SSN COLLEGE OF ENGINEERING, KALAVAKKAM – 603 110
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
B.E(CSE) – CS6307 GRID AND CLOUD COMPUTING

ACADEMIC YEAR: 2017-2018 (ODD) **BATCH: 2014-2018**

COURSE DESCRIPTION

- Understand how Grid computing helps in solving large scale scientific problems.
- Gain knowledge on the concept of virtualization that is fundamental to cloud computing.
- Learn how to program the grid and the cloud.
- Understand the security issues in the grid and the cloud environment.

BLOOMS TAXONOMY

Remember	Understand	Apply	Analyse	Evaluate	Create
K1	K2	K3	K4	K5	K6

COURSE OUTCOMES

CO1: Understand & Apply grid computing techniques to solve problems. [K3]
CO2: Understand & Apply the concept of virtualization. [K3]
CO3: Understand & Use the grid and cloud tool kits. [K3]
CO4: Understand the security models in the grid and the cloud environment. [K2]

PROGRAMME OUTCOMES

1 Engineering knowledge: Our graduates will have the knowledge of mathematics, logic, probability and statistics, computer science and engineering, and the skill to apply them in the fields of computer software and hardware. **[K3]**

2 Problem analysis: Our graduates will have the knowledge and skill to identify, formulate, and solve hardware and software problems using sound computer science principles. **[K3, K4]**

3 Experimentation: Our graduates will have the skill to design and conduct experiments, organize, analyze, and interpret data. **[K3, K4, K5]**

4 Design and development: Our graduates will have the skill to design and construct hardware and software systems, components, or processes as per needs and specifications. **[K4]**

5 Team work: Our graduates will have the interpersonal and communication skills to function as team players on multidisciplinary teams.

6 Modern tools usage: Our graduates will be able to use the techniques, skills, and modern hardware and software tools necessary for computer engineering practice. **[K2, K4]**

7 Social and environmental responsibilities: Our graduates will demonstrate knowledge related to social, ethical, legal, economical, health and safety, sustainability and environmental dimensions.

8 Communication skills: Our graduates will be able to effectively communicate technical information in speech, presentation, and in writing.

9 Contemporariness: Our graduates will have knowledge of contemporary issues in the practice of their profession.

10 Self-learning: Our graduates will develop confidence for self-learning and ability for life-long learning.

11 Competitive exam preparedness: Our graduates will participate and succeed in competitive examinations such as GATE, IES, GRE.

12 Leadership: Our graduates are trained to enhance their managerial skills, leadership quality and entrepreneurial spirit.

COURSE OUTCOMES MAPPED TO PROGRAMME OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
	K3	K4	K5	K4		K3						
CO1: K3	3	2	2	2		3				1		
CO2: K3	3	2	2	2		3				1		
CO3: K3	3	2	2	2		3				1		
CO4: K2	2	2	1	2		2				1		

3	Strong	2	Significant	1	Reasonable

DESCRIPTION OF ASSESSMENT TOOLS

Assignments: Assignments covering most of the topics
Exams: 3 continuous assessments during the semester and final exam.

OURSE ASSESSMENT MATRIX

	CO 1	CO 2	CO 3	CO4
Assignments	X	X	X	
Assessment I	X			
Assessment II	x	X		
Assessment III		X	X	X

Prepared By	**Verified By**	**Approved By**
K. Vallidevi Y. V. Lokeswari	**PAC Member**	**HOD / CSE**

Justification of CO-PO Mapping

CO	Description	Knowledge Level	Remarks
CO1	Understand & Apply grid computing techniques to solve problems.	K2,K3	K2: Understand the basic concepts of Grid Computing Techniques K3: Apply the Grid Computing Techniques for deploying applications
CO2	Understand & Apply the concept of virtualization.	K2,K3	K2: Understand the concepts of Virtualization. K3: Apply the learned concept by deploying VMs
CO3	Understand & Use the grid and cloud tool kits.	K2,K3	K2: Understand the Toolkits for Grid and Cloud Computing. K3: Apply the learned toolkits – Globus for Grid Computing and Eucalyptus for Cloud Computing
CO4	Understand the security models in the grid and the cloud environment.	K2	K2: Understand the security models available in Grid and Cloud computing environment.

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