

Analytical Skills for Business (WS 2025/26)

Business Administration (M. A.)

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September 4, 2025

This document holds the course material for the Analytical Skills for Business course in the Master of Business Administration program. It discusses version control systems such as Git and GitHub for efficient team collaboration, offers an overview of no-code and low-code tools for data analytics including Tableau, Power BI, QlikView, makeML, PyCaret, RapidMiner, and KNIME, and introduces key programming languages such as R, Python, and SQL alongside essential programming concepts like syntax, libraries, variables, functions, objects, conditions, and loops. In addition, it covers working with modern development environments, including Unix-like systems, containers, APIs, Jupyter, and RStudio, and sets expectations for project submissions and evaluation.

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1 Introduction

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1.1 Implementing version control systems like git and GitHub for efficient team collaboration.

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1.3 Overview on Programming languages: R, Python, SQL

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1.4 Elements of programming languages: Syntax, libraries, variables, functions, objects, conditions, loops

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2 Descriptive statistics

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2.1 Measures of centrality, dispersion, and concentration.

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3 Inferential statistics

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3.1 Basic concepts of statistical inference.

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4 Predictive analytics

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4.1 Overview of data mining techniques.

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4.2 Applications of regression analysis.

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4.3 Applications of forecasting in predicting future business outcomes.

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5 Literature

All references for this course.

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