

DBA3803 PREDICTIVE ANALYTICS IN BUSINESS

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LEARNING OUTCOMES

By the end of the course, students will be able to:

- Apply supervised learning algorithms to solve business problems
- Use model selection and evaluation techniques to choose appropriate AI models
- Understand and apply interpretability methods to enhance trust in AI systems
- Translate business questions into predictive models using Python-based tools

These outcomes align closely with future-ready competencies in AI literacy, algorithmic thinking, and ethical data use.

The course reflects an “X + AI” approach by embedding AI methods directly into business problem-solving, rather than teaching AI as a standalone subject.

BACKGROUND

- This introductory course focuses on key aspects of modern AI techniques applied in business. Students explore foundational machine learning tools:
 - cross-validation
 - neural networks
 - responsible AI use
- The course was redesigned in response to the rising influence of AI across industries
- Aims to equip students with practical skills to apply AI tools in real-world business contexts

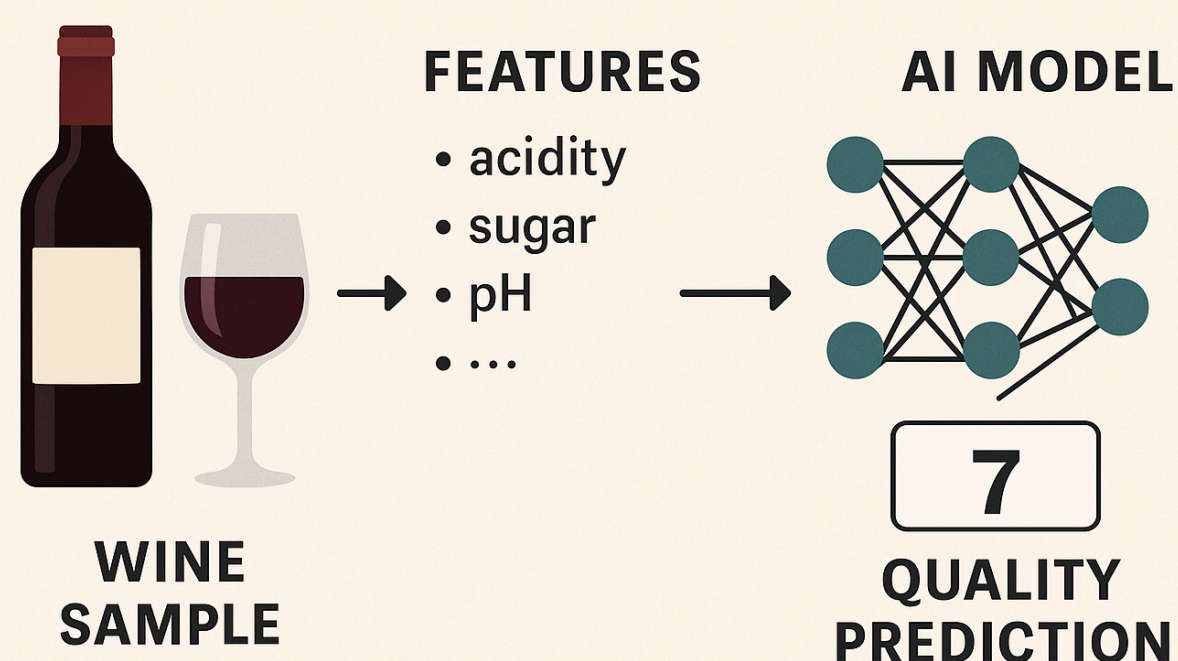
AI FOR FALL DETECTION



IMPLEMENTATION AND STUDENT EXPERIENCE

- Hands-on and application-driven, which students seem to appreciate
- Starting each session with an industry use case helps them see the relevance of predictive analytics in solving real business problems
- This approach keeps engagement high
- Made abstract concepts easier to grasp.
- Students have responded well to the mix of theory and practical exercises, especially when they can experiment with real data.

EXAMPLE - AI FOR WINE QUALITY PREDICTION



AI FOR SUPREME COURT DECISIONS

CHALLENGES

- Balancing the technical depth of algorithms with the business-oriented perspective expected from the course
- Some students struggled with the mathematical underpinnings, while others wanted more advanced coding practice
- Managing diverse backgrounds required extra effort in designing examples that were both accessible and meaningful.
- Ensuring that practical applications and conceptual understanding were equally emphasized within limited time was an ongoing balancing act.