Course Name	Cloud Management		Course Code	COMP 559		
Credit Hours	3		Contact Hours	**Theory**	**Lab**	**Total**
				2	2	4

Offered as	☐ **University Requirement** ☐ **College Requirement** ☒ **Program Requirement**	☒ **Elective** ☐ **Revised**

Offered in	☒ **BS - Computer Science** ☐ **BS – Information Technology** ☐ **BS - Computer & Network Engineering**

Level	10	Prerequisite	COMP 452

Course Description:

This course will equip students with skills in cloud enterprise service creation and management, and technical and business knowledge required for assessing opportunities and risks of cloud services. The course focusses on developing skills to manage cloud instances through lab assignments in the simulated environment provided by top Cloud vendors in the market today. Conceptual themes will also be presented alongside technical aspects of cloud management. This course will broaden and deepen your understanding of cloud management.

Upon completion, the student will be able to:
- Manage cloud environments 'as a service,'.
- Use capacity management tools to monitor the health of the services or applications.
- Design, configure, and manage cloud, hybrid, and on-premises based information services in digital enterprise environments.
- Identify the necessary security implementations needed for deploying cloud-service.
- Identify the optimal cloud service platform to host the application in order to minimize the cost and maximize the performance of the application.
- Use services provided by vendors to host application in the cloud environment

Assessment Methods	☒ **Exam 1**	10%	☒ **Exam 2**	10%	☒ **Assignment(s)**	20%
	☒ **Final**	40%	☒ **Lab**	20%	☐ **Mini Project**	

Text Book:
- Cloud Capacity Management, Navin Sabharwal & Prashant Wali; Publisher: Apress; Publish Date: July 17, 2013'ISBN: DOI 10.1007/ISBN 978-1-4302- 4924-5; 978-1-4302-4923.

Reference Book:
- Buyya R., Broberg J., Goscinski A., *Cloud Computing: Principles and Paradigms*, John Wiley & Sons Inc., ISBN: 978-0-470-88799-8, 2011.
- L. Wang, R. Ranjan, J. Chen, and B. Benatallah, *Cloud Computing: Methodology, Systems, and Applications*, CRC Press, Boca Raton, FL, USA, ISBN: 9781439856413, October 2011.
- Cloud Computing Concepts, Technology & Architecture, Thomas Erl, Zaigham Mahmood and Ricardo Puttini, Prentice Hall, ISBN-13: 978-0-13-338752-0.