

Sport Science
Crucial Knowledge Glossary

Unit R046: Technology in Sport

Amputee – A person who has lost a limb

Analytical technology – Technology that allows performance and/or physiological measures within the body to be recorded and evaluated

Application (of technology) – How the technology is actually put to use

Aquatic therapy – Fluid environment that adjusts the pressure and resistance on an athlete to assist with recovery and rehabilitation

Blade – Artificial part of a limb made from carbon fibre

Carbon fibre – A composite material with high strength-to-weight ratio

Challenge decisions – Decisions in sport that can be challenged as part of the rules and regulations

Drag – The resistant force that water or air exerts against the body or equipment

Gait – How people run or walk

Game-play – The way in which the game is carried out or played

Hawk-eye – A laser reading technology that tracks the projected line of the ball; used in tennis and cricket

Hot-spot – Thermal imaging that records the balls point of impact in cricket

Hyperbaric chamber – Medical treatment in which you breathe pure oxygen inside a highly pressurised chamber; it accelerates the body's natural healing process from injury or disease

Ice therapy – Use of ice or freezing conditions to reduce pain and swelling and increase the removal of waste products after exercise

Level playing field – When conditions are the same for all competing

Marginal gains – Small, incremental improvements in any process

Mechanical assistance – The use of devices or equipment to guide and support a performer when performing a skill

Motion tracking software – Technology that tracks the movement and distance covered by the performer

Over-reliance on technology – When performers rely on technology to make up for a lack of skill

Performance – The standard to which the athlete or performer performs to

Protective clothing – Clothing designed to prevent injury in sport

Shock zone – Area of the foot that impacts with the ground whilst running

Simulators – Technology that allows you to simulate the real-world action and outcome of a sporting skill in an artificial environment

Social Media – Computer-based technologies that facilitate the creation and sharing of information and ideas via virtual communities and networks, for example Twitter, FaceBook and Instagram

Spectatorship – Those watching at the sporting event, at home or on the move

Stakeholders in sport – Athletes/performers, spectators, professional bodies

Technology – Putting scientific knowledge into practical use to solve problems or invent useful tools

Technology doping – The practice of gaining a competitive advantage using high-tech sports equipment

Television Match Official (TMO) – Technology based system in rugby allowing the on-field referee to review playback of an incident in order to come to the correct decision

Traditional nature of sport – The standard ways and rules that have been used in a sport for a number of years

Umpire decision review system (DRS) – Technology-based system used in cricket to review controversial decisions made by the on-field umpires as to whether or not a batsman had been dismissed

Video Assisted Referee (VAR) – Video based system used in football to review clear and obvious errors made by the on-field referee with the ability to reverse decisions