Lesson Plan

Department: COMPUTER SCIENCE AND ENGINEERING	Date:07/06/2018
Academic Year:2018-19	Year/Semester: IV/I
Name of the Faculty: SYED NAWAZ PASHA	
Course Name: DATAWAREHOUSING AND DATA MINING	Course Code: CS125

Prerequisite:

1. Understanding about the database

2. Knowledge about statistical analysis.

3. Knowledge about real world data.

Course Outcomes:

1. Design a data mart or data warehouse for any organization

2. Develop skills to write queries using DMQL

3. Extract knowledge using data mining techniques

4. Adapt to new data mining tools.

5. Explore recent trends in data mining such as web mining, spatial-temporal mining

6. Describe the basic principles and algorithms used in practical data mining and Comprehend their strengths and weaknesses.

7. Apply data mining techniques to solve problems in other disciplines in a mathematical way;

8. Apply data mining methodologies with information systems

Lecture Schedule:

S.No	Topic of the Lecture	Name of the Activity & Instructional Aids	Tentative Date
UNIT – I			
1	**Data Warehouse and OLAP Technology for Data Mining**		11/06/2018
2	Data Warehouse		12/06/2018
3	Multidimensional Data Model		13/06/2018
4	Data Warehouse Architecture		18/06/2018
5	Data Warehouse Implementation		19/06/2018
6	Efficient Methods for Data Cube Computation		20/06/2018
7	Further Development of Data Cube and OLAP Technology		25/06/2018
8	Attribute-Oriented Induction	**Think---Pair---Share**	26/06/2018
UNIT-II			
9	Fundamentals of data mining, Data Mining Functionalities		27/06/2018
10	Classification of Data Mining systems		02/07/2018
11	Data Mining Task Primitives		03/07/2018
12	Integration of a Data Mining System with a Database or a Data Warehouse System		04/07/2018
13	Major issues in Data Mining.		09/07/2018
14	**Data Pre-processing:** Need for Pre-processing the Data: Data Cleaning		10/07/2018
15	Data Integration		11/07/2018
16	Data Transformation		16/07/2018
17	Data Reduction		17/07/2018
18	Discretization and Concept Hierarchy Generation		18/07/2018
UNIT-III			
19	**Mining Frequent Patterns, Associations and Correlations**		23/07/2018
20	Basic Concepts, Efficient and Scalable Frequent Item set Mining Methods	**Group problem solving**	24/07/2018
21	Mining various kinds of Association Rules, From Association Mining to Correlation Analysis		25/07/2018
22	Constraint-Based Association Mining		30/07/2018
UNIT-IV			
23	**Classification and Prediction:** Issues		31/07/2018

	Regarding Classification and Prediction		
24	Classification by Decision Tree Induction	**Think Aloud Pair Problem Solving (TAPPS)**	01/08/2018
25	Bayesian Classification	**Think Aloud Pair Problem Solving (TAPPS)**	06/08/2018
26	Rule-Based Classification, Classification by Back Propagation		13/08/2018
27	Support Vector Machines, Associative Classification, Lazy Learners		20/08/2018
28	Other Classification Methods, Prediction		21/08/2018
29	Accuracy and Error measures		22/08/2018
30	Evaluating the accuracy of a Classifier or a Predictor		27/08/2018
31	Ensemble Methods		28/08/2018
32	**Cluster Analysis Introduction :**Types of Data in Cluster Analysis		29/08/2018
33	A Categorization of Major Clustering Methods		03/09/2018
34	Partitioning Methods		04/09/2018
35	Hierarchical Methods		05/09/2018
36	Density-Based Methods, Grid-Based Methods		10/09/2018
37	Model-Based Clustering Methods		11/09/2018
38	Outlier Analysis		12/09/2018
UNIT-V			
39	Mining streams		17/09/2018
40	Time Series and Sequence Data		18/09/2018
41	Mining Data Streams		19/09/2018
42	Mining Time-Series Data.		24/09/2018
43	**Data Mining Applications: :** Data Mining For Financial Data Analysis	**Group Writing Assignments**	25/09/2018
44	Retail Industry		26/09/2018
45	Telecommunication Industry		01/10/2018
46	Social Impacts on Data Mining.		03/10/2018

1. Topic Name: Efficient and Scalable Frequent Item set Mining Methods

Name of the Activity: Group problem solving

Description of the Activity:

1. Presenting students with a problem.
2. Providing some structure or guidance toward solving the problem
3. Reaching a final outcome or solution

2. Topic Name: Classification by Decision Tree Induction

Name of the Activity: Think Aloud Pair Problem Solving (TAPPS)
Description of the Activity: The learning activity involves solving problems. Students work In pairs and alternate roles. For each problem one is the solver while the other is the listener. The Solver thinks aloud— narrating his/her reasoning process— while solving the problem

3. Topic Name: Data Mining For Financial Data Analysis

Name of the Activity: Group Writing Assignments
Description of the Activity: The learning activity involves collaborative work that culminates in a group---authored document. Assign groups to write (and submit) Wikipedia entries on course---related topics or create study guides for the course.

4. Topic Name: Bayesian Classification
Name of the Activity: Think Aloud Pair Problem Solving (TAPPS)
Description of the Activity: The learning activity involves solving problems. Students work In pairs and alternate roles. For each problem one is the solver while the other is the listener. The Solver thinks aloud— narrating his/her reasoning process— while solving the problem

5.Topic Name: Attribute-Oriented Induction

Name of the Activity: Think---Pair---Share

Description of the Activity: The learning activity involves explaining answers/ideas to another student. The instructor poses a question to the class. Students write a response and then share It with a student nearby. Students clarify their positions and discuss points of agreement And disagreement.

Prepared By:Syed Nawaz Pasha

Lesson Plan

Department: CSE	**Date: 12-06-2018**
Academic Year: 2018-2019	**Year/Semester: IV B.Tech/I sem**
Name of the Faculty:VahiniSiruvoru	
Course Name: Grid and Cloud Computing	**Course Code: CS126**
Prerequisite: Distributed Systems, Advanced Database Management Systems	
Course Outcomes: 1. Ability to understand various service delivery models of a cloud computingarchitecture. 2. Knows the design issues of Cloud Computing Platforms. 3. Understand the Concepts of Service Oriented Architecture 4. Analyze the different workflows of Service Oriented Architecture 5. Ability to understand the security challenges and address the challenges 6. Understand the ways in which the cloud can be programmed and deployed. 7. Understand the Grid Computing Resource Management 8. Apply the Grid computing in solving large scale scientific problems	

Lecture Schedule:

S.No	Topic of the Lecture	Name of the Activity & Instructional Aids	Tentative Date
UNIT-I			
	Distributed System Models and Enabling Technologies	Chalk and talk	**12/06/2018**
	scalable computing services over the Internet	PPT's	13/06/2018
	technologies for network-based computing	PPT's	18/06/2018
	system models for distributed and	PPT's	19/06/2018

