

Course Name	DATACENTER DESIGN & ADMINISTRATION		Course Code	ITEC-455		
Credit Hours	3	Contact Hours	Lec	Lab	Total	
			2	2	4	
Offered as	<input type="checkbox"/> University Requirement <input type="checkbox"/> College Requirement <input checked="" type="checkbox"/> Program Requirement <input checked="" type="checkbox"/> Core <input type="checkbox"/> Elective <input checked="" type="checkbox"/> ITEC <input type="checkbox"/> COMP <input type="checkbox"/> CNET					
Level	8	Prerequisite	ITEC454			
Course Description: This course is intended to study data center principles and operational issues, including design, build, configure, deploy, and maintain the critical assets that comprise your data center, environmental controls, power supplies, backup, data communications, and security standards to assure business continuity. It also discusses emerging trends and technologies in areas including cloud computing, virtualization, middleware, databases, data centers, green grids, and corporate and environmental social responsibility.						
On completion of the course, students will: <ul style="list-style-type: none"> • Gain a thorough understanding of the fundamental concepts and principles of datacenter design and administration. • Learn to manage critical components of datacenter infrastructure, including power, cooling, networking, and storage systems. • Identify best practices, and security requirements for designing efficient, scalable, and sustainable datacenters. • Implement virtualization and cloud computing solutions within a datacenter environment. • Implement effective backup and recovery strategies to protect data and ensure business continuity. • Develop and implement effective disaster recovery strategies to ensure business continuity. • Apply security measures to protect datacenter assets from threats and vulnerabilities. 						
Assessment Methods	<input checked="" type="checkbox"/> Exam-1	15%	<input checked="" type="checkbox"/> Assignment	10%	<input checked="" type="checkbox"/> Assignments	15%
			<input checked="" type="checkbox"/> Lab Exam	20%	<input checked="" type="checkbox"/> Final Exam	40%
Text Book: ♦ Hwaiyu Geng, Data Center Hand Book, John Wiely, Publications, ISBN: 978111843663, Year -2015.						
References: <ul style="list-style-type: none"> ♦ Rob Snevely, Enterprise Data Center Design and Methodology, Prentice Hall, ISBN: 0130473936, Release Date: January 2002. ♦ Kailash Jayaswal, Administering Data Centers: Servers, Storage and VoIP, Wiley Technology Publications, ISBN: 9780471771838, 2006. ♦ CISCO Press, Data center fundamentals, CISCO Press, ISBN: 1587050234, 2003. 						