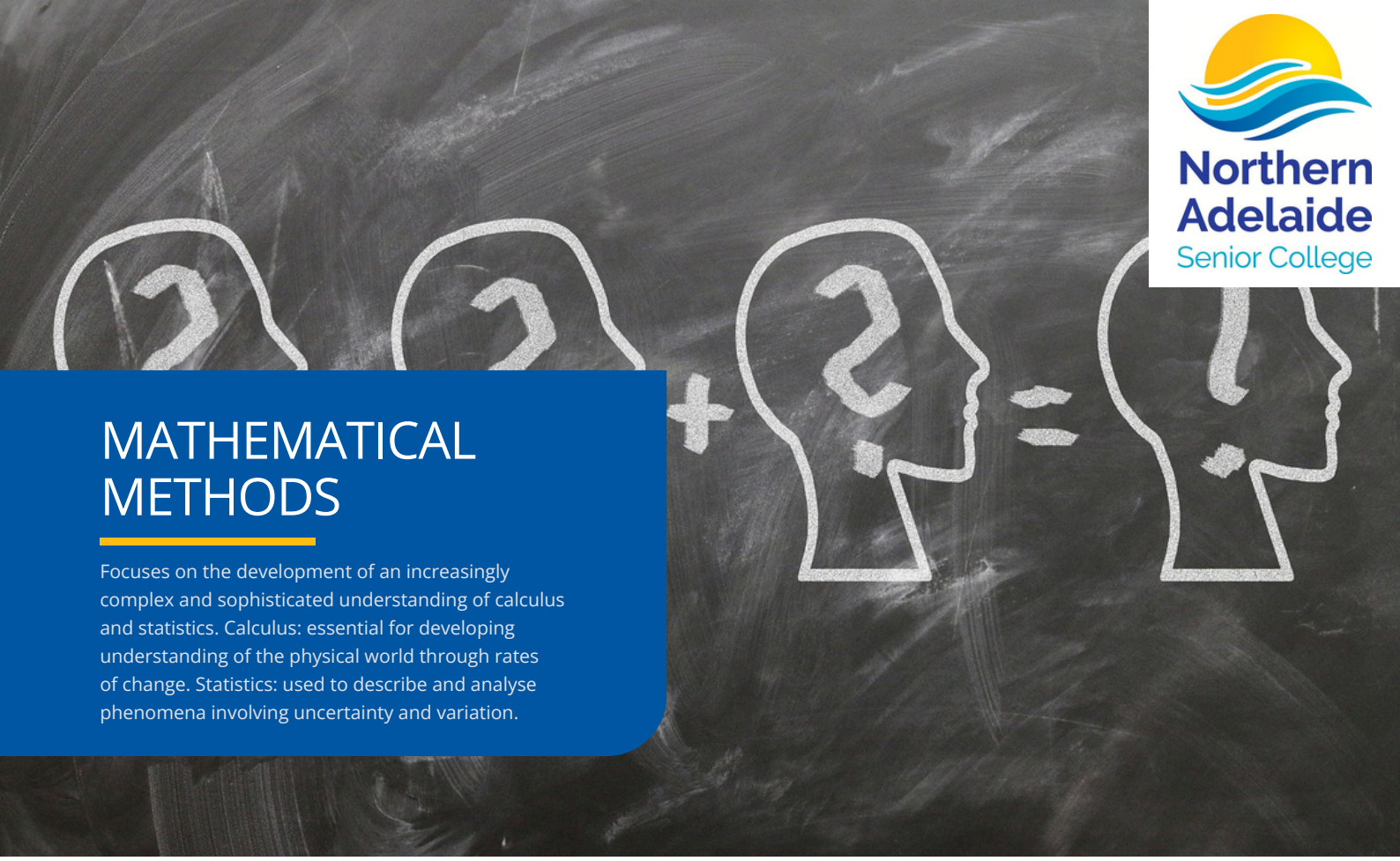

MATHEMATICAL METHODS

Focuses on the development of an increasingly complex and sophisticated understanding of calculus and statistics. Calculus: essential for developing understanding of the physical world through rates of change. Statistics: used to describe and analyse phenomena involving uncertainty and variation.

PREREQUISITES: FOR STAGE 2, B GRADE OR HIGHER IN AT LEAST 2 SEMESTERS OF STAGE 1 MATHEMATICS (NOT ESSENTIAL MATHEMATICS OR GENERAL MATHEMATICS)

WHAT WILL YOU LEARN?

01. Explore, describe, and explain aspects of the world around you mathematically.

02. Gain a conceptual grasp of calculus and use its techniques in applications.

03. Develop a basic understanding of how and why statistical decisions are made.

Transferable Skills

- Using a range of communication formats to express ideas
- logically and fluently
- Using mathematical skills
- Managing own learning
  Being prepared to invest time and effort in learning new skills

Assessment

Stage I	N/A
Stage II	50% Skills and Applications Tasks; 20% Mathematical Investigation; 30% Examination

VOCATIONAL PATHWAYS

- Certificate III in Engineering - Technical
- Certificate IV in Building Design Drafting
- Diploma of Electronics and Communications Engineering

TERTIARY PATHWAYS

- Bachelor of Engineering (Civil) (Honours)
- Bachelor of Teaching (Secondary) with Bachelor of
- Mathematical and Computer Sciences
  Bachelor of Medical Studies

CAREERS

- Engineer
- Astronomer
- Mathematician
- Medical Scientist
- Industrial Designer

① **SACE STAGE 1**
NOT AVAILABLE

② **SACE STAGE 2 | 20 CREDITS**
FULL YEAR

ATAR SUBJECT