	cloud computing		
	software environments for distributed systems and clouds,	PPT's	20/06/2018
	performance, security, and energy-efficiency.	PPT's	25/06/2018
UNIT-II			
	Design of Cloud Computing Platforms	Reciprocal Teaching	**27/06/2018**
	cloud computing and service models	PPT's	
	data center design and interconnection networks	PPT's	3/07/2018
	architecture design of compute and storage clouds	PPT's	4/07/2018
	public cloud platforms, cloud resource management and exchanges	PPT's	9/07/2018
	cloud security and trust management	PPT's	10/07/2018
UNIT-III			
	Service Oriented Architectures	PPT's	16/07/2018
	message-oriented middleware	PPT's	17/07/2018
	portals and science gateways	PPT's	18/07/2018
	discover, registries	PPT's	23/07/2018
	metadata, and databases,	PPT's	24/07/2018
	Workflowinservice-oriented architectures	Group Writing Assignments	25/07/2018
UNIT-IV			
	Cloud Programming and Software Environments	PPT's	
	features of cloud and grid platforms	PPT's	1/08/2018
	parallel and distributed programming paradigms	PPT's	6/08/2018
	programming support of Google App engine	Group writing Assignments	**7/08/2018**
	Amazon Web Services programming,	PPT's	8/08/2018
	Microsoft Azure programming support	PPT's	9/08/2018
	emerging cloud software environments	PPT's	13/08/2018
UNIT-V			
	Grid Computing and Resource Management	Student-Team-Achievement-Divisions	16/08/2018
	grid architecture and service modeling	PPT's	20/08/2018
	case studies of grid computing systems	PPT's	
	grid resource management and brokering	PPT's	21/08/2018
	middleware support for grid resource management	PPT's	22/08/2018

	grid security infrastructure in GT4	PPT's	27/08/2018

1. Topic Name: Design of Cloud Computing Platforms

Name of the Activity: Reciprocal Teaching

Description of the Activity: The learning activity involves students teaching to one another in groups. Students jointly read a text or work on a task. Students take turns being the teacher for a segment of the text or task. In their teaching role students lead the discussion, summarize material, ask questions, and clarify material.

2. Topic Name: Workflow in service-oriented architectures

Name of the Activity: Group Writing Assignments

Description of the Activity: The learning activity involves collaborative work that culminates in a group-authored document. Assign groups to write (and submit) Wikipedia entries on course-related topics or create study guides for the course.

i.   Use a wiki, Google Docs, or Office Live for collaborative writing
ii.   Use assignment that has authentic purpose and audience such as creating Wikipedia entries or study guides for the course
iii. Establish guidelines to scaffold the process

3. Topic Name: programming support of Google App engine

Name of the Activity: Group Writing Assignments

Description of the Activity: The learning activity involves collaborative work that culminates in a group-authored document. Assign groups to write (and submit) Wikipedia entries on course-related topics or create study guides for the course.

i.   Use a wiki, Google Docs, or Office Live for collaborative writing
ii.   Use assignment that has authentic purpose and audience such as creating Wikipedia entries or study guides for the course
iii. Establish guidelines to scaffold the process

4. Topic Name: Grid Computing and Resource Management

Name of the Activity: Student-Team- Achievement-Divisions

Description of the Activity: students are assigned to four-member learning teams mixed in performance level, sex and ethnicity. The teacher presents a lesson, and the students work within their teams to make sure that all team members have mastered the lesson. Finally, all students take individual quizzes on the material, at which time they may not help one another.

Lesson Plan

Department: Computer Science and Engineering	**Date: 07-06-2018**
Academic Year: 2018 - 2019	**Year/Semester: IV – I**
Name of the Faculty: Dr. K. Seena Naik	
Course Name: Human Computer Interaction	**Course Code: CS129**
Prerequisite:	
Course Outcomes: 1. Explain the human components functions regarding interaction with computer. 2. Define key terms used in interaction design. 3. Demonstrate understanding of Interaction between the human and computer components. 4. Implement Interaction design basics. 5. Apply design rules. 6. Produce Implementation supports. 7. Use evaluation techniques. 8. Demonstrate universal design.	

