

H-Form ISE 250

| Course Information: | | |
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| Code and Title: | ISE 250 Decision and Data Analytics | |
| Prerequisites: | MATH 265-2 | |
| Co requisite (if any) | - | |
| Credit Hours: 3 | Credit Hours: 3 Lecture Hrs. (30), Tutorial Hrs. (10), Lab (), Total Credits (60) | |
| College/ Department: | ollege/ Department: College of Engineering/Industrial and Systems Engineering | |

Course Description:

The Decision and Data Analysis course offers an integrated approach, combining decision and data analytics to address practical business challenges. Students engage in hands-on projects that involve system modelling, data collection, analysis, and report writing to apply theoretical concepts to real-world scenarios.

Course Objectives:

After completing the course, the student will:

Understand the need for and importance of decision making in business, its inherent difficulties and pitfalls and the importance of proper data analysis in management decision making. Also, Linking Business Analytics Goals to Decision-Data-Analytics (DDA) Processes and Applying common quantitative and visual techniques to aid in management decision making.

| Course | Course Learning Outcomes | | | | |
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| | | PLO | | | |
| Knowled | | | | | |
| 1.1 | Explain fundamentals of decision analysis with logical thinking | K1 | | | |
| 1.2 | Discuss modelling techniques used in the analysis of statistical data | K2 | | | |
| Skills | | | | | |
| 2.1 | Formulate real life problems using analytical technics | S1 | | | |
| 2.2 | Implement parameters in data-models using statistical software to build and validate models and solve decision problems | S2 | | | |
| 2.3 | Formulate written documents and oral presentations that communicate effectively complex disciplinary ideas | S5 | | | |
| Values | | | | | |
| 3.1 | Appraise ethical, environmental and sustainability considerations in decision making and in practice in business | V2 | | | |

| Textbook: | | | | | | |
|-------------------------|--|-------------------|-------------------|--|--|--|
| Title: | Business Analytics | | | | | |
| Author(s): | James. R. Evans, | | | | | |
| Publisher: | Pearson, | Year and Edition: | 3th edition, 2020 | | | |
| Other Useful Resources: | Competing on Analytics: The New Science of Winning (1st Edition), Thomas H. Davenport & Jeanne G. Harris, Harvard Business School Press, 2007. | | | | | |