



high performance centre
sport, science, knowledge



The University of Pretoria's High Performance Centre (hpc) is Southern Africa's first elite performance sports facility. Launched in 2002 and having celebrated our 10th year in existence, the Centre is the training ground for tomorrow's sporting champions and the venue of choice for sports professionals and enthusiasts alike.

Boasting the delivery of 3 of the 6 medals won at the 2012 Olympic Games, with a Gold, Silver and Bronze through our Rowing 'Oarsome Foursome', Caster Semenya and Bridgitte Hartley, we are confident that we are preparing the up and coming medal winners for the 2016 Olympic Games.

To add to these medals we are also proud of the performances of our International athletes/friends who honed and polished their performances here at the hpc in preparation for the Olympics. We were party to 12 medals won by athletes of other countries who used the hpc as one of their training bases.

The hpc's unique combination of world-class training facilities, medical services, accommodation, nutritional and scientific expertise, research and hospitality has established its local and international reputation for excellence and success.

The hpc is situated on the LC de Villiers Sports Grounds. These facilities annually attract international athletes as well as local sporting bodies for training camps or specific team preparation. The hpc has become the preferred location for Team South Africa pre-departure camps, as well as the preferred centre of specialisation for a significant number of national federations.

Within the sporting environment this sporting initiative has been endorsed by several national federations who host their academies at the hpc. The hpc offers academy programmes for a number of sporting codes.

In addition, the TuksSport High School was created by the high performance centre (hpc) to provide high school learner athletes with a unique opportunity to live out their passion for sport in a distinctive sporting milieu. TuksSport High School distinguishes itself by offering quality education to South African and international high performance athletes, and does so within a flexible structure. The structure creates optimal training opportunities, without compromise to the academic development of the learners/athletes.

The hpc is a valuable asset, not only to the University, but also to all up and coming athletes who make use of our sport science support.

Sport Science and Medical Unit

Whether you are a professional sports person or just a fitness junky, we offer the following services to ensure that you get the most out of your training and performance.

Sport Science Testing

The hpc is a leader in sport specific physiological testing. Athletes are assessed according to the latest sport specific protocol in order to determine the current baseline for the player or team. This includes cardio-respiratory endurance, muscular endurance, speed, agility, explosive power, flexibility, body composition, VO2 Max and lactate testing. Feedback includes identification of strengths and weaknesses as well as advice on how to get the individual or team to perform at their peak.

Based on the testing results, our strength and conditioning specialists and sport scientists can assist with the following:

- Periodized strength and conditioning programmes
- Speed and agility training
- Rehabilitation
- Personalized and group training sessions
- Personalized training programmes

In addition, we offer the following:

- Bike setup, power, VO2 max and lactate testing
- Workshops on various topics
- Lectures for coaches and officials

For more information contact

Shona Hendricks: shona.hendricks@hpc.co.za or 012 362 9800

Strength and Conditioning

Our highly qualified strength and conditioning staff provide programming for individuals and groups to enhance athletic performance. Programmes are individualized using assessment results from Sport Scientists and/or biomechanicists to determine muscle imbalance, current strengths and weaknesses as well as the demands of the specific sport.

Our strength and conditioning team works in conjunction with the Biomechanics and Sport Science teams to ensure that a holistic approach is taken with each strength-and-conditioning programme.

For more information contact

Shona Hendricks: shona.hendricks@hpc.co.za or 012 362 9800



Biokinetics and Rehab

The word Biokinetics is taken from the Greek word “BIOS” which means “life” and “KINESIS” which means “movement”. In other words, it refers to the maintenance of quality of life through the use of physical activity.

A Biokineticist is a trained professional who specialises in final phase rehabilitation for a variety of conditions including but not limited to sport injuries.

Rehabilitation programmes are updated either weekly or monthly depending on the patient's condition with the end goal of doing functional or sport specific activities.

Biokinetics is not solely for rehabilitating those recovering from injury or surgery, there is also a big need for it with regards to rehabilitating people diseases caused by “lack of movement”, unhealthy diets, smoking and even stress. Examples of such diseases include high blood pressure, high cholesterol, heart disease, diabetes and obesity.



