



# Pearson BTEC Level 4 HNC Diploma

**Sport and Exercise Sciences (QCF)**



International Sports Academy (S) Pte Ltd  
A: 1 Stadium Place, #01-11 Singapore 397628  
T: (65) 64230668 E: info@isa.edu.sg  
W: www.isa.edu.sg  
RCB No: 200305869C Exp: 13 July 2014 – 12 July 2018





# Pearson BTEC Level 4 HNC Diploma Sport and Exercise Sciences (QCF)

## DESCRIPTION

Sports and exercise scientists help athletes and sports people improve their performance and general health. They use scientific knowledge on how the human body works, moves and how people think about physical activity to help people get better at what they do.

This qualification will give you a good understanding and knowledge of the sports and active leisure sector as well as developing the essential skills required for employment or progression to further qualifications and training.

This course is the equivalent to the 1st year of a University Degree and is designed for students who wish to gain sports qualification to further their career aspirations in the sports and leisure industries, or prepare them for further training or higher education.

## ACCREDITATION

This course has been accredited by Pearson, Edexcel, based in UK.

In the UK, Edexcel qualifications are suitable for a wide range of learners aged from 14 to 19. International schools can also offer the Edexcel Primary and Lower Secondary Curricula, so learners range from 8 to 19 years old.

## What is Edexcel / BTEC?

Edexcel is a qualification brand for academic and generation qualifications from Pearson. Designed to advance learners' skills while developing knowledge, Edexcel's qualifications help learners either progress to higher education or go directly into employment. They are grounded in the quality and traditions of the British education system made relevant for today's UK and international learners.

BTEC stands for 'Business and Technology Education Council', named after the body which first governed the qualifications (it's now Edexcel). BTECs are gaining popularity as an alternative to A-Levels, but they actually cover a whole range of academic levels. BTECs at levels 1 and 2 are equivalent to GCSEs, level 3 to A-Levels, and levels 4 -7 hold the same status of achievement as a degree.

One of the main differences between BTECs and A-Levels is the way both are assessed. A-Levels mainly involve two years of study geared towards a few big tests at the end, whereas BTECs are continually assessed via coursework and practical projects. You might only just be hearing about BTECs now, but they're not a new qualification – they've actually been around since 1984.

## Pearson BTEC Level 4 HNC Diploma Sport and Exercise Sciences (QCF)

### COURSE DURATION

The delivery for the Pearson BTEC Level 4 HNC Diploma in Sport and Exercise Sciences (QCF) is 9 months, full time, and 18 months, part time.

Course Title: <b>(FULL-TIME)</b>	Pearson BTEC Level 4 HNC Diploma in Sport and Exercise Sciences
Total No. of Months:	9
Total No. of Days Per Week:	5
Total No. of Hours Per Day:	3 - 6
<u>Total Contact Hours (FULL-TIME)</u>	540

Course Title: <b>(Part-TIME)</b>	Pearson BTEC Level 4 HNC Diploma in Sport and Exercise Sciences
Total No. of Months:	18
Total No. of Days Per Week:	3
Total No. of Hours Per Day:	3
<u>Total Contact Hours (PART-TIME)</u>	540

### **Mentorship / Industrial Attachment:**

Depending on the choice of modules, all students will also have the opportunity to undertake at least 200 contact hours of mentorship / industrial attachment programme with a mentor of their choice.

### **NOTE:**

The number of hours listed above are subject to change. Students will be eligible for the certification so long as they fulfil the requisite number of hours, and successfully complete all the assessments as required of them.



# Pearson BTEC Level 4 HNC Diploma Sport and Exercise Sciences (QCF)

## ENTRY REQUIREMENTS

**Minimum Age** : 16

**Minimum Academic Qualification** : 1 GCE A level Pass at E and above; or

Recognized Polytechnic diploma from Nanyang Polytechnic, Ngee Ann Polytechnic, Republic Polytechnic, Singapore Polytechnic or Temasek Polytechnic; or

Relevant certification issued by the United States Sports Academy; or

Australian Qualification Framework Certificate III

**English Language Proficiency** : GCE O Level Pass in English at C6 and above; or  
IELTS 5.5 and above.

## Pearson BTEC Level 4 HNC Diploma Sport and Exercise Sciences (QCF)

### COURSE STRUCTURE

The structure of this programme is as follows:

Unit Number	Unit Name	Unit Level	Unit Credit
1	Anatomy & Physiology for Sport and Exercise	5	15
2	Sport and Exercise Psychology	4	15
3	Research Methods for Sport and Exercise Science	4	15
4	Biomechanics for Sport	5	15
6	Nutrition for Sport and Exercise	4	15
7	Training and Fitness for Sport and Exercise	4	15
21	Physical Activity, Lifestyle and Well-being	4	15
22	Instructing Physical Activity and Exercise	3	10
25	Work-Based Experience	5	15
33	Functional Exercise Physiology	5	15

#### **Note:**

The Pearson BTEC Level 4 HNC in Sport and Exercise Sciences (QCF) is a qualification with a minimum of 120 credits of which 60 are mandatory core. The Core Modules are highlighted in Grey above.

For the duration of the full-time program, students will attend a full-day course, comprising 3 hours of classroom lectures and tutorials, between Mondays – Fridays.

For the part-time program, students will attend lessons twice a week comprising of 3 hours of classroom lectures and tutorials. Classes will typically be held on weekday nights, and on weekends.

# Pearson BTEC Level 4 HNC Diploma Sport and Exercise Sciences (QCF)

## UNIT DESCRIPTIONS

### **Unit 1 – Anatomy & physiology for sport and exercise**

**Level 5**

#### **Aims:**

This unit examines the physiological systems relevant to sport and exercise sciences. The interrelationships between systems are stressed with learners considering homeostatic control mechanisms at rest and during exercise.

#### **Abstract:**

An understanding of anatomy and physiology forms the basis for a number of other areas relating to training, fitness, fitness testing, physical activity and various therapeutic techniques. In this unit learners will study the structure and function of the human body systems (cardiovascular, respiratory and musculo-skeletal), intracellular processes and the endocrine and nervous systems. Learners will also be required to understand the homeostatic control mechanisms for each perspective at rest and during exercise.

### **Unit 2 – Sport and Exercise Psychology**

**Level 4**

#### **Aims:**

The aim of this unit is to develop an understanding of the key psychological factors that influence participation and performance in sport and exercise.

#### **Abstract:**

Successful sport performance is dependent upon many scientific disciplines. However, increasingly there is an awareness of the link between what a sport and exercise participant is thinking and the outcomes they achieve. Understanding the experiences of sport and exercise participants and the psychological skills they are employing is the focus of sport psychology.

This unit addresses key concepts in sport psychology that are relevant to sports performance. Whilst the focus of sport psychology is on performance in competitive sport, the focus of exercise psychology is on exercise/physical activity and the role exercise plays in establishing optimal mental health.

### **Unit 3 – Research Methods for Sport and Exercise Science**

**Level 4**

#### **Aims:**

The aim of this unit is to develop learners' understanding of and skills and techniques for sport and exercise science related research.

## **Pearson BTEC Level 4 HNC Diploma Sport and Exercise Sciences (QCF)**

### **Abstract:**

Research methods is the branch of sport and exercise sciences that aims to enhance human knowledge on a given topic. It is essential for all elements of sport and exercise sciences and without it there would be very little credibility to any of the applied work that is conducted within each of the different disciplines within sport and exercise science.

This unit will introduce learners to each of the different areas of understanding within research methods, starting with being able to find and read journal articles to develop subject knowledge in a given area and culminating with to having an applied knowledge of the different quantitative and qualitative techniques that are commonly used within sport and exercise science research.

### **Unit 4 – Biomechanics for Sport**

**Level 5**

#### **Aims:**

The aim of this unit is to develop learners' understanding of biomechanical principles and techniques used to improve an individual's or a team's sport performance.

#### **Abstract:**

Sports biomechanics is the branch of sport and exercise sciences that examines the causes and consequences of human movement and the interaction of the body with apparatus or equipment through the application of mechanical principles in sporting settings. It is one of the key areas to understand when analysing the performance of both individuals and teams.

This unit combines theoretical and applied learning contexts allowing learners to examine traditional principles of biomechanics through a practical learning environment. Learners will also discover how to use essential practical techniques in sports biomechanics through investigating different sporting activities first hand, which will give learners a greater understanding of the key mechanical principles in sport performance. Learners will start to adopt an evidence-based practice approach to their work which will help them to prepare for possible careers within sport and exercise sciences, sports therapy and other related areas.

### **Unit 6 – Nutrition for Sport and Exercise**

**Level 4**

#### **Aims:**

The aim of this unit is to develop learners' understanding of the principles of nutrition and how these principles can be applied to enhance sport and exercise performance.

#### **Abstract:**

Success in sport and achieving goals is dependent upon a range of physiological and psychological factors and thus sports performers are seeking out every advantage available to them. As a result of these developments, sports performers are increasingly engaging the services of sports nutritionists to provide advice on nutritional strategies to enable them to optimise their performance and safeguard their health.

## **Pearson BTEC Level 4 HNC Diploma Sport and Exercise Sciences (QCF)**

The unit develops learners' knowledge of nutrition in relation to improving performance in sport and exercise and helping them to achieve their sporting or exercise goals. On completion of this unit, learners should feel confident in offering well-informed, accurate nutrition advice to other people. The ability to provide information to people participating in exercise sessions and those interested in general health is a skill in increasing demand from coaching and instructional professionals.

### **Unit 7 – Training and Fitness for Sport and Exercise**

**Level 4**

#### **Aims:**

This unit will develop learners' understanding of training principles and methods and their use in improving sport and exercise performance.

#### **Abstract:**

Training and fitness has inherent applications within all areas of sport and exercise sciences and sports therapy as it examines the different fitness requirements of different sports and athletes, the training methods that can benefit these areas and the changes that can occur with an individual or team as a result of the adopted methods. The principles of training and fitness can be particularly important for sport and exercise scientists working with sport and exercise performers who are trying to peak for competition and sports therapists that are working with performers in the later stages of functional rehabilitation.

In this unit there is a combination of both theoretical and applied learning contexts which will allow learners to examine traditional principles of training in a practical learning environment. Learners will also discover how to use essential practical techniques in training environments through investigating different training techniques. This will allow for a greater understanding of the key physiological, biomechanical and psychological changes that can benefit performance. Learners will also adopt an evidence-based practice approach to their work on training programmes which will help them to prepare for the continuing rigours of Higher Education and careers within sport and exercise sciences, