

5.5 EXERCISE AND SPORTS SCIENCE

Introduction

The objective of this programme is to produce graduates who are academically sound and able to function as the experts in the field of exercise and sports science relevant to the requirement of the public and private sectors of the industry. It also takes into cognisance the incorporation and assistance to be physically active in order to achieve the national aspiration of creating healthy citizens.

Students undergoing this programme are expected to acquire a high level of academic competency and knowledge that is at par with graduates of similar institutions within and outside the country. The uniqueness of this programme is that it allows the graduates to be flexible and capable of continued development in their specific career. This is based on the curriculum design that is aimed at strengthening the knowledge of exercise and sports sciences while at the same time expose students to health and sporting events relevant to the field.

List of Core Courses of the Exercise and Sports Science Programme

No.	Course Code	Title of Core Courses in the Exercise and Sports Science Programme	Unit
1.	GTU101/3	Structure and Function of Humans I	3
2.	GTU103/3	Fundamentals of Health Informatics	3
3.	GTU104/3	Structure and Function of Humans II	3
4.	GTU105/3	Psychology and Behavioral Science	3
5.	GTU106/3	Biochemistry and Basic Genetics	3
6.	GTS101/2	Introduction to Exercise and Sports Science	2
7.	GTS102/3	Sociology and Philosophy of Sports	3
8.	GTS201/3	Exercise Physiology	3
9.	GTS205/3	Sports Psychology	3
10.	GTS206/3	Sports Training Methodology	3
11.	GTS208/3	Kinanthropometry, Tests & Measurements for Sports Science	3
12.	GTN213/4	Principles of Nutrition	4
13.	GTS308/2	Applied Sports Physiology	2
14.	GTS311/3	Sports Nutrition	3
15.	GTS312/3	Sports Injuries and Rehabilitation	3
16.	GTS313/3	Sports Biomechanics and Kinesiology	3
17.	GTS302/2	Motor Learning	2
18.	GTS315/3	Coaching Science and Performance Analysis	3
19.	GTS316/3	Adapted Physical Activity	3
20.	GTS317/3	Sports Management	3
21.	GTS401/3	Fitness Testing and Exercise Prescription	3

No.	Course Code	Title of Core Courses in the Exercise and Sports Science Programme	Unit
22.	GTS409/10	Research Project	10
23.	GTS410/3	Contemporary Issues in Sports Science Practices	3
24.	GTS411/6	Industrial Training	6
Total Unit of Core Courses			80

Programme Learning Outcomes

At the end of the programme, the graduates will be able to:

- PO1: Possess comprehensive knowledge with a strong foundation in exercise and sports physiology.
- PO2: Proficiently identify and apply the appropriate tests and technical analysis in exercise and sports science.
- PO3: Demonstrate analytical thinking, application of knowledge and problem-solving in research laboratories and at the actual playing field.
- PO4: Display professional communication skills for accurate information dissemination.
- PO5: Provide professional services to aid optimum health and fitness for the community.
- PO6: Demonstrate responsibility, accountability and portray professional ethics and noble values.
- PO7: Apply continuous learning and exploration of new knowledge in line with the latest development.
- PO8: Incorporate management and entrepreneurship skills that will branch out as other career options related to the field.
- PO9: Display leadership and team management skills in taking charge of group tasks and in community.

Recommended Registration Guidelines for the Core Courses of the Exercise and Sports Science Programme

Code	Core Courses	Unit	Code	Core Courses	Unit
Year 1 Semester I			Year 1 Semester II		
GTU101/3	Structure and Function of Humans I	3	GTU104/3	Structure and Function of Humans II	3
GTU103/3	Fundamentals of Health Informatics	3	GTU105/3	Psychology and Behavioural Science	3
GTU106/3	Biochemistry and Basic Genetics	3	GTS102/3	Sociology and Philosophy of Sports	3
GTS101/2	Introduction to Exercise and Sports Science	2			
		11			9

Code	Core Courses	Unit	Code	Core Courses	Unit
Year 2 Semester I			Year 2 Semester II		
GTS201/3	Exercise Physiology	3	GTS206/3	Sports Training Methodology	3
GTS205/3	Sports Psychology	3	GTN213/4	Principle of Nutrition	4
GTS202/2*	First Aid and CPR	2	GTS208/3	Kinanthropometry, Tests and Measurements for Sports Science	3
GTU202/3*	Health and Society	3	GTS207/3*	Individual and Team Sports (Badminton, Volleyball & Soccer)	3
GTB224/3*	Immunology I	3			
		14			13

*Compulsory elective courses for Exercise and Sports Science students

Recommended Registration Guidelines for the Core Courses of the Exercise and Sports Science Programme

Code	Core Courses	Unit	Code	Core Courses	Unit
Year 3 Semester 1			Year 3 Semester II		
GTS312/3	Sports Injuries and Rehabilitation	3	GTS308/2	Applied Sports Physiology	2
GTS313/3	Sports Biomechanics and Kinesiology	3	GTS311/3	Sports Nutrition	3
GTS302/2	Motor Learning	2	GTS315/3	Coaching Science and Performance Analysis	3
GTU301/3*	Ethics and Law for the Health Professionals	3	GTS316/3	Adapted Physical Activity	3
GTU304/3*	Research Methodology	3	GTS317/3	Sports Management	3
			GTS314/3*	Physical Activity Growth and Development	3
GTU302/3*	Biostatistics	3			
		17			17

Code	Core Courses	Unit	Code	Core Courses	Unit
Year 4 Semester 1			Year 4 Semester II		
GTS401/3	Fitness Testing and Exercise Prescription	3	GTS409/10	Research Project	5
GTS409/10	Research Project	5	GTS411/6	Industrial Training	6
GTS410/2	Contemporary Issues in Sports Science Practices	3			
GTS407/3*	Therapeutic Exercises	3			
		14			11

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