11/15	Introduction to association analysis,	15/11/15	DM1
34	16/11/15	problem definition	16/11/15	DM1,DM8
35	18/11/15	Frequent itemset generation	18/11/15	DM1
36	18/11/15	Frequent itemset generation	18/11/15	DM1
37	19/11/15	Rule generation,	19/11/15	DM1
38	20/11/15	Compact representation of frequent itemsets	20/11/15	DM1
39	30/11/15	FP-Growth algorithms	30/11/15	DM1
40	02/12/15	FP-Growth algorithms	02/12/15	DM1
41	02/12/15	Handling categorical & continuous attributes	02/12/15	DM1
42	03/12/15	Concept hierarchy	03/12/15	DM1



## LESSON PLAN

**Course Code& Course Name:** Data Mining **SEM:** I

**Programme:** M.Tech

Course Code& Course Name: Data Mining Programme: M.Tech		SEM: I	Department: CSE
43	04/12/15	Sequential & sub-graph patterns	04/12/15 DM 1
44	07/12/15	Assignment/quiz/Test.	07/12/15 DM 4
45	08/12/15	Clustering : Overview.	08/12/15 DM 1
46	08/12/15	K-means algorithm	08/12/15 DM 2
47	09/12/15	Agglomerative Clustering	09/12/15 DM 1,DM8
48	10/12/15	DBSCAN clustering	10/12/15 DM 1
49	15/12/15	Cohesion and separation techniques	15/12/15 DM 1
50	15/12/15	Cluster Evaluation using Proximity matrix	15/12/15 DM 1
51	16/12/15	Scalable clustering algorithms.	16/12/15 DM 1
52	17/12/15	Tutorial -4.	17/12/15 DM 2
53	18/12/15	Assignment/quiz/Test.	18/12/15 DM 4
54	22/12/15	Introduction to web mining,	22/12/15 DM 1
55	22/12/15	Web mining terminology, characteristics	22/12/15 DM 2
56	23/12/15	Web content mining, formats Introduction to search engines	23/12/15 DM 1,DM8
57	28/12/15	Web usage mining procedure	28/12/15 DM 1
58	28/12/15	Characteristics and limitations of search engine	28/12/15 DM 1
59	04/01/16	Functionality and architecture of search engines	04/01/16 DM 1
60	05/01/16	Ranking of web pages searched	05/01/16 DM 1
61	06/01/16	Ranking of web pages searched	06/01/16 DM 1
62	07/01/16	Enterprise search methods	07/01/16 DM 1
63	21/01/16	Enterprise search methods	21/01/16 DM 1
64	22/01/16	Tutorial of Unit – V	22/01/16 DM 2
65	23/01/16	Revision of all units	23/01/16 DM 1



## LESSON PLAN

**Course Code & Course Name:** Data Mining **SEM:** I  
**Programme:** M.Tech

	<b>Course Code &amp; Course Name:</b> Data Mining <b>Programme:</b> M.Tech	<b>SEM:</b> I	<b>Department:</b> CSE	
66	24/01/16	Revision of all units	24/01/16	DM 1
67	25/01/16	Revision of all units	25/01/16	DM 1
68	27/01/16	Revision of all units	27/01/16	DM 2
69	28/01/16	Revision of all units	28/01/16	DM 3 & DM 4

**NOTE: DELIVERY METHODS :** DM1: Lecture interspersed with discussions/BB, DM2: Tutorial, DM3: Lecture with a quiz, DM4: Assignment/Test, DM5: Demonstration ( laboratory, field visit ), DM6: Group Discussion, DM7: Group Assignment/ Project, DM8: Presentations/PPT, DM9:Asynchronous Discussion..

Signature			
	<b>Name of the Faculty</b>	<b>Name of Course Co-ordinator</b>	<b>HOD</b>
	D.Srinivasa Rao	B.Obula Reddy	Dr.N.Ravi Sankar

## COURSE HANDOUT

**PROGRAM** : M. Tech., I-Sem., CSE  
**ACADEMIC YEAR** : 2015-16  
**COURSE NAME & CODE** : Software Project Management & MTCS1054  
**L-T-P STRUCTURE** : 4-1-0  
**COURSE CREDITS** : 3  
**COURSE INSTRUCTOR** : Mr. Lella Kranthi Kumar  
**COURSE COORDINATOR** : Dr. Ch Venkata Narayana  
**PRE-REQUISITE:** Basic knowledge regarding computer, graphics and screen designs.