Individuals requiring treatment for any of the conditions previously mentioned can expect the following from a Biokinetics evaluation:

- Have a thorough medical history evaluation.
- Measurement of blood pressure and heart rate to assess the likelihood of possible health complications.
- Range of motion evaluation to assess flexibility. Poor flexibility can impair one's ability to perform certain activities (sport or normal tasks of daily living) properly.
- Assessment of body composition and waist to hip ratio. These can help determine one's risk for coronary heart disease.
- Measure muscular strength, endurance and power.
- A postural analysis to identify any deviation which have either lead to injury or will prevent a proper recovery.
- Assessments of the core stability, and the ability of "stabiliser muscles" to function properly.
- Cholesterol and glucose test can be conducted if deemed necessary.
- In addition, specialised tests may be requested which include; electrocardiograms (ECG), Biodex (both used for balance or muscle strength), and similarly the Cybex (for muscle strength)

For more information contact:

Menzi Ngcobo: menzi.ngcobo@hpc.co.za or 012 362 9850



Biomechanics and Performance Analysis

The Biomechanics & Performance Analysis team at the hpc uses video technology and Dartfish analysis software to record and assess all aspects of your performance, placing powerful analysis tools and knowledge at the fingertips of coaches, athletes, students, teachers, physiotherapists and trainers. Whether you're concerned with injury prevention, enhancing your technique, or achieving the optimal competitive strategy in individual or team sports, we can provide you with analysis and information that is based on scientific evidence and elite sports practice.

Services offered by the Biomechanics & Performance Analysis Department:

- **Functional Movement Screen:** Before focusing on your performance goals, such as strength, speed, power or technical skill, you should make sure that you have the necessary movement foundation. Through a series of fundamental movement tests, any weak links that may limit your performance and increase your risk of injury are identified. These results provide essential information to coaches and conditioning trainers, and are especially valuable for individuals who are beginning a new training regime or have been struggling with injury problems.
- **Sport-Specific Technique Analysis:** Video analysis of your technique is tailored to the requirements of your sport. Whether you require underwater filming of your swimming technique, or high speed video analysis of your bowling action, we will aim to provide you with information that is relevant and practical.



You will receive a report containing both qualitative and quantitative results, in conjunction with your video footage.

- **Gait Analysis:** Slow motion filming of your walking and running gait is used to analyse lower limb mechanics. This information can be used to inform your strength training programme and running shoe choices. Beginners, experienced “weekend warriors” and elite distance runners have all benefitted from learning about their individual gait mechanics.
- **Performance Analysis:** In team sports, analysis of filmed match content reveals trends and statistics that help coaches assess their team’s performance, develop optimal strategies, and understand their opposition’s strengths and weaknesses. In individual racing events, such as in swimming and track & field, races can be broken down into appropriate splits to help improve pacing strategies and identify phases of the race where an athlete is losing time.

For more information contact:

Dr Helen Bayne, PhD: helen.bayne@hpc.co.za

Amy Bathgate: amy.bathgate@hpc.co.za

Ernest Hobbs: ernest.hobbs@hpc.co.za or 012 362 9800

Sports physiotherapy

The physiotherapy team at the high performance centre consists of four qualified physiotherapists and a full time masseuse and stretch therapist.

The team:

Andri Smuts (head physiotherapist), Corli van der Watt (physiotherapist), Garreth Bruni (physiotherapist), Jaco Swart (physiotherapist), JP du Plessis (massage and stretch therapist)

This busy clinic looks after national and international sportsmen and women, recreational athletes, the diplomatic corps of Pretoria, Ministers and Deputy Ministers, but most of all the general public with any type of injury. The physiotherapy team is very experienced and represent South Africa at various provincial, national and world sport events both locally and internationally as the team physiotherapist. Regular congresses, courses and updates are attended by the whole team to comply with the HPCSA registration requirements and continued education concepts.

Individual members of the team also lecture part-time and run a busy practical student clinic where 3rd and 4th year physiotherapy students can obtain firsthand experience in the treatment of various injuries and conditions. These students treat the general public and injured students at a lower costs to make the service of good physiotherapy more accessible to everyone. Booking is essential (see contact details below).



