

Course Title and Code

IT 435 Decision Support Systems

I. Course Identification and General Information:

Course Title	Decision Support Systems	Course Code	IT 435	Pre-requisite	IT 332
Department	Information Technology	Course Level	10	Credit Hours	3(3+0)

II. Course Description/Topics: The following course topics will be covered.

This course introduces topics in Decision Support Systems (DSS), which are computer-based systems. A practical focus on the application of information technology (IT) to the solution of management problems. Topics include Management Support Systems, decision-making systems, Data mining for business and intelligent system.

III. Course Outcomes: Summary of the main learning outcomes for students enrolled in the course.

- Understand how management uses computer technologies.
- Learn basic concepts of decision-making and understanding decision support systems.
- Learn characteristics and capabilities of DSS.
- Understand DSS components and Describe structure of DSS components.
- Understand basic concepts of MSS modeling and Understand different model classes.
- Formulate Influence diagram, decision tables and decision tree.
- Handle multiple goals and Understand terms sensitivity, automatic, what-if analysis, goal seeking.
- Describe the issues in management of data.
- Understand the concepts and use of DBMS in DSS.
- Explain business intelligence/business analytics.
- Examine how decision-making can be improved through data manipulation and analytics.
- DSS interfaces: Designing, issues, influencing factors, evaluating and construction methods.
- Understand DSS technology levels and tools.
- Learn expert systems, its structure, its benefits and limitations, its working, chaining. its application in DSS.

IV. Required Text:

- Decision Support Systems & Intelligent Systems, 9/E, 2011, Turban, E. & Aronson J. E., Prentice Hall. ISBN: 0-13-046106-7.

V. References:

- Handbook on Decision Support Systems 2, ISBN 978-3-540-48716-6, 2008.