

CIS 356 – Decision Support and Business Intelligence

Course Description

This course covers the techniques, frameworks, and application of computerized decision support systems that support managerial decision making. Topics include the characteristics, structure, uses, and types of decision support systems.

Instructional Materials

Turban, E., Sharda, R., & Delen, D. (2011). *Decision support and business intelligence*. Upper Saddle River, NJ: Pearson Education, Inc.

Course Learning Outcomes

1. Describe decision support systems (DSS) in the context of managerial decision making.
2. Use data-mining visualization and heuristic options in discovery and decision support processes.
3. Describe the ethical issues in DSS data in organizational settings.
4. Describe DSS software packages and their application into organizational practice.
5. Explain the application of business analytics and data mining in Business Intelligence (BI).
6. Compare and contrast DSS modeling techniques and analysis.
7. Describe the application of neural networks in organizational settings.
8. Explain the role of text mining and Web mining as they relate to BI and DSS.
9. Describe the role of data warehouses in the context of DSS.
10. Compare and contrast business performance management, planning, and measurement techniques.
11. Describe collaborative and group support systems (GSS) and tools in the context of managerial decision making.
12. Describe the role of knowledge management in organizational activities.
13. Compare and contrast the foundations, definitions, and application of artificial intelligence and expert systems.
14. Describe the application of advanced intelligent systems to include genetic algorithms, fuzzy logic, and case-based reasoning.
15. Analyze and critique emerging trends of management support systems.
16. Describe methods of data mining and what insights may be gained by these methods.
17. Describe the application of data mining to information, data, and databases.
18. Develop a decision support solution to solve a proposed business problem.
19. Use technology and information resources to research issues in data mining.
20. Write clearly and concisely about Decision Support and Business Intelligence topics using proper writing mechanics and technical style conventions.