

# IT647- IT688 Project Guidelines

## **Topic: Data Mining in Business Intelligence**

### **Project Objective**

The goal is to write an academic paper explaining how data mining techniques support Business Intelligence (BI) in making better organizational decisions.

you should demonstrate:

- Understanding of BI concepts
- Knowledge of data mining methods
- Ability to connect theory to real business cases

### **Paper Requirements**

#### **Length & Format**

- 6–10 pages
- IEEE or APA format
- Font 12, Times New Roman, 1.5 spacing

### **Paper Structure**

#### ***1. Introduction***

Define Business Intelligence and Data Mining and explain why BI needs data mining.

#### ***2. Literature Review***

Discuss previous research on BI systems, data mining in business, and AI/ML in BI. Use at least 5–8 academic references.

#### ***3. Data Mining Techniques in BI***

Explain method used as classification, clustering, association rules, or prediction/regression and how each helps your businesses .

#### ***4.Results analysis***

Explain your results and analyze .

#### ***5. Benefits & Challenges***

Benefits include better decisions, customer insights, and cost reduction. Challenges include data quality, privacy concerns, and complexity.

#### ***6. Conclusion***

Summarize findings and discuss future trends.

## **7. References**

Use academic sources such as IEEE, Scopus, or Web of Science with proper citation.

### **First Presentation Guidelines- week 5**

Duration: 10–15 minutes per group

Slides (10–15 slides) should include:

Title

- 1- Problem statement : What business problem are you solving and why it is important.
- 2- Proposed idea : Describe your data mining idea and what you plan to analyze or predict.
- 3- Data source : Explain where the data will come from (public dataset or simulated data).
- 4- Method or technique : Specify which data mining methods you will use such as classification, clustering, or prediction.
- 5- Expected outcome : Describe expected insights or results and how businesses can benefit.

### **Final Presentation Guidelines- week 14-15**

Duration: 10–15 minutes per group

Slides (10–15 slides) should include:

1. Title slide
2. Introduction
3. BI overview
4. Data mining methods
5. Proposed Approach
6. Benefits & challenges
8. Conclusion
9. References

### **Evaluation Criteria**

- Content quality (40%)
- Understanding of topic (30%)
- Presentation skills (20%)
- Design & organization (10%)

### **Important Notes**

- No plagiarism
- All members must participate
- Use diagrams or examples
- Submit before the deadline