Lecture Schedule:

S.No	Topic of the Lecture	Name of the Activity & Instructional Aids	Tentative Date
UNIT – I			
1	Importance of the User Interface	Chalk Board/PPT	12-06-2018
2	Defining the User Interface	Chalk Board/PPT	13-06-2018
3	Importance of Good Design	Chalk Board/PPT	14-06-2018
4	Benefits of Good Design	Chalk Board/PPT	15-06-2018
5	Brief History of the Human-Computer Interface	Chalk Board/PPT	18-06-2018
6	Introduction of the Graphical User Interface	Chalk Board/PPT	19-06-2018
7	Blossoming of the World Wide Web	Chalk Board/PPT	20-06-2018
8	Brief History of Screen Design	Chalk Board/PPT	21-06-2018
9	Popularity of graphics	Chalk Board/PPT	22-06-2018
10	Concept of direct manipulation	Chalk Board/PPT	23-06-2018
11	Graphical System, Characteristics	Chalk Board/PPT	25-06-2018
12	Web user – Interface popularity	Chalk Board/PPT	26-06-2018
13	Characteristics- Principles of User Interface	Chalk Board/PPT	27-06-2018
UNIT – II			
14	The User Interface Design Process	Chalk Board/PPT	28-06-2018
15	Obstacles and Pitfalls in the Development Path	Chalk Board/PPT	29-06-2018
16	Designing for People	Chalk Board/PPT	30-06-2018
17	Five Commandments Usability	Chalk Board/PPT	02-07-2018
18	Usability Assessment in the Design Process	Chalk Board/PPT	03-07-2018
19	Common Usability Problems	Chalk Board/PPT	04-07-2018
20	Some Practical Measures of Usability	Chalk Board/PPT	05-07-2018
21	Some Objective Measures of Usability	Chalk Board/PPT	06-07-2018
22	Human interaction with computers	Chalk Board/PPT	07-07-2018
23	Importance of human characteristics	Chalk Board/PPT	09-07-2018
24	Human consideration	Chalk Board/PPT	10-07-2018
25	Human interaction speeds	Chalk Board/PPT	11-07-2018
26	understanding business junctions	Chalk Board/PPT	12-07-2018
UNIT - III			
27	Visually pleasing composition	Chalk Board/PPT	13-07-2018
28	Amount of information focus and emphasis	Chalk Board/PPT	14-07-2018

29	Presentation information simply and meaningfully	Chalk Board/PPT	16-07-2018
30	Formation retrieval on web in statistical graphics	Chalk Board/PPT	17-07-2018
31	Technological consideration in interface design	Chalk Board/PPT	18-07-2018
I - Mid Examinations			**09-08-2018 to 11-08-2018**
32	Visually pleasing composition	Chalk Board/PPT	16-08-2018
33	Amount of information focus and emphasis	Chalk Board/PPT	17-08-2018
34	Presentation information simply and meaningfully	Chalk Board/PPT	18-08-2018
35	Formation retrieval on web in statistical graphics	Chalk Board/PPT	20-08-2018
36	Technological consideration in interface design	Chalk Board/PPT	21-08-2018
UNIT - IV			
37	Windows	Chalk Board/PPT	23-08-2018
38	New and Navigation schemes selection of window	Chalk Board/PPT	24-08-2018
39	Selection of devices based and screen based controls	Chalk Board/PPT	25-08-2018
40	Components text and messages	Chalk Board/PPT	27-08-2018
41	Icons and increases	Chalk Board/PPT	28-08-2018
42	Multimedia and Colors	Chalk Board/PPT	29-08-2018
43	Uses Problems	Chalk Board/PPT	30-08-2018
44	Choosing Colors	Chalk Board/PPT	
UNIT - V			
45	Software Tools	Chalk Board/PPT	31-08-2018
46	Specification methods	Chalk Board/PPT	03-09-2018
47	Interface Building Tools	Chalk Board/PPT	04-09-2018
48	Interaction Devices	Chalk Board/PPT	05-09-2018
49	Keyboard and function keys	Chalk Board/PPT	06-09-2018
50	Pointing devices	Chalk Board/PPT	07-09-2018

1. Topic Name: Graphical User Interface

Name of the Activity: Graphical User Interface in Transportation system

Description of the Activity: The purpose of the study is to give analytically constructed criteria for a public transportation system for the user interface and service design for one's on-board ticketing system and navigation system design.

2. Topic Name: Screen Designing

Name of the Activity: Easy Accessing Screen Designing

Description of the Activity: The user interface for an (Android) app is built using a hierarchy of *layouts* (View Group objects) and *widgets* (View objects). Layouts are invisible containers that control how its child views are positioned on the screen. Widgets are UI components such as buttons and text boxes.

3. Topic Name: Navigation schemes

Name of the Activity: Voice Navigation

Description of the Activity: Voice Navigation is the fastest and easiest application to get navigation. Just like the name implies, Voice Navigation is the first all voice operated navigation system. Just say where you are going and Voice Navigation will get you there. Choose between driving, biking, walking and busing directions.

Course Projects: Auto informant Shortest Route Seeker

Prepared By:

K. Seena Naik

(CS130) IMAGE PROCESSING AND PATTERN RECOGNITION

(Professional Elective - 2)

COURSE OUTCOMES:

AT THE END OF THE COURSE, THE STUDENTS WILL DEVELOP ABILITY TO

1. ACQUIRE BASICS ON DIGITAL IMAGE PROCESSING SYSTEM AND VARIOUS FORMATS OF DIGITAL IMAGES.

2. ARTICULATE BACKGROUND KNOWLEDGE ABOUT IMAGE PROCESSING.

3. 3. EXPLAIN VARIOUS GEOMETRICAL AND RADIOMETRIC ERRORS AND THEIR CORRECTION PROCEDURES, AND PRE-PROCESSING METHODS FOR IMAGE.

4. LIST THE IMPORTANCE OF PATTERN RECOGNITION METHODS.

5. EXPERIMENT IMAGE PROCESSING TOOLS ON VARIOUS IMAGES.

6. EXPAND PRACTICAL KNOWLEDGE AND SKILLS ABOUT PATTERN RECOGNITION TOOLS.

7. ILLUSTRATE NECESSARY KNOWLEDGE TO DESIGN AND IMPLEMENT A PROTOTYPE OF AN IMAGE PROCESSING AND PATTERN RECOGNITION APPLICATION.

8. IDENTIFY DIFFICULTIES IN CURRENT EXISTING IMAGE AND PATTERN RECOGNITION AND PROPOSE NEW METHODS FOR IT.

LESSON PLAN

Name of the Faculty: **Academic Year:** 2018 - 2019

Course Number   : CS130   **Course Name: IMAGE PROCESSING AND PATTERN RECOGNITION Program**   : B.Tech   **Branch**   : CSE

Year / Semester   : IV / I   **Section**   :

S.No.	Topic	Schedule Date
	UNIT I	
1	THE DIGITIZED IMAGE AND ITS PROPERTIES	11/06/2018
2	THE DIGITIZED IMAGE AND ITS PROPERTIES	12/06/2018

3	THE DIGITIZED IMAGE AND ITS PROPERTIES	13/06/2018
4	APPLICATIONS OF IMAGE PROCESSING	18/06/2018
5	IMAGE FUNCTION,	19/06/2018
6	IMAGE REPRESENTATION	20/06/2018
7	SAMPLING	25/06/2018
8	QUANTIZATION	26/06/2018
9	COLOR IMAGES	27/06/2018
10	METRICS AND TOPOLOGICAL PROPERTIES OF DIGITAL IMAGES	2/07/2018
11	HISTOGRAMS	3/07/2018
12	IMAGE QUALITY	4/07/2018
13	NOISE IMAGE	9/07/2018
14	NOISE IMAGE	10/07/2018
	UNIT - II	
15	IMAGE PRE-PROCESSING	11/07/2018
16	PIXEL BRIGHTNESS TRANSFORMATION	16/07/2018
17	PIXEL BRIGHTNESS TRANSFORMATION	17/07/2018
18	POSITION DEPENDENT BRIGHTNESS CORRECTION,	18/07/2018
19	GRAY SCALE TRANSFORMATION;	23/07/2018
20	GEOMETRIC TRANSFORMATION	24/07/2018
21	LOCAL PRE-PROCESSING IMAGE SMOOTHENING,	25/07/2018
22	EDGE DETECTORS, ZERO-CROSSING	30/07/2018
23	SCALE IN IMAGE PROCESSING	31/07/2018
24	CANNY EDGE DETECTION	1/08/2018
25	PARAMETRIC EDGE MODELS,	6/08/2018

26	EDGES IN MULTI SPECTRAL IMAGES	7/08/2018
27	EDGES IN MULTI SPECTRAL IMAGES	8/08/2018
	UNIT– III	
28	IMAGE SEGMENTATION:.	13/08/2018
29	IMAGE SEGMENTATION:.	14/08/2018
30	THRESHOLD DETECTION METHODS,	16/08/2018
31	OPTIMAL THRESHOLDING,	20/08/2018
32	MULTISPECTRAL THRESHOLDING	21/08/2018
33	THRESHOLDING IN HIERARCHICAL DATA STRUCTURES	22/08/2018
34	THRESHOLDING IN HIERARCHICAL DATA STRUCTURES	27/08/2018
35	THRESHOLDING IN HIERARCHICAL DATA STRUCTURES	28/08/2018
	I - Mid Examinations	
36	EDGE BASED IMAGE SEGMENTATION- EDGE IMAGE THRESHOLDING,	29/08/2018
37	EDGE BASED IMAGE SEGMENTATION- EDGE IMAGE THRESHOLDING	3/09/2018
38	EDGE RELAXATION	**4**/09/2018
39	BORDER TRACING	5/09/2018
40	BORDER DETECTION	10/09/2018
	UNIT– IV	
41	MATHEMATICAL MORPHOLOGY	11/09/2018
42	MATHEMATICAL MORPHOLOGY	12/09/2018
43	BASIC MORPHOLOGICAL CONCEPTS,	17/09/2018
44	FOUR MORPHOLOGICAL PRINCIPLES,.	18/09/2018

45	BINARY DILATION, EROSION,	19/09/2018
46	HIT OR MISS TRANSFORMATION,	24/09/2018
47	OPENING AND CLOSING; THINNING AND SKELETON ALGORITHMS	25/09/2018
48	OPENING AND CLOSING; THINNING AND SKELETON ALGORITHMS	26/09/2018
49	MORPHOLOGICAL SEGMENTATION -PARTICLES SEGMENTATION AND WATERSHEDS	27/09/2018
50	MORPHOLOGICAL SEGMENTATION -PARTICLES SEGMENTATION AND WATERSHEDS	28/09/2018
51	MORPHOLOGICAL SEGMENTATION -PARTICLES SEGMENTATION AND WATERSHEDS	29/09/2018
52	PARTICLE SEGMENTATION	1/10/2018
	UNIT– V	
53	PATTERN RECOGNITION FUNDAMENTALS	2/10/2018
54	BASIC CONCEPTS OF PATTERN RECOGNITION,	3/10/2018
55	FUNDAMENTAL PROBLEMS IN PATTERN RECOGNITION SYSTEM, DESIGN CONCEPTS AND METHODOLOGIES, EXAMPLE OF AUTOMATIC PATTERN RECOGNITION SYSTEMS, A SIMPLE AUTOMATIC PATTERN RECOGNITION MODEL.	4/10/2018
56	DESIGN CONCEPTS AND METHODOLOGIES	5/10/2018
57	EXAMPLE OF AUTOMATIC PATTERN RECOGNITION SYSTEMS	6/10/2018
58	A SIMPLE AUTOMATIC PATTERN RECOGNITION MODEL.	7/10/2018
59	A SIMPLE AUTOMATIC PATTERN RECOGNITION MODEL.	8/10/2018
II - Mid Examinations		

Time Table:

Monday	:	3	Thursday	:	
Tuesday	:	2	Friday	:	
Wednesday	:	4	Saturday	:	

Prepared by

A.Harshavardhan

CSE Dept.

(CS127) SOFTWARE TESTING

(Professional Elective - 2)

COURSE OUTCOMES:

1. Design and conduct a software test process for a software testing project.

2. Apply software testing knowledge and engineering methods.

3. Explore the flow graphs and path testing.

4. Analyze, transaction flow testing and domain testing.

5. Enhance the testing tools for effective debugging.

6. Analyze the graph matrices and application.

7. Identify the needs of software test automation, and define and develop a test tool to support test automation.

8. Knowledge of contemporary issues in software testing, such as component-based software testing problems.

LESSON PLAN

Name of the Faculty: M.Rajesh   **Academic Year : 2018**

Course Number   : CS127   **Course Name   :** Software Testing

Program   : B.Tech   **Branch   :** CSE

Year / Semester   : IV / I   **Section   :**

S.No.	Topic	Schedule Date
	UNIT I	
1.	Introduction	11/06/2018
2.	Purpose of testing, Dichotomies	12/06/2018

3.	Model for testing, consequences of bugs	13/06/2018
4.	Taxonomy of bugs	18/06/2018
5.	Flow Graphs and Path Testing	19/06/2018
6.	Basics concepts of path testing	20/06/2018
7.	Predicates, path predicates and achievable paths	25/06/2018
8.	Path sensitizing	26/06/2018
9.	Path instrumentation	27/06/2018
10.	Application of path testing	02/07/2018
UNIT-II		
11.	Transaction flows	03/07/2018
12.	Transaction flow testing techniques	04/07/2018
13.	Basics of dataflow testing	09/07/2018
14.	Strategies in dataflow testing	10/07/2018
15.	Application of dataflow testing	11/07/2018
16.	Domains and paths, Nice & ugly domains	16/07/2018
17.	Domain testing, domains and interfaces testing	17/07/2018
18.	Domain and interface testing	18/07/2018
19.	Domains and testability	23/07/2018
UNIT-III		
20.	Path products & path expression	24/07/2018
21.	Reduction procedure	25/07/2018
22.	Applications of Regular Expressions	30/07/2018
23.	Regular expressions	31/07/2018
24.	Flow anomaly detection and Assignment-I	01/08/2018

		I - Mid Examinations	06/08/2018 – 11/08/2018
25.		Overview of Logic Based testing	13/08/2018
26.		Decision tables	14/08/2018
27.		Path expressions	20/08/2018
28.		KV charts	21/08/2018
29.		Specifications Logic Based testing	27/08/2018
UNIT-IV			
30.		State graphs	28/8/2018
31.		Good & Bad state graphs	29/08/2018
32.		State testing	04/09/2018
33.		Testability tips	05/09/2018
UNIT-V			
34.		Motivational overview Graph Matrices	10/09/2018
35.		Matrix of graph	11/09/2018
36.		Relations, power of a matrix	12/09/2018
37.		Node reduction algorithm, building tools	17/09/2018
38.		Usage of JMeter and Winrunner tools for Regression testing	18/09/2018
39.		Usage of JMeter and Winrunner tools for functional testing	19/09/2018
40.		Creation of test script for unattended testing	24/09/2018
41.		Synchronization of test case	25/09/2018
42.		Rapid testing	26/09/2018
43.		Performance testing of a data base application	01/10/2018
44.		HTTP connection for website access	03/10/2018

II - Mid Examinations					08/10/2018 to 13/10/2018

Time Table:

Monday	:	3	Thursday	:	
Tuesday	:	1	Friday	:	
Wednesday	:	4	Saturday	:	

(CS132) WIRELESS SENSOR NETWORKS

COURSE OUTCOMES:

At the end of the course, the students will develop ability to:

1. Work with existing ad-hoc and sensor network protocols and standards and deploy security mechanisms in the wireless ad-hoc and sensor networks.
2. Create a Sensor network environment for different type of applications.
3. Design ad-hoc and sensor network architectures using QoS and congestion control mechanisms.
4. Interpret the various control fields of the protocol in each layer.
5. Select appropriate routing algorithms for different network environments.
6. Program ad-hoc and sensor network for various applications and evaluate the QoS related performance measurements of ad-hoc and sensor networks

LESSON PLAN

Name of the Faculty: Mr. D. Mahesh   **Academic Year :** 2018 - 2019

Course Number   : CS136   **Course Name :** Wireless Sensor Networks

Program   : B.Tech   **Branch**   : CSE

Year / Semester   : IV / I   **Section**   :

S.No.	Topic	Schedule Date
UNIT-I: Introduction to Wireless Sensor Networks		
1	Introduction to Wireless Sensor Networks	11-06-2018

2	Fundamentals of wireless communication technology	12-06-2018
3	the electromagnetic spectrum radio propagation	13-06-2018
4	characteristics of wireless channels	18-06-2018
5	Modulation techniques	19-06-2018
6	multiple access techniques	20-06-2018
7	wireless LANs , PANs, MANs & WANs -1	25-06-2018
8	wireless LANs , PANs, MANs & WANs -2	26-06-2018
9	Wireless Internet	27-06-2018
UNIT – II: Introduction to Ad-hoc / Sensor Networks		
10	Key definitions of adhoc/ sensor networks	02-07-2018
11	unique constraints and challenges	03-07-2018
12	advantages of ad-hoc/sensor network	04-07-2018
13	driving applications	09-07-2018
14	Issues in adhoc wireless networks	10-07-2018
15	Issues in design of sensor network	11-07-2018
16	Sensor network architecture	16-07-2018
17	Data dissemination and gathering in WSN	23-07-2018
UNIT– III: MAC Protocols		
18	Issues in designing MAC protocols in wireless networks	24-07-2018
19	MAC protocols for adhoc wireless networks	25-07-2018
20	Issues in designing MAC protocols for adhoc wireless networks	30-07-2018
21	Design goals of MAC protocols - 1	31-07-2018

22	Design goals of MAC protocols - 2	01-08-2018
23	classification of MAC protocols and their functionalities – 1	13-08-2018
24	classification of MAC protocols and their functionalities - 2	14-08-2018
25	MAC protocols for sensor network	20-08-2018
26	Location discovery	21-08-2018
27	Quality & other issues	27-08-2018
28	S-MAC, IEEE 802.15.4.	28-08-2018
	I - Mid Examinations	**06-08-2018 to 11-08-2018**

UNIT– IV: Routing Protocols

29	Issues in designing a routing protocol	29-08-2018
30	classification of routing protocols	04-09-2018
31	Routing Protocol - table-driven	05-09-2018
32	Routing Protocol - on-demand	10-09-2018
33	Routing Protocol - hybrid	11-09-2018
34	Routing Protocol - flooding	12-09-2018
35	Routing Protocol - hierarchical	17-09-2018
36	power aware routing protocols	18-09-2018

UNIT– V: QoS and Energy Management

36	Issues and Challenges in providing QoS	19-09-2018
37	QoS - classifications	24-09-2018
38	MAC protocols	25-09-2018
39	Network layer solutions	25-09-2018

40	QoS framework	26-09-2018
41	need for energy management	26-09-2018
42	Energy Management – classification	01-10-2018
43	Energy Management – battery	01-10-2018
44	Energy Management – transmission power	03-10-2018
45	Energy Management – system power management schemes	03-10-2018
II - Mid Examinations		**04-10-2018 to 11-10-2018**

Time Table:

Monday	:	1	Thursday	:	
Tuesday	:	1	Friday	:	
Wednesday	:	1	Saturday	:	