Services offered:

- Pre-season functional movement assessment (to diagnose possible muscle imbalances and to correct them)
- Spinal mobilization and manipulations (back and neck conditions and injuries)
- Peripheral joint mobilizations and treatments (hip, knee, shoulder, ankle, elbow, wrist and finger injuries)
- Treatment and diagnosis of soft tissue injuries such as muscle tears, tendinopathies and ligament injuries
- Lymo method (myofascial techniques)
- Pre and post surgery rehabilitation
- Exercise prescriptions for various conditions e.g., scoliosis
- People with disabilities (we offer easy disability access)
- Pilates and yoga individual rehabilitation
- Headaches and temporomandibular problems
- Electro therapy: ultrasound, laser, interferential, tens, shockwave
- Hydrotherapy
- Massage
- Stretch therapy

For more information contact:

Andri Smuts: andri.smuts@hpc.co.za or 012 362-9850, 083 271 4524

Student clinic: 012 420-6085

Sports Medicine

The Sport Science and Medical Unit is the proud home of a distinguished team of sports physicians, led by Dr Christa Janse van Rensburg. The experience gained from working with provincial, national, international and Olympic athletes and teams make these doctors extremely valuable in the preparation and management of both high performance and recreational athletes. The resident sports physicians work closely with a multi-disciplinary team in order to ensure efficient and optimised management of all exercise related conditions.

Services offered include:

- Medical screening which comprises of a general medical assessment, a musculoskeletal assessment and a sport specific assessment
- Sports medical consultations and injury management
- General medicine consultations
- Corporate screening which includes general medical assessment, ECG, blood tests, lung function tests and anthropometry.
- Muskuloskeletal sonar
- Platelet therapy
- Shock wave therapy
- Blood tests

Our sports physicians also give sports medicine related lectures for coaches, managers, athletes and corporate clients.

Topics include, but are not limited to:

- Concussion in sport
- Doping and drug free sport
- Sports injuries
- Injury prevention
- Corporate Wellness. These lectures cover a range of topics depending on what is requested by the client. Discussions can include optimizing health in the work place, cardiovascular illness and exercise, relationship between sleep, exercise and productivity in the workplace, to name but a few.

For more information contact:

Prof Christa Janse van Rensburg, Dr Org Strauss and
Dr Arnold Human: info@hpc.co.za or 012 362 9850

Nutrition / Dietetics

(Part of the Discovery Vitality Wellness Network and Bestmed Wellness Network)

The goal of nutritional services is to equip athletes with the necessary information to make sound dietary decisions that maximise their physical output. A healthy diet, tailored to the needs of an individual athlete, may improve concentration, lead to faster recovery time in between training sessions, and support optimal body composition.

For more information contact:

Nicki de Villiers: nicki.devilliers@hpc.co.za or

Ursula Botha: ursula.botha@hpc.co.za or 012 362 9850



Sports Psychology

The psychology services offered by our psychologists address a wide array of psychological aspects with the aim of assisting athletes, parents, coaches and management staff. Services are based on and offered according to a healthy blend of academic research as well as the experience of our staff. Sessions can be conducted on individual and / or group bases depending on the needs of the client and the nature of the service offered.

The sport psychology services include:

- **Performance Development**
 - **On field performance development:** our sport specific performance development programmes at the hpc are influenced by two major sport psychology approaches – The Mindfulness-Acceptance-Commitment (MAC) approach and the Psychological Skills Training (PST) approach.



- **Off the field performance development:** our life skills programme, especially aimed at adolescents and young adults, aims to help individuals function optimally in the following areas: health, organisational skills, emotional development, professional conduct, education, and communication.
- **Team performance development:** team performance development addresses team building, team dynamics, problem solving and personal growth within a team. A low ropes course and other team building programmes are used to address team aspects.
- **Sport Counselling Services:** sport counselling services aim to explore how personal issues affect athletes in their personal and professional lives.
- **Psychological Assessments:** this service helps identify and classify performance related aspects and includes:
 - **Shadowmatch assessment:** a behavioural assessment that aims to identify performance related habits of an individual or team, and offers the option of comparing individuals to the best performers in their specific environment.
 - **Psychometric assessment:** various assessments help provide a psychological profile of athletes, parents, or coaches, and allow for a better understanding of individuals, their relationships, and their functioning within a team.
 - **Career assessment:** a career assessment package that aids in subject choice, study options or career planning.

For more information contact:

Monja Human: monja.human@hpc.co.za

Maurice Aronstam: maurice.aronstam@hpc.co.za

Theo Bezuidenhout: theo.bezuidenhout@hpc.co.za

Rozanne Maré: rozanne.mare@hpc.co.za or 012 362 9850

Sportscience Gym

The Sportscience gym is the Strength and Conditioning facility for the academy programme at the hpc. Here the Biokineticists and Strength and Conditioning specialists train our academy athletes looking to improve their structural and functional strength and sport specific power. The cardiovascular conditioning programmes are performed on our treadmills, arm ergometers, cycle ergometers, rowing ergometers and spinning bikes.

