

# **SPORTS SCIENCE : THE SUBJECT WE CAN NOT AFFORD TO SKIP**

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## **ABSTRACT**

Sports Science is an exceptionally wide field of scholastics which is gradually becoming a force to be reckoned with in India and abroad. This educational plan can cause a games devotee to grasp the ambit of the course, its applications lastly pick any of the various ways that lead to additional specialization. In a nation where youth becomes energetic about cricket as well as numerous different games and getting valued decorations from worldwide games contest, a subject like this needs to approach for good nature of sports and wellness. Sport science has typically been perceived by coaches over the years as being difficult to understand, overly complex, or frequently not applicable to the actual sport environment. With the increased attention being paid to injury prevention, improving performance at younger levels of competition, and the significant time and financial commitment being made to training and conditioning, adopting a more comprehensive approach through science gives the coach and the athlete greater control, preparation, accountability, and, most importantly, measurable progress.

**Keywords:***Sports Science, injury prevention, athletic testing , coaching education, measurement*

## **INTRODUCTION**

The study of sport science is a multidisciplinary area devoted to improving human performance. It covers the information, techniques, and applications of the various subfields of human movement studies, such as exercise physiology, biomechanics, motor control and motor development, exercise psychology, and sport psychology, as well as how these fields interact. Sports scientists are qualified professionals that help athletes perform at their best on the field. They review coaching, training, competition, and rehabilitation methods at all levels and in all sports through evaluation, research, assessment, and advice. Teams and individual athletes will collaborate with a sports scientist to give scientific support as they get ready for competition. Information, technical support, and practical assistance with training, injury prevention, technique analysis, nutrition, performance optimization, and assistance with psychological concerns can all fall under this category (such as motivation, stress and arousal, and coping strategies). A sport scientist might, for instance, create a training regimen to boost a cyclist's speed or a swimmer's

power off the blocks. Sports science is the study of science as it relates to athletics. In order to prepare athletes as best as possible for competitions and events, this topic is focused on maximising performance and endurance while lowering injury risks. In order to tailor any training programme for everyone, from athletes to the elderly to everyone in between, it is utilised to help identify the shortcomings and strengths of individuals. Students that study sports science are referred to as sports scientists, and they make sure that players are informed on their most recent tests, preparation, and training regimens.

### **Sports science Areas covered include:**

- Sport specific testing
- Movement screenings
- Injury prevention and corrective exercise prescription
- Strength and conditioning
- Program design and monitoring

### **Sports science benefits sports performance**

Sports today are no longer what they used to be years and years sooner. The entire methodology towards a game has changed definitely throughout the long term. Allow us to check out at India's number one game, cricket. With the sort of ability expanding the nation over, contest levels have gone up and it has unquestionably assisted with increasing the expectation of the game. The greatest wearing event in the country, the Indian Premier League is one of the most outstanding instances of the change of cricket somewhat recently. Gets are being culled out of nowhere and, surprisingly, 100m sixes are being hit for no particular reason. This was unfathomable during the 90s and the competitors are propelling themselves hard to draw out the best in them. What's more, same difference either way. With such a huge amount in question, it has turned into the absolute minimum to remain pertinent. This is where sports science comes into the image. Sports Science is the investigation of how the sound human body functions during activity, and how sport and actual work can assist with advancing wellbeing truly, intellectually, and socially. It is, in addition to other things, the investigation of how a specific body type responds to a specific activity system and how to rescue the best once again from a specific competitor. While ability is most certainly a thing, be that as it may, sports science has developed throughout the long term and has assisted numerous with bettering their game - from novices to truly incredible. With the improvement of clinical science throughout the long term, we have a superior comprehension of the human body and its capacities. Each human body is unique and sports science can arrange particular wellness preparing conventions to achieve extreme execution and forestall wounds. Certain qualities could make you more receptive to specific kinds of exercises, and an educated mentor alongside a hereditary instructor can prove to be useful to direct one through the interaction. The manner in which one's body works is constrained by qualities as well as preparing, climate, and diet and having an exhaustive information

careful information is of most extreme significance. Competitors who keep an equilibrium and take on the right methodology are the ones who end up being super competitors.

## **1 Stretching**

Your muscles should be extended when an exercise to assist with forestalling wounds. To be compelling extending should be done accurately. Inadequate extending can really cause harm and not be satisfactory for your exercise.

## **2 Warming Up and Cooling Down**

Heating up readies your body for practice and actual preparation. A warm-up relaxes your joints and muscles while gradually expanding your pulse. It is similarly as critical to Cool down. It cuts your pulse down leisurely.

## **3 Proper Training**

Having a legitimate preparation system in light of your physiology and execution objectives will help in forestalling injury. Have a Private Exercise Consultation to assist you with deciding the most effective way to work on your exhibition in your picked game or exercise.

