

DBA 3702: Descriptive Analytics with R

NATIONAL UNIVERSITY OF SINGAPORE
NUS Business School
Department of Analytics & Operations

DBA3702: Descriptive Analytics with R

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Office hour: By Appointment, BIZ1 8-79

Session: Semester I, 2025/2026

Overview

We are now at the era of big data. Data and algorithms dominate the day. Competitive advantage, for more and more enterprises, is obtained via data analytics and idea sharing in the current fast-paced, data-intensive, and open-source business environment. The capability of understanding and interpreting data, digging out valuable insights from data, and thus making right managerial decisions accordingly has gradually become an essential skill that business graduates must master in order to excel in their career.

This course prepares students with fundamental knowledge of using R, a powerful complete analytical environment, to organize, visualize, and analyze data. It is, however, not a programming course. It will focus on case studies that will train students how to summarise and present findings in a structured, meaningful, and convincing way.

Learning Outcomes

After the course, students should be able to

1. Clean, transform, and manage data efficiently with R programme with help of Gen AI.
2. Develop meaningful and insightful visualisations for a given data case using R programme with help of Gen AI.
3. Ask appropriate questions in-depth to explore a given data case.
4. Properly interpret the insights from data visualisations and make informed business decisions.

Assessment

Assessment Components	Weightage
Class participation	20%
Group Project	30%

Test 1	25%
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Test 2	25%
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Reading list

“Business.Analytics.for.Managers”, Wolfgang Jank, Springer.

“Data.Mining.and.Business.Analytics.with.R”, Johannes Ledolter, Wiley.

“Marketing.Data.Science”, Thomas W. Miller, Pearson.