We offer state of the art equipment. This includes the:

- Technogym® Key System - providing you with your own personal training assistant and enabling you to monitor your results on a daily basis.
- Hammer Strength Machines – providing a Sport Specific and Functional training alternative for the elite or developmental athlete
- Olympic Lifting Platform – for functional, sport specific weight lifting activities
- Spinning bikes, Swiss balls and much more.

We offer personalised training programmes, to our general clients, according to your assessment results. These health-risk assessments include assessing the following:

- Body Composition
- Body Mass Index
- Flexibility
- Muscular Strength
- Blood Pressure
- Blood Glucose
- Cholesterol
- Submaximal VO2

Our staff is highly qualified and trained and includes Strength and Conditioning specialists, Biokineticist and Fitness Consultants. These individuals are on the floor throughout the day providing guidance and assistance to our members. Come train in an environment catering for all your health needs.

For more information contact:

Themba Madima: themba.madima@hpc.co.za



Conferencing

The hpc conference centre offers two state-of-the-art conference venues and a meeting room that can accommodate various seating styles and delegations. Whether you require an intimate atmosphere or an expansive conference setup, our packages are tailor-made to meet your specific needs and budgets.

Conference venues:

Auditorium	Legacy Room	Nashua Rowing Room
<ul style="list-style-type: none"> • Seats 51 delegates in cinema style • Built in tables • Fully air-conditioned • LCD projector • Big screen • Video machine • DVD player • Audio equipment • Flipchart • Overhead projector (on request) • White board with markers 	<ul style="list-style-type: none"> • Seats 30 delegates in U-shape • Seats 60 delegates in cinema & schoolroom style • Seats 35 delegates in boardroom style • Fully air-conditioned • LCD projector • White board with markers • Video machine • DVD player • Audio equipment • Flipchart • Overhead projector (on request) • PA system 	<ul style="list-style-type: none"> • Seats 12 delegates in boardroom style • Conference table (12 pax max) • Fully air-conditioned • LCD projector • White board with markers • Video machine • DVD player • Audio equipment • Flipchart • Overhead projector (on request)



Conference Package Options:

• Breakfast Package (07:00 – 12:00)	• Half-Day Package (07:00 – 14:00)	• Full-Day Package (07:00 – 17:00)
Includes: <ul style="list-style-type: none">• Venue hire• Audio visual equipment• Breakfast• Mid-morning tea/coffee with sandwich platter• Mineral water and mints• A5 notepads and pens	Includes: <ul style="list-style-type: none">• Venue hire• Audio visual equipment• Tea/coffee on arrival with either a platter of muffins, croissants, fruit kebabs, or rusks• Mid-morning tea/coffee with a sandwich platter• Lunch• Mineral water and mints• A5 notepads and pens	Includes: <ul style="list-style-type: none">• Venue hire• Audio visual equipment• Tea/coffee on arrival with either a platter of muffins, croissants, fruit kebabs, or rusks• Mid-morning tea/coffee with a sandwich platter• Lunch• Afternoon tea and biscuits• Mineral water and mints• A5 notepads and pens

For more information or bookings please contact banqueting@hpc.co.za or 012 362 9800

Banqueting and Functions

The hpc Banqueting and Events division provides a variety of services. Whether you are hosting corporate functions, meetings, end of the year parties, private parties, cocktail parties, casual braais or spitbraais, we can create an atmosphere to suit your event.

Should you prefer to host a function at your own business/house we can provide you with customised platters, finger foods or warm meals which can be delivered directly to your doorstep, with or without waiters. We are able to cater to your specific dietary needs as all our food is prepared by our fully licensed Time Out Café.

For more information or bookings please contact: banqueting@hpc.co.za or 012 362 9800



Accommodation

The hpc hotel provides the ideal opportunity for business persons to break away from their day-to-day corporate surroundings and experience a relaxed sporting environment. Individuals or couples can enjoy 3-star accommodation with a spectacular view of the University of Pretoria's sporting fields. Our 4-star team/group accommodation sleeps a maximum of 4 people per room and is perfect for sport training camps or large group accommodation.

