

THIAGARAJAR COLLEGE OF ENGINEERING - MADURAI 625 015 TCE-III

S.No	One credit course need analysis sheet		
1.	Name of the Course	Green Data Center	
2.	Name of the Industry	IBM	
3.	Name of the SIG associated with	System Engineering	
4.	Motivation for offering the course	Green Data Center have become central to any business activity. The information residing on these computers, networks and in cloud are an essential asset and due care should be taken for its security. The impact of any loss of this asset or any downtime of the infrastructure is quite high with the proliferation of easy-to-use tools and open how-to-discussions, the number of people aiming to hack in to or bring down the network is high, both in this country and abroad. Hence, there is a need for awareness on security measures and	
4.1	Feedback (If yes, Details of the feedback as per the annexure I)		
	From Recruiter	N	
	From Employer	N	
	From Alumni	Y	
	From Academic Council members	N	
	From Board of Studies members	N	
	From Senior students	N	
	From current students	N	
	From Performance Assessment Committee	N	
	From Department Advisory committee	N	
4.2	Faculty participation in Seminar/FDP (If yes, details)		
	At higher learning institutes		
	At Industry		
5.	Outcomes expected		
	Technology transfer	 Understand the concepts of Green Data Center. Apply the secure coding 	



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TCE-III

Course Schedule

Name of the Course: Green Data Center

Name of the Industry: IBM

Name of the Expert: Mr.Vidyasankar

Number of Students enrolled: 65

Name of the Faculty: S.Padmavathi

Date/Time/Venue: 27/8/16 & 28/8/16

Date	Time	Topics	Remarks
Day1	9.30 to 1	Definition of Green Data Center & Types and Components of Data center, Current trends in DC power and cooling, Overview of ASHRAE environmental guidelines Basics of electrical and cooling components in data center	
	2 to 4:45	Definition of Virtualization and Consolidation Types of Virtualization Introduction to Cloud Software defined data center	
Day2	9.30 to 1	Overview of different types of cooling technologies and infrastructure for a Datacenter Temperature, Air Flow and Humidification in a Datacenter Energy Efficiency Best Practices, Water Based Cooling Energy Management	
	2 to 3	Sensor Technology and measurement in Data centers Data center IT Systems Optimizations, Cost Considerations and Data center Example	

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3.30 to 5		
3.50 to 3	Green Data center transformation case studies Future technologies for efficient DC IT systems,	
	cooling systems and Power Systems	
	Case Study for IBM	

Signature of the Faculty coordinator



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Course Instructor Feedback for One/Two credit course

TCE-III

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	Comments
Student attendance	Good
Level of the students in understanding the concepts	Good
Any suggestions regarding new content to be included as Prerequisites/Special electives	Yes
Hall/Lab arrangements	Good
Hospitality	Good

Signature of the Course Instructor

Signature of Head of the Department