

**K.L.N. College of Engineering**  
(An Autonomous Institution, Affiliated to Anna University, Chennai)  
Department of Computer Science and Engineering

Course Name : Data Analytics		Course Code : 20CS701			
CO	Course Outcomes	Unit	K-CO	POs	PS Os
C401.1	Explain the basic concepts of Data Analytics	1	K2	1, 2, 8, 9,10	1
C401.2	Describe the Data Analysis preprocessing Techniques.	2	K2	1, 2, 8,9, 10	1
C401.3	Explain about how missing data will be handled during preprocessing	2	K2	1, 2, 8,9, 10	1
C401.4	Apply the Classification and Clustering algorithms for real time applications	3	K3	1,2,3,6,8, 9,10,12	1
C401.5	Apply intelligent analytics techniques like neural networks, fuzzy and genetic algorithms for real time analytics applications	4	K3	1, 2, 3,5,8,9, 10,12	1
C401.6	Explain the Hadoop related tools such as Pig and Hive for big data analytics	5	K2	1,2,5, 8,9,10, 12	1,2

K Level Note:	Apply (PO1-K3), Analyze (PO2-K4), Evaluate (PO3-K5), Create (PO4-K6)													
K Level →	K3	K4	K5	K6										
Course outcomes ↓	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C401.1	2	1	-	-	-	-	-	1	1	1	-	-	1	-
C401.2	2	1	-	-	-	-	-	1	1	1	-	-	1	-
C401.3	2	1	-	-	-	-	-	1	1	1	-	-	1	-
C401.4	3	2	1	-	-	1	-	1	1	1	-	2	1	-
C401.5	3	2	1	-	2	-	-	1	1	1	-	2	1	-
C401.6	2	1	-	-	2	-	-	1	1	1	-	2	1	2
C	2	1	1	-	1	1	-	1	1	1	-	2	1	1

*JSR*  
**Domain Expert**

[J. SULTHAN ALIKHAN]

*J.S. Jadhav*  
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Course Name : ARTIFICIAL INTELLIGENCE		Course Code : 20CS702			
CO	Course Outcomes	Unit	K-CO	POs	PSOs
C402.1	Illustrate the structure of different intelligent agents and various problem solving approaches.	1	K3	1, 2,3 8,9,10	1
C402.2	Determine the appropriate search algorithms for any AI problem	2	K3	1, 2,3 8,9,10	1
C402.3	Identify the suitable agent strategy to solve a given problem.	2	K3	1, 2,3 8,9,10	1
C402.4	Relate first order logic with predicate logic for a given problem	3	K3	1, 2,3 8,9,10	1
C402.5	Illustrate software agents components to solve a problem	4	K3	1, 2,3 8,9,10	1
C402.6	Demonstrate different applications that use Artificial Intelligence	5	K3	1, 2,3,5 8,9,10,11	1

K Level	Apply (PO1-K3), Analyze (PO2-K4), Evaluate (PO3-K5), Create (PO4-K6)														
Note:															
K Level	K3	K4	K5	K6											
→															
Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	
outcomes															
↓															
C402.1	3	2	1	-	-	-	-	1	1	1	-	-	2	-	
C402.2	3	2	1	-	-	-	-	1	1	1	-	-	2	-	
C402.3	3	2	1	-	-	-	-	1	1	1	-	-	2	-	
C402.4	3	2	1	-	-	-	-	1	1	1	-	-	2	-	
C402.5	3	2	1	-	-	-	-	1	1	1	-	-	2	-	
C402.6	3	2	1	-	2	-	-	1	1	1	2	-	2	-	
C402	2	1	1	-	-	-	-	1	1	1	-	-	2	-	

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(Mrs. S. Venkata Lakshmi)

*Prof. J. Jaganath*  
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Course Name : Software Defined Networks										Course Code : 20CSV41					
CO	Course Outcomes										Unit	K-CO	POs	PSOs	
CE403.1	Explain the key benefits of SDN by separation of Data and Control Planes.										1	K2	1, 2, 8, 9,10	1	
CE403.2	Discuss the openflow specification and different controllers of SDN.										2	K2	1, 2, 8, 9,10	1	
CE403.3	Describe various Data centers and SDN solutions for the Data Center networks.										3	K2	1, 2, 8, 9,10	1	
CE403.4	Develop various applications of SDN using current languages and tools.										4	K3	1, 2, 3, 8, 9,10	1	
CE403.5	Explain the various concepts of Network function virtualization in SDN programming.										4	K2	1, 2, 8, 9,10	1	
CE403.6	Explain different framework and controller used in SDN										5	K2	1, 2, 8, 9,10	1	
CO-PO Mapping															
CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	
CE403.1	2	1	-	-	-	-	-	1	1	1	-	-	2	-	
CE403.2	2	1	-	-	-	-	-	1	1	1	-	-	2	-	
CE403.3	2	1	-	-	-	-	-	1	1	1	-	-	2	-	
CE403.4	3	2	1	-	-	-	-	1	1	1	-	-	2	-	
CE403.5	3	2	-	-	-	-	-	1	1	1	-	-	2	-	
CE403.6	3	2	-	-	-	-	-	1	1	1	-	-	2	-	
<b>C</b>	<b>3</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>2</b>	<b>-</b>	

