



Department: Business	Administration	Program: MBA		
Course Name	Special Topics in M	IS	Course Code	MIS 627
Pre-requisite	Not Applicable		Credit Hours	3

Brief D	escription
ß	The course is designed to give students a focused study of selected current topics in management information systems. Topics of interest are data mining and knowledge extraction; big data management and processing; cloud computing and Internet of Things (IoT); and E-services.
Course	Objectives
After c	completion of this course the student will be able to:
N	Knowledge: Relate MIS contemporary issues to relevant theories.
	Comprehension : Explain the importance and need for data management and cloud computing.
2	Application : Demonstrate the significance of data management and cloud computing in facilitating business functions.
2	Analysis: Debate contemporary issues of data management, cloud computing and e-services.
2	Synthesis : Manage potential risks and threats caused by digital technologies to businesses.
2	Evaluation : Evaluate the various factors that may impact contemporary use of big data and cloud computing.
Course	Leaning Outcomes
7	Distinguish between concepts, principles, and theories of Special Topics in MIS
2	Apply the concepts, principles, and theories of special topics in MIS
N	Demonstrate written communication skills
2	Have oral communication skills
N	Have skills of using computer applications in special topics in MIS
	Have scientific research skills in the field of special topics in MIS
	Have the skills of critical thinking and analysis in the fields of special topics in MIS
	Paliave, and practice sustainability in the context of special topics in MIS
	Have the skills of leadership, teamwork, and decision making in special topics in MIS
	Have the ability to distinguish between ethical issues in special topics in MIS
N	Have the competence of social responsibility in the fields of special topics in MIS
2	Have the competence to deal with cultural diversity in special topics in MIS situations





Course Topics

- Data mining and knowledge extraction
- **b** Big data processing and management
- Legal & Ethical Issues
- Cloud computing and Internet of things
- **E**-Services
- Data & business strategies

Text Book

- Peng, S. L., Pal, S., & Huang, L. (2020). Principles of Internet of Things (IoT) Ecosystem: Insight Paradigm. Cham, Switzerland, Springer.
- Nayyar, A. (2019). Handbook of Cloud Computing: Basic to Advance research on the concepts and design of Cloud Computing. New Delhi, BPB Publications.
- T. Jo, Text Mining (2018). Concepts, Implementation, Big Data Challenge (Studies in Big Data). Cham, Switzerland: Springer.

Additional References

- Ergu, Y. A. (2020). Data Mining and Ware Housing.
- Hariri, R. H., Fredericks, E. M., & Bowers, K. M. (2019). Uncertainty in big data analytics: survey, opportunities, and challenges. *Journal of Big Data*, *6*(1), 44.
- Dang, L. M., Piran, M., Han, D., Min, K., & Moon, H. (2019). A survey on internet of things and cloud computing for healthcare. *Electronics*, 8(7), 768.
- Shuaib, M., Samad, A., Alam, S., & Siddiqui, S. T. (2019). Why adopting cloud is still a challenge? —A review on issues and challenges for cloud migration in organizations. In *Ambient Communications and Computer Systems* (pp. 387-399). Springer, Singapore.
- Prasdika, P., & Sugiantoro, B. (2018). A Review Paper on Big Data and Data Mining Concepts and Techniques. *IJID (International Journal on Informatics for Development)*, 7(1), 36-38.
- Yang, H. (2018). Data Pre-processing.
- Khan, M., Wu, X., Xu, X., & Dou, W. (2017, May). Big data challenges and opportunities in the hype of Industry 4.0. In 2017 IEEE International Conference on Communications (ICC) (pp. 1-6). IEEE.
- Sivarajah, U., Kamal, M. M., Irani, Z., & Weerakkody, V. (2017). Critical analysis of Big Data challenges and analytical methods. *Journal of Business Research*, 70, 263-286.
- Jayamalini, K., & Ponnavaikko, M. (2017, February). Research on web data mining concepts, techniques and applications. In 2017 International Conference on



Algorithms, Methodology, Models and Applications in Emerging Technologies (ICAMMAET) (pp. 1-5). IEEE.

- Adams, J., & Albakajai, M. (2016). Cyberspace: A New Threat to the Sovereignty of the State. Management Studies, 4(6).
- Adams, J., & Albakjaji, M. (2016). Cyberspace: A Vouch for Alternative Legal Mechanisms. Journal of Business and Cyber Security, 1(1), 10-18.
- Tsagourias, N. (2015). The legal status of cyberspace. In Research Handbook on International Law and Cyberspace. Edward Elgar Publishing.

Online Resources

- Information Systems and e-Business Management
- Journal of Database Management
- **)** Journal of Information Science
- Journal of Management Information Systems
- **Journal of Cloud Computing**
- **** Internet of Things and *Cloud Computing*
- International Journal of Cloud Computing

Course Outline

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Week	Hours	Topics	Remarks				
1	3	Data mining and knowledge extraction					
2	3	Big data processing and management (I)	Big data processing and management (I)				
3	3	Big data processing and management (II)	Big data processing and management (II)				
4	3	Discussion of a research paper/ Case study					
5	3	Cloud computing and Internet of things (I)					
6	3	Cloud computing and Internet of things (II)					
7	3	Midterm Exam					
8	3	E-Services					
9	3	E-Services					
10	3	Discussion of a research paper/ Case study					
11	3	Legal & Ethical Issues (I)					
12	3	Legal & Ethical Issues (II)					
13	3	Privacy, confidentiality & security of data, Discussion of a research					
		paper/ Case study					
14	3	Business Strategies using big data					
15	3	Presentation					





Measurement and Assessment Tools														
			Knowledge		Skills					Values				
Assessment Tools	Grades	Week	Identify and apply	Written	Oral	Information Technology	Research	Critical thinking	Strategic thinking	Sustainability	Leadership	Ethics	Corporate Social responsibility	Cultural diversity
Midterm Exam	20	9	Х											
Case Study	10	12		Х				Х	Х	Х	Х	Х	Х	Х
Project	20	15		Х		Х	Х	Х	Х	Х	Х	Х	Х	Х
Presentation	10	15			Х	Х								
Final Exam	40	TBD	X											
Total	100													

Approved by Department Chair	Date of Approval

Additional Information: Updated every Semester by Course Instructor					
Course Instructor					
Department					
Phone No.					
Extension No					
Email					
Office Hours					