### **COURSE OBJECTIVE:**

1. Define and highlight importance of software project management.
2. To Describe and understand the software project management activities
3. To implement project plans through managing people, communications and change
4. To Select and employ mechanisms for tracking your software projects
5. Control your software projects Development
6. Learn how to apply the techniques and develop the documents related to IT project management.

### **COURSE OUTCOMES (CO)**

**CO1:** Identify the basic concepts and issues of software project management , Parameters to be considered to improve the software economics.

**CO2:** Apply SDLC methodology for development and identification of artifacts for each lifecycle phases.

**CO3:** Apply activities necessary to successfully complete and close the software projects using all the checkpoints in development process.

**CO4:** Apply the metrics for assessing the quality and cost; Acquire knowledge about automation building blocks and organization structure.

**CO5:** Identify the elements of tailoring process and future software project management along with case study (CCPDS).

### **COURSE ARTICULATION MATRIX (Correlation between COs&POs,PSOs):**

COs	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3
CO1	2	-	-	-	-	-	-	-	-	-	2	-	-	-	2
CO2	2	-	-	-	-	-	-	-	-	-	3	-	-	-	3
CO3	1	-	-	-	-	-	-	-	-	-	3	-	-	-	1
CO4	2	-	-		3	-	-	-	-	-	2	-	-	-	2
CO5	3	-	-	-	2	-	-	-	-	-	3	-	-	-	3

**Note:** Enter Correlation Levels 1 or 2 or 3. If there is no correlation, put '-'  
1- Slight(Low), 2 - Moderate(Medium), 3 - Substantial (High).

### **BOS APPROVED TEXT BOOKS:**

**T1** "Software Project Management ", walker Royce, Pearson Education, 2009.

**COURSE DELIVERY PLAN (LESSON PLAN):****UNIT-I : Conventional software Project management, Evaluation of software Economics, Improving Software Economics, The old way and new way.**

S.No.	Topics to be covered	No. of Classes Required	Tentative Date of Completion	Actual Date of Completion	Teaching Learning Methods	Learning Outcome COs	Text Book followed	HOD Sign Weekly
1.	Introduction	1	08.07.2015		TLM1	CO1	T1	
2.	Introduction	1	09.07.2015		TLM1	CO1	T1	
3.	Development Life Cycle	1	10.07.2015		TLM1	CO1	T1	
4.	Process Models	1	11.07.2015		TLM1	CO1	T1	
5.	Process Models	1	12.07.2015		TLM1	CO1	T1	
6.	CMMI		15.07.2015		TLM1,TLM2	CO1	T1	
7.	Waterfall Model	1	16.07.2015		TLM1,TLM2	CO1	T1	
8.	Conventional Software Management Performance	1	17.07.2015		TLM1,TLM2	CO1	T1	
9.	Software Economics ,Pragmatic Software Cost Estimation	1	18.07.2015		TLM1,TLM1	CO1	T1	
10.	TUTORIAL	1	19.07.2015		TLM3	CO1	T1	
11.	Reducing Software Product Size	1	22.07.2015		TLM1,TLM2	CO1	T1	
12.	Improving Software Processes	1	23.07.2015		TLM1,TLM2	CO1	T1	
13.	Improving Team Effectiveness	1	24.07.2015		TLM1,TLM2	CO1	T1	
14.	Improving Automation	1	25.07.2015		TLM1,TLM2	CO1	T1	
15.	Achieving Required Quality & Peer Inspections	1	26.07.2015		TLM1,TLM2	CO1	T1	
16.	Principles of Conventional Software Engineering	1	29.07.2015		TLM1,TLM2	CO1	T1	
17.	Principles of Modern Software Management	1	30.07.2015		TLM3	CO1	T1	
18.	Transition to an iterative process	1	31.07.2015		TLM6	CO1	T1	
No. of classes required to complete UNIT-I		18			No. of classes taken:			

**UNIT-II : Life cycle Phases, Artifacts of the process, Model based Software Architecture.**

S.No.	Topics to be covered	No. of Classes Required	Tentative Date of Completion	Actual Date of Completion	Teaching Learning Methods	Learning Outcome COs	Text Book followed	HOD Sign Weekly
19.	Engineering and Production Stages	1	01.08.2015		TLM1	CO2	T1	
20.	Inception	1	02.08.2015		TLM1	CO2	T1	
21.	Elaboration	1	05.08.2015		TLM1,TLM2	CO2	T1	
22.	Construction	1	06.08.2015		TLM1,TLM2	CO2	T1	
23.	Transition	1	07.08.2015		TLM1,TLM2	CO2	T1	
24.	Artifact Sets Introduction	1	08.08.2015		TLM1,TLM2	CO2	T1	
25.	Management Artifacts		10.08.2015		TLM1,TLM2	CO2	T1	
26.	TUTORIAL	1	11.08.2015		TLM3	CO2	T1	
27.	Engineering Artifacts	1	12.08.2015		TLM1,TLM2	CO2	T1	
28.	Requirements Artifacts	1	13.08.2015		TLM1,TLM2	CO2	T1	
29.	Design Artifacts	1	14.08.2015		TLM1,TLM2	CO2	T1	
30.	Implementation Artifacts	1	17.08.2015		TLM1,TLM2	CO2	T1	
31.	Construction Artifacts	1	18.08.2015		TLM1,TLM2	CO2	T1	
32.	Programmatic Artifacts	1	19.08.2015		TLM1,TLM2	CO2	T1	
33.	Management Perspective	1	20.08.2015		TLM1,TLM2	CO2	T1	
34.	Technical Perspective	1	21.08.2015		TLM1.TLM2	CO2	T1	
35.	TUTORIAL	1	24.08.2015		TLM3	CO2	T1	
No. of classes required to complete UNIT-II		17			No. of classes taken:			

**UNIT-III: Workflows of the process, Check Points of the process, Iterative Process Planning.**

S.No.	Topics to be covered	No. of Classes Required	Tentative Date of Completion	Actual Date of Completion	Teaching Learning Methods	Learning Outcome COs	Text Book followed	HOD Sign Weekly
36.	Workflows	1	25.08.2015		TLM1	CO3	T1	
37.	software process workflows	1	26.08.2015		TLM1,TLM2	CO3	T1	
38.	Iteration Workflows	1	27.08.2015		TLM1,TLM2	CO3	T1	
39.	Iteration Workflows	1	28.08.2015		TLM1,TLM2	CO3	T1	
40.	Major & Minor Milestones	1	31.08.2015		TLM1,TLM2	CO3	T1	

41.	Periodic Status Assessments	1	01.09.2015		TLM1,TLM2	CO3	T1	
42.	Periodic Status Assessments	1	02.09.2015		TLM3	CO3	T1	
43.	Work breakdown structure	1	03.09.2015		TLM1,TLM2	CO3	T1	
44.	Work breakdown structure	1	04.09.2015		TLM1,TLM2	CO3	T1	
45.	Planning guidelines	1	07.09.2015		TLM1,TLM2	CO3	T1	
46.	TUTORIAL	1	08.09.2015		TLM3	CO3	T1	
47.	Cost & Schedule Estimating	1	16.09.2015		TLM1,TLM2	CO3	T1	
48.	Cost & Schedule Estimating	1	17.09.2016		TLM1,TLM2	CO3	T1	
49.	Iteration Planning Process	1	18.09.2016		TLM1,TLM2	CO3	T1	
50.	Pragmatic planning	1	21.09.2015		TLM1,TLM2	CO3	T1	
51.	Use of software to assist in project planning activities	1	22.09.2015		TLM1,TLM2	CO3	T1	
No. of classes required to complete UNIT-III		15			No. of classes taken:			

**UNIT-IV: Project Organizations and Responsibilities, Process Automation, Project Control and Process Instrumentation.**

S.No.	Topics to be covered	No. of Classes Required	Tentative Date of Completion	Actual Date of Completion	Teaching Learning Methods	Learning Outcome COs	Text Book followed	HOD Sign Weekly
52.	Line-of-Business Organization	1	23.09.2015		TLM1	CO4	T1	
53.	Project Organizations	1	24.09.2015		TLM1,TLM2	CO4	T1	
54.	Evolution of Organizations	1	25.09.2015		TLM1,TLM2	CO4	T1	
55.	Evolution of Organizations	1	28.09.2015		TLM1,TLM2	CO4	T1	
56.	Automation Building Blocks	1	29.09.2015		TLM1,TLM2	CO4	T1	
57.	Project Environment	1	30.09.2015		TLM1,TLM2	CO4	T1	
58.	Seven Core Metrics	1	01.10.2015		TLM1,TLM2	CO4	T1	
59.	TUTORIAL	1	02.10.2015		TLM3	CO4	T1	
60.	Management Indicators	1	05.10.2015		TLM1,TLM2	CO4	T1	
61.	Quality Indicators	1	06.10.2015		TLM1,TLM2	CO4	T1	
62.	Life Cycle Expectations	1	07.10.2015		TLM1,TLM2	CO4	T1	
63.	Pragmatic Software Metrics	1	08.10.2015		TLM1,TLM2	CO4	T1	



