

## **Sport Science Advancement**

Sport Science is a very broad topic that can be applied uniquely to different sports. These education sessions will take students through an interactive session where they will learn about each of the different areas of sport science and how they relate to elite athlete performance.

VIS experts will take the students through real-life athlete examples and give them exclusive insights into how athletes train, and how their performance in training and competition is closely monitored to ensure they reach their full potential.

VIS Sports Science Advancement sessions will extend students' understanding of basic sport science concepts to cover physiological, performance analysis and biomechanical principles and how they apply to human performance, energy systems and training programming.

The aim is to deliver age-appropriate content, specific to the health and physical education framework. Sessions will be targeted toward the Year 7/8, Year 9/10 and Year 11/12 curriculum and competency levels, with focus on the following areas:

- acute physiological responses to exercise in the cardiovascular, respiratory and muscular systems
- o performance enhancing practices from a physiological perspective heat and altitude training and how VIS athletes use the VIS climate chamber.
- o biomechanical principles for analysis of human movement.
- assessment of fitness including the purpose of fitness testing, aims, reliability & validity, standardised tests used for aerobic power, anaerobic capacity etc.
- performance analysis as it relates to live coding and its application to inform decision with regards to game tactics and opposition scouting.

Please note: There is a minimum of 5 students per session.

These 90-minute sessions are available for on-demand bookings at the following times:

MON: 10:30am and 12:30pm

WED: 12:30pm

FRI: 10:30am and 12:30pm

## **VICTORIAN INSTITUTE OF SPORT**

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