

https://courseoutline.auckland.ac.nz/dco/course/BUSAN/300/1223

# **BUSAN 300: Data Wrangling**

## **Business and Economics**

2022 Semester One (1223) (15 POINTS)

## **Course Prescription**

Organisations are increasingly adopting big data analysis, predictive analytics, social data mining, and deep machine learning to gain business intelligence and insight. The value of such technologies relies on having high-quality data, yet raw data is messy and its transformation to add value is often neglected. Students will explore a data wrangling toolbox to add value to data.

#### Course Overview

This course aims to provide you with a data management toolbox that is applicable to business data among disciplines and industries; to develop your skills in analytical thinking, programmatic problem solving, and business communication; to build up your proficiency in making raw data valuable and meaningful for a business audience; and to expose you to the digital data life-cycle.

## **Course Requirements**

Prerequisite: 15 points from BUSAN 201, INFOMGMT 292, INFOSYS 222 Restriction: INFOMGMT 390

# Capabilities Developed in this Course

Capability 1: Disciplinary Knowledge and Practice

Capability 2: Critical Thinking
Capability 3: Solution Seeking

Capability 4: Communication and Engagement

Capability 5: Independence and Integrity

Capability 6: Social and Environmental Responsibilities

Graduate Profile: Bachelor of Commerce

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

- 1. Recognise, comprehend, and consume data in various structures and formats (Capability 1 and 2)
- 2. Source and extract web data with potential relevance and insight for a business problem (Capability 1 and 3)
- 3. Clean and profile data to holistically evaluate its veracity and usefulness (Capability 1 and 3)
- 4. Transform data from one format and location to another for downstream consumption (Capability 1)
- 5. Document wrangling processes and communicate them for a business audience (Capability 1 and 4.2)
- 6. Plan, design, execute and report independently on an integration of public data of New Zealand or global public interest (Capability 1, 5.1 and 6)

#### **Assessments**

Assessment Type	Percentage	Classification
Assignment	35%	Individual Coursework
Project	15%	Individual Coursework
Test	50%	Individual Test
3 types	100%	

Assessment Type	Learning Outcome Addressed						
	1	2	3	4	5	6	
Assignment	~	<b>~</b>	~	<b>~</b>			
Project		~	~	~	<b>✓</b>	~	
Test	✓		<b>✓</b>	<b>~</b>	~		

To pass this course, students must attempt and pass all tests combined, and the course overall.

#### **Workload Expectations**

This course is a standard 15 point course and students are expected to spend 10 hours per week involved in each 15 point course that they are enrolled in. For this course, you can expect 3 hours of lectures, 2 hours of tutorials and 5 hours of working on your own: reading and practicing, working on assignments and project, and preparing for tests.

## **Delivery Mode**

#### **Campus Experience**

Attendance is required at scheduled activities including lectures and tutorials to complete components of the course. The activities for the course are scheduled as a standard weekly timetable. Lectures will be available as recordings.

#### **Learning Resources**

Course materials are made available in a learning and collaboration tool called Canvas which also includes reading lists and lecture recordings (where available).

Please remember that the recording of any class on a personal device requires the permission of the instructor.

This course may require students to bring your own device (BYOD) for scheduled activities and use the following software and tools: Microsoft Excel or Google Sheets; Visual Studio Code or Atom or Notepad++ or other text editor; Firefox Developer Tools or Chrome DevTools; MongoDB and Robo 3T; and Command Prompt or Terminal.

#### Student Feedback

At the end of every semester students will be invited to give feedback on the course and teaching through a tool called SET or Qualtrics. The lecturers and course co-ordinators will consider all feedback and respond with summaries and actions.

Your feedback helps teachers to improve the course and its delivery for future students.

Class Representatives in each class can take feedback to the department and faculty staff-student consultative committees.

## **Academic Integrity**

The University of Auckland will not tolerate cheating, or assisting others to cheat, and views cheating in coursework as a serious academic offence. The work that a student submits for grading must be the student's own work, reflecting their learning. Where work from other sources is used, it must be properly acknowledged and referenced. This requirement also applies to sources on the internet. A student's assessed work may be reviewed against online source material using computerised detection mechanisms.

# **Class Representatives**

Class representatives are students tasked with representing student issues to departments, faculties, and the wider university. If you have a complaint about this course, please contact your class rep who will know how to raise it in the right channels. See your departmental noticeboard for contact details for your class reps.

#### **Inclusive Learning**

All students are asked to discuss any impairment related requirements privately, face to face and/or in written form with the course coordinator, lecturer or tutor.

Student Disability Services also provides support for students with a wide range of impairments, both visible and invisible, to succeed and excel at the University. For more information and contact details, please visit the <a href="Student Disability Services">Student Disability Services</a> website <a href="http://disability.auckland.ac.nz">http://disability.auckland.ac.nz</a>

#### **Special Circumstances**

If your ability to complete assessed coursework is affected by illness or other personal circumstances outside of your control, contact a member of teaching staff as soon as possible before the assessment is due.

If your personal circumstances significantly affect your performance, or preparation, for an exam or eligible written test, refer to the University's <u>aegrotat or compassionate consideration page</u> https://www.auckland.ac.nz/en/students/academic-information/exams-and-final-results/during-exams/aegrotat-and-compassionate-consideration.html.

This should be done as soon as possible and no later than seven days after the affected test or exam date.

## **Learning Continuity**

In the event of an unexpected disruption, we undertake to maintain the continuity and standard of teaching and learning in all your courses throughout the year. If there are unexpected disruptions the University has contingency plans to ensure that access to your course continues and course assessment continues to meet the principles of the University's assessment policy. Some adjustments may need to be made in emergencies. You will be kept fully informed by your course co-ordinator/director, and if disruption occurs you should refer to the university website for information about how to proceed.

#### Student Charter and Responsibilities

The Student Charter assumes and acknowledges that students are active participants in the learning process and that they have responsibilities to the institution and the international community of scholars. The University expects that students will act at all times in a way that demonstrates respect for the rights of other students and staff so that the learning environment is both safe and productive. For further information visit <a href="Student Charter">Student Charter</a> https://www.auckland.ac.nz/en/students/forms-policies-and-guidelines/student-policies-and-guidelines/student-charter.html.

#### Disclaimer

Elements of this outline may be subject to change. The latest information about the course will be available for enrolled students in Canvas.

In this course students may be asked to submit coursework assessments digitally. The University reserves the right to conduct scheduled tests and examinations for this course online or through the use of computers or other electronic devices. Where tests or examinations are conducted online remote invigilation arrangements may be used. In exceptional circumstances changes to elements of this course may be necessary at short notice. Students enrolled in this course will be informed of any such changes and the reasons for them, as soon as possible, through Canvas.