

Course Name	Cloud Architecture and Design	Course Code	COMP 558		
Credit Hours	3	Contact Hours	Theory	Lab	Total
			2	2	4
Offered as	<input type="checkbox"/> University Requirement <input type="checkbox"/> College Requirement <input checked="" type="checkbox"/> Program Requirement <input type="checkbox"/> Core <input checked="" type="checkbox"/> Elective				
	<input type="checkbox"/> ITEC <input checked="" type="checkbox"/> COMP <input type="checkbox"/> CNET				
Level	9	Prerequisite	COMP 452		

**Course Description:** This course is designed for undergraduate students to gain knowledge in Cloud architecture and design it is rapidly growing business and technology area it has been one of the most challenging technologies and has changed the way It is consumed by enterprises in providing an end end systematic study on both architectural design and implementation of cloud computing it offers a industrial and research knowledge to it professionals and researchers and helps the students to find out the key challenge of cloud worlds and explore the ways to overcome these challenges using the best industrial practices validate in real enterprise

**Upon completion, the student will be able to:**

- ◆ Discuss the basic concepts and understanding the Cloud Computing Infrastructure and cloud Architecture.
- ◆ Explain the fundamental principles of Mobile Cloud Computing and their major technologies and techniques.
- ◆ Describe different clouds computing services and tools in real life scenario.
- ◆ Illustrate the methods of cloud Computing architecture and its application.
- ◆ Analyze of Case Studies to adopt cloud computing architecture, familiarize students with various types of services and applications.

<b>Grading</b>	<input checked="" type="checkbox"/> <b>Exam 1</b>	<b>10%</b>	<input checked="" type="checkbox"/> <b>Exam 2</b>	<b>10%</b>	<input checked="" type="checkbox"/> <b>Assignment(s)</b>	<b>20%</b>
	<input checked="" type="checkbox"/> <b>Final</b>	<b>40%</b>	<input checked="" type="checkbox"/> <b>Lab</b>	<b>20%</b>	<input type="checkbox"/> <b>Mini Project</b>	

**Text Book:**

- ◆ End-to-End Cloud Computing Architecture Design Jianwen “Wendy” Chen (IBM, Australia), Yan Zhang (Western Sydney University, Australia) and Ron Gottschalk (IBM, Australia) Copyright: © 2017 |Pages: 507|ISBN13: 9781522507598|ISBN10: 1522507590|EISBN13: 9781522507604 DOI: 10.4018/978-1-5225-0759-8 Cite Book.
- ◆ Barrie Sosinsky,”Cloud Computing Bible”,Wiley India Edition

**References:**

- ◆ Anthony Velte ,Toby Velte, Robert Elsenpenter, “ Cloud Computing – Apractical Approach”. Tata McGraw-Hill Edition.
- ◆ Architecting the **Cloud**: Design Decisions for **Cloud Computing** Service Models by Michael J. Kavis.