64.	Pragmatic Software Metrics	1	09.10.2015		TLM1,TLM2	CO4	T1	
65.	Metrics automation	1	12.10.2015		TLM1,TLM2	CO4	T1	
66.	Metrics automation	1	13.10.2015		TLM1,TLM2	CO4	T1	
67.	TUTORIAL	1	14.10.2015		TLM3	CO4	T1	
No. of classes required to complete UNIT-IV		16			No. of classes taken:			

**UNIT-V: Tailoring the Process, Future Software Project Management, Case Study.**

S.No.	Topics to be covered	No. of Classes Required	Tentative Date of Completion	Actual Date of Completion	Teaching Learning Methods	Learning Outcome COs	Text Book followed	HOD Sign Weekly
68.	Process Discriminants	1	15.10.2015		TLM1	CO5	T1	
69.	Process Discriminants	1	16.10.2015		TLM1,TLM2	CO5	T1	
70.	TUTORIAL	1	26.10.2015		TLM1,TLM2	CO5	T1	
71.	Modern Project Profiles	1	27.10.2015		TLM1,TLM2	CO5	T1	
72.	Next Generation Software Economics	1	28.10.2015		TLM1,TLM2	CO5	T1	
73.	Modern Process Transitions	1	29.10.2015		TLM1,TLM2	CO5	T1	
74.	Modern Process Transitions	1	30.10.2015		TLM1,TLM2	CO5	T1	
75.	CCPDS Case Study	1	02.11.2015		TLM1,TLM2	CO5	T1	
76.	CCPDS Case Study	1	03.11.2015		TLM1,TLM2	CO5	T1	
77.	CCPDS Case Study	1	04.11.2015		TLM1,TLM2	CO5	T1	
78.	Revision	1	05.11.2015		TLM1,TLM2	CO5	T1	
79.	TUTORIAL	1	06.11.2015		TLM3	CO5	T1	
No. of classes required to complete UNIT-V		11			No. of classes taken:			

**Contents beyond the Syllabus**

S.No.	Topics to be covered	No. of Classes Required	Tentative Date of Completion	Actual Date of Completion	Teaching Learning Methods	Learning Outcome COs	Text Book followed	HOD Sign Weekly
80.	Software Engineering.	1	07-11-15		TLM1			
81.	Software Testing Methodologies.	1	08-11-15		TLM1			

<b>Teaching Learning Methods</b>					
<b>TLM1</b>	Chalk and Talk	<b>TLM4</b>	Problem Solving	<b>TLM7</b>	Seminars or GD
<b>TLM2</b>	PPT	<b>TLM5</b>	Programming	<b>TLM8</b>	Lab Demo
<b>TLM3</b>	Tutorial	<b>TLM6</b>	Assignment or Quiz	<b>TLM9</b>	Case Study

**ACADEMIC CALENDAR:**

Description	From	To	Weeks
I Phase of Instructions-1	08-07-2015	08-09-2015	9W
I Mid Examinations	09-09-2015	15-09-2015	1W
II Phase of Instructions I	16-09-2015	17-10-2015	4 1/2W
Vijaya Dasami Holidays	19-10-2015	24-10-2015	1W
II Phase of Instructions-II	26-10-2015	25-11-2015	4 1/2W
II Mid Examinations	26-11-2015	01-12-2015	1W
Preparation and Practicals	02-12-2015	11-12-2015	1 1/2W
Semester End Examinations	14-12-2015	26-12-2015	2W

**EVALUATION PROCESS:**

Evaluation Task	COs	Marks
Assignment/Quiz – 1	1	A1=5
Assignment/Quiz – 2	2	A2=5
I-Mid Examination	1,2	B1=20
Assignment/Quiz – 3	3	A3=5
Assignment/Quiz – 4	4	A4=5
Assignment/Quiz – 5	5	A5=5
II-Mid Examination	3,4,5	B2=20
Evaluation of Assignment/Quiz Marks: $A=(A1+A2+A3+A4+A5)/5$	1,2,3,4,5	A=5
Evaluation of Mid Marks: $B=75\%$ of Max(B1,B2)+25% of Min(B1,B2)	1,2,3,4,5	B=20
<b>Cumulative Internal Examination : A+B</b>	<b>1,2,3,4,5</b>	<b>A+B=25</b>
<b>Semester End Examinations</b>	<b>1,2,3,4,5</b>	<b>C=75</b>
<b>Total Marks: A+B+C</b>	<b>1,2,3,4,5</b>	<b>100</b>

Course Instructor

Course Coordinator

Module Coordinator

HOD