## **4 Build Your Workout Gradually**

Forestall wounds by beginning gradually and steadily assemble term and power. Having VO<sub>2</sub> Max and edge testing performed will help you decide and execute your preparation levels.

## **5 Vary Your Workout**

Utilizing similar muscles again and again can prompt abuse and injury. Switch things up so you're not rehashing a similar development consistently.

## **6 Proper Nutrition**

Sustenance is important for an effective exercise. Our advisors can converse with you about the appropriate sustenance for your exercise, your objectives and your physiology.

## **7 Sufficient Recovery**

Recuperation is urgent in forestalling injury. Inadequate recuperation can prompt debilitated execution and injury. Converse with one of our activity physiologists about recuperation for your singular necessities.

## **8 Psychological Recovery**

Mental recuperation methods, for example, back rub, spas and hot showers can help your emotional wellness. Emotional wellness assumes a major part in recuperation and it's essential to guarantee you're having an extraordinary outlook on your exercises, not fearing them as this can prompt weakness and injury

## 9 Pay Attention to Your Body

The "no aggravation, no addition" hypothesis is inaccurate. Continuously pay attention to your body. Assuming you are feeling torment you could be causing avoidable harm. While starting another gym routine daily practice, it is ordinary to feel gentle uneasiness, so it is critical to realize what is typical agony and what isn't

## .List of Sports Science Courses in India

Sports science is gaining immense importance in India. Thus, you will find various courses at the bachelor, diploma, and postgraduate levels.

<b>UG Courses</b>	<ul style="list-style-type: none"><li>• B.Sc in Sport and Recreation Management</li><li>• B.Sc (Honors) in Sports Science</li><li>• B.Sc in Exercise and Sport Science</li></ul>
<b>PG Courses</b>	<ul style="list-style-type: none"><li>• Master of Science in Sports Science</li><li>• Master of Science in Exercise Science</li><li>• M. Phil in Sports Science</li><li>• MSc Sports Coaching</li></ul>
<b>Diploma Courses</b>	<ul style="list-style-type: none"><li>• Diploma in Sports Science and Nutrition</li><li>• Post Graduate Diploma in Sports Medicine</li><li>• Post Graduate Diploma in Sports Psychology</li><li>• PG Diploma in Sports Science and Nutrition</li></ul>

## Career in Sports Science

Once you have your degree level qualifications, there are numerous sports science jobs you can pursue. Depending on your interests, you could align yourself with roles that work with athletes, children or the general public in either public, private and not-for-profit sectors.

With a sports science degree you could secure work as a:

- Fitness Centre Manager
- Personal Trainer
- Sports Administrator
- Sports Development Officer
- Sports Therapist

With postgraduate qualifications, you could secure sport and exercise science jobs such as an:

- Dietitian/Nutritionist
- Exercise Physiologist
- PE Teacher
- Sports Coach
- Sports Science Researcher
- Strength and Conditioning Specialist
- Spinal Therapist

### **Top Sports Science Courses Colleges**

There are several private and government colleges that offer a degree in sports science. Also, these colleges are available all over India so you can choose the relevant college according to your choice. Some of these top government colleges for the B.Sc Sports Sciences are available here:

- Bharathiar University
- Amity University, Noida
- Vinayaka Missions University
- NetajiSubhash National Institute of Sports
- Lakshmi Bai National College of Physical Education, Thiruvananthapuram
- Indira Gandhi Institute Sports Sciences and Exercise.
- University of Calcutta
- University of Madras
- Osmania University
- University of Mysore
- College of Physical Education Pune
- SGSU, Gujarat
- Indira Gandhi Institute of Sports Sciences.
- IISM, Mumbai
- Amity School of Physical Education And Sports
- BPCA's College Of Physical Education, Mumbai
- Lakshmi Bai National College of Physical Education, Gwalior
- SCEPE, Meerut
- LPU Lovely Professional University, Jalandhar

- National Institute of Sports Patiala
- DAV College , Jalandhar

## CONCLUSION

Sport Science and the disciplines that are covered under its spread is some way or another a piece dubious in India. A ton of mindfulness needs to come up to cause individuals to energize and seek after a course in Sports Science. The game science vocation makes certain to come up amazingly. Be ready to get an eyebrows up response to the answer "I concentrate on Sports Science", however It will be an exceptionally remunerating profession abroad, and in India now in many institutes serious about future of Sports Science . Sports Science' covers an expansive scope of fields including human physiology, brain research and biomechanics, and their relationship to sports execution, wellbeing and prosperity. Courses in life systems and physiology expect to foster information and comprehension of the essential design and capability of the human body and to talk about how this information can be utilized to further develop wellbeing or potentially execution. Moreover, natural physiology offers the chance to examine the cutoff points to human execution and endurance

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