  
**Domain Expert**

R. KIRUBAHARI

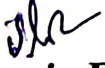
  
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Course Name : Data Analytics Laboratory		Course Code : 20CS7L1			
CO	Course Outcomes	Experiments	K-CO	POs	PS Os
C407.1	Build numerical and statistical analysis on various data sources	1,2,3	K3	1,2,3,4,5,8,9,10,12	1,2
C407.2	Apply data preprocessing and dimensionality reduction methods on raw data	4,5	K3	1,2,3,4,5,8,9,10,12	1,2
C407.3	Apply the different regression technique on given dataset	6	K3	1,2,3,4,5,8,9,10,12	1,2
C407.4	Apply the classification and clustering algorithms on different datasets	7,8,9	K3	1,2,3,4,5,8,9,10,12	1,2
C407.5	Apply appropriate visualization techniques for presenting the data	10	K3	1,2,3,4,5,8,9,10,12	1,2
C407.6	Solve the real world data analysis problems.	11	K4	1,2,3,4,5,6,8,9,10,11,12	1,2

K Level Note:	Apply (PO1-K3), Analyze (PO2-K4), Evaluate (PO3-K5), Create (PO4-K6)													
K Level →	K3	K4	K5	K6										
Course outcomes ↓	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C407.1	3	2	1	1	1	-	-	2	2	2	-	2	1	2
C407.2	3	2	1	1	1	-	-	2	2	2	-	2	1	2
C407.3	3	2	1	1	1	-	-	2	2	2	-	2	1	2
C407.4	3	2	1	1	1	-	-	2	2	2	-	2	1	2
C407.5	3	2	1	1	1	-	-	2	2	2	-	2	1	2
C407.6	3	3	2	1	1	1	-	2	2	2	2	2	1	2
C	3	2	1	1	1	1	-	2	2	2	1	2	1	2

  
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Course Name : Mini Project		Course Code : 20CS7L2			
CO	Course Outcomes	Experiments	K-CO	POs	PSOs
C408.1	Identify a problem and its applicability along with suitable domain.	-	K3	1,2,3,6,7,8,9,10,11,12	1,2
C408.2	Analyze and formulate project modules and identified constraints based on environmental and societal impact.	-	K4	1,2,3,4,5,6,7,8,9,10,11,12	1,2
C408.3	Select efficient tools and methods for designing and implementing project modules.	-	K4	1,2,3,4,5,6,7,8,9,10,11,12	1,2
C408.4	Propose an effective solution for the problem identified with the help of developed methodology and tools	-	K6	1,2,3,4,5,6,7,8,9,10,11,12	1,2
C408.5	Summarize all the modules through effective integration and testing.	-	K5	1,2,3,4,5,6,7,8,9,10,11,12	1,2
C408.6	Illustrate the completed task and compile the project report.	-	K4	1,2,3,4,5,6,7,8,9,10,11,12	1,2

K Level Note:	Apply (PO1-K3), Analyze (PO2-K4), Evaluate (PO3-K5), Create (PO4-K6)													
K Level →	K3	K4	K5	K6										
Course outcomes ↓	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C408.1	3	2	1	-	-	3	3	3	3	3	2	2	3	3
C408.2	3	3	2	1	2	3	3	2	2	2	3	2	3	3
C408.3	3	3	2	1	3	2	2	2	2	2	3	2	3	3
C408.4	3	3	3	3	3	3	3	2	2	2	3	2	3	3
C408.5	3	3	3	2	3	3	3	2	2	2	3	2	3	3
C408.6	3	3	2	1	1	1	1	3	3	3	2	2	3	3
C	3	3	2	2	2	3	3	3	3	3	3	2	3	3

  
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Course Name : Project Work		Course Code : 20CS8L1			
CO	Course Outcomes	Experiments	K-CO	POs	PSOs
C409.1	Identify a domain and problem by applying required domain knowledge.	-	K3	1,2,3,6,7,8,9,10,11,12	1,2
C409.2	Analyze and categorize executable project modules including real time project constraints based on environmental and societal impact.	-	K4	1,2,3,4,5,6,7,8,9,10,11,12	1,2
C409.3	Examine efficient tools and methods for designing and implementing project modules.	-	K4	1,2,3,4,5,6,7,8,9,10,11,12	1,2
C409.4	Develop effective solution for the problem identified with the help of proposed methodology and tools	-	K6	1,2,3,4,5,6,7,8,9,10,11,12	1,2
C409.5	Assess all the modules through effective integration, optimization and testing.	-	K5	1,2,3,4,5,6,7,8,9,10,11,12	1,2
C409.6	Elaborate the completed task and compile the project report.	-	K4	1,2,3,4,5,6,7,8,9,10,11,12	1,2

K Level Note:	Apply (PO1-K3), Analyze (PO2-K4), Evaluate (PO3-K5), Create (PO4-K6)													
K Level →	K3	K4	K5	K6										
Course outcomes ↓	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C409.1	3	2	1	-	-	3	3	3	3	3	2	2	3	3
C409.2	3	3	2	1	2	3	3	2	2	2	3	2	3	3
C409.3	3	3	2	1	3	2	2	2	2	2	3	2	3	3
C409.4	3	3	3	3	3	3	3	2	2	2	3	2	3	3
C409.5	3	3	3	2	3	3	3	2	2	2	3	2	3	3
C409.6	3	3	2	1	1	1	1	3	3	3	2	2	3	3
C	3	3	2	2	2	3	3	3	3	3	3	2	3	3

  
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