

# Ensuring the next generation of AI specialists

Data science for high school science teachers

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# New NSW 7-10 Science syllabus for implementation 2026

## Working scientifically

### Stage 4

Observing  
the Universe

Living systems

Forces

Periodic table and  
atomic structure

Cells and  
classification

Change

Solutions and  
mixtures

Data science 1

### Stage 5

Energy

Genetics and  
evolutionary change

Disease

Reactions

Materials

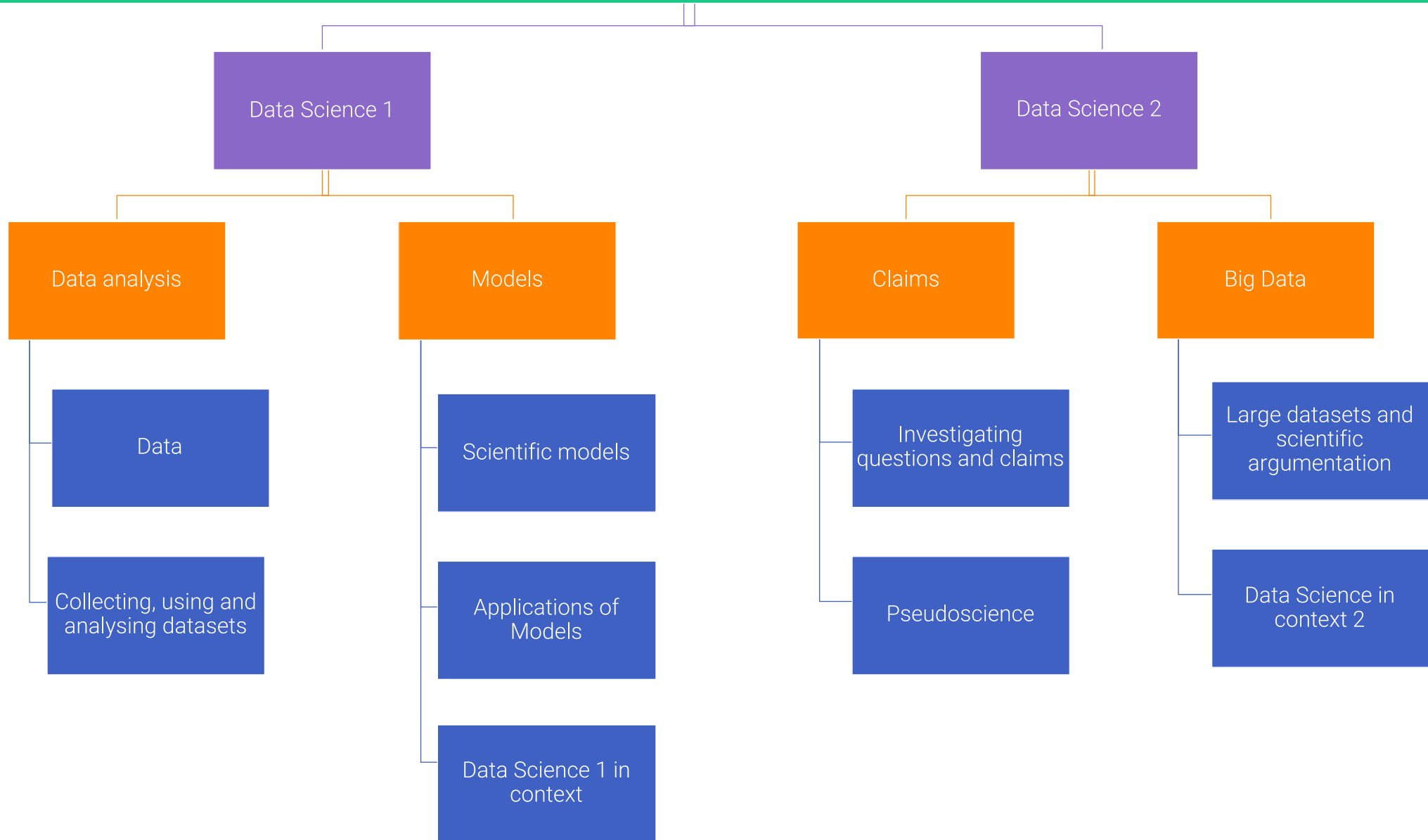
Waves and motion

Environmental  
sustainability

Data science 2

**Depth study**  
(from one or more focus areas)

# Data Science in the new 7-10 syllabus



# SciX Discovering Data Teacher Professional Development

- Building bridges
  - Collaboration
  - Iteration
  - Generative AI
- Course outline
  - Data Science: What? How? and also, Why?
  - Interactive Computer Labs
    - Visualising and analysing data
    - Data Modelling
    - Analysing Large Data Sets



# SciX Discovering Data

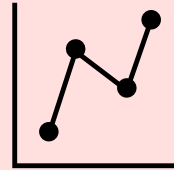


## Contexts

Authentic scientific contexts

(UNSW data sets)

(Graduate student mentors)



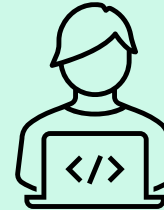
## Principles

Trends and patterns

Modelling

Predicting

Uncertainty



## Tools & techniques

Google Colab

No-code  
“Glass boxing”

GenAI prompts →  
python



## Resources

Classroom-ready notebooks or web-apps

(Under development)

# Outcomes and opportunities

## Building a Talent Pipeline

- Preparing students who will be future data scientists.

## Community Impact

- Knowledge translation to improve educational outcomes equitably.

## Amplifying Research

- Integrates UNSW datasets into classrooms, showcasing relevance.

## Stay abreast of changes

- Changes in school syllabus impact course readiness and student engagement

### Collaborate with us:

- Authentic datasets to showcase research
  - Simple univariate and bivariate relationships
  - Basic predictive models
  - "Data stories"

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# The SciX Discovery Program Core Team



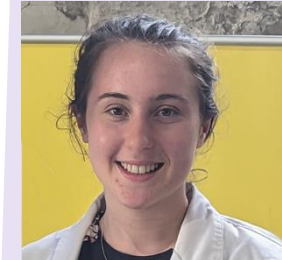
**Director**  
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Educational Developer



**Advisor (volunteer  
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