Visitors stay in the plush of comfort while having access to the hpc's full range of services and facilities. These include:

- Tailor-made hotel packages
- En-suite bathrooms with showers
- Fully air-conditioned bedrooms
- Tea and coffee making facilities
- Flat screen TVs
- Safes
- Use of the sport science gym and 25m heated swimming pool
- Conferencing facilities
- Transportation (on request)
- Prepaid WIFI vouchers for guests
- Access to 24 hour secure parking on the premises
- Laundry & dry cleaning (we offer same-day laundry and dry cleaning services from Monday to Saturday)
- Universal adaptors (available on request)
- Wake-up calls

Check in time: 14:00, Check out time: 10:00

For more information, quotations or bookings please contact:

Emile Smith: emile.smith@hpc.co.za

Julie O'Donoghue: julie.o'donoghue@hpc.co.za or 012 362 9800





Sales

The hpc is ideal for team training camps and also for specific individual training. Here, athletes and managers/coaches can be accommodated while training or competing at the same venue.

Every aspect of your stay – from accommodation, meals, gym and the use of facilities – can be tailor-made to meet your requirements. The following facilities are at the disposal of our guests: a 25m & 50m pool, an athletics track, netball and basketball courts, football fields, grass fields and synthetic surface (astro) for hockey, cricket fields and rugby fields.

At an additional cost teams may make use of the hpc transport facilities to transport them to and from the airport or for sightseeing.

For more information, quotations or bookings please contact:

Emile Smith: emile.smith@hpc.co.za

Julie O'Donoghue: julie.o'donoghue@hpc.co.za or 012 362 9800





Time Out Café

Guests and athletes can refuel at The Time Out Café and Restaurant. Situated at the High Performance Centre (hpc) and open to the public, it caters for guests in a healthy, exciting and nutritious way. Menus are determined in conjunction with a nutritionist for the benefit of the active clientele.

The restaurant offers a wide variety of sumptuously healthy foods and clients have a choice between buffet or à la carte menus. The Time Out Café is open seven days a week, from 06:30 to 22:00, and offers an exciting experience in a unique sporting environment. Guests are spoilt with a spectacular view that overlooks five rugby fields. The indoor area seats 50 people, while an outdoor patio with a mesmerizing view of the sports grounds and swimming pool can seat a further 50-80 people. We also offer 24-hour televised sports coverage, corporate functions and media launches.

For more information or bookings please contact :
Linda Tyrrell: (012) 362-9800 or linda.tyrrell@hpc.co.za



TuksSport High School

TuksSport High School offers learner athletes a unique opportunity to live out their passion for sport in a distinctive sporting milieu created by the High Performance Centre (hpc). The sports campus of the University is home to the sporting and accommodation facilities of the hpc, while the school itself is situated on the Groenkloof Campus. Learners are transported from the hpc to school by bus.

What makes us different?

TuksSport High School distinguishes itself by offering quality education to South African and international high performance athletes, and does so within a flexible structure. This structure creates optimal training opportunities without compromise to the academic development of the learners/athletes.

TuksSport learners

- have training sessions before and after school and can therefore maximize their learning time during the day
- attend school from 9:15 to 15:05
- receive personalised tuition and attention (class sizes vary according to subject choice, but do not exceed a 1-27 teacher-learner ratio)
- attend scheduled extra classes to make up for school missed as a result of sporting commitments
- may enjoy hpc lunches in the school canteen (provided they made the necessary bookings)

Curriculum

The school aims to equip learners with knowledge and skills which will not only prepare them for their roles as future sports personalities, but also for their chosen career paths beyond sport. To realise this, the National Curriculum as offered by the Gauteng Department of Education, is offered to learners from Gr 8 – 12, thereby ensuring that the learners not only meet the basic requirements for a Senior National Certificate (as minimum), but also attain university exemption should they wish to pursue a tertiary academic career.

The following FET subjects are offered:

Core Subjects:

English (Home Language), Afrikaans (First Additional Language), IsiZulu (First Additional Language), Mathematics, Mathematical Literacy and Life Orientation

Electives:

Physical Science, Life Science, Geography, Accounting, Business Studies, CAT and Tourism

Identity

The fashionable yet sporty school uniform worn by the learners of TuksSport High School is reflective of the lifestyle and milieu of boys and girls who are serious about sport, and who live out the motto of the school 'The will to do, the heart to win'.

Why choose TuksSport High?

- Small classes
- Good teaching
- Regular feedback to parents
- A disciplined environment
- Hostel facilities in a safe and caring environment
- Coaching expertise
- Sport Science Fundamentals (Sport Psychology, Nutrition, Sports Medicine, etc.)

All within a localised sports-friendly environment.

For more information please contact:

TuksSport High School

Phone: +27 12 343 4501/ 27 Fax: 086 636 4019 or 086 582 3749

Email: di.reid-ross@hpc.co.za Website Address: www.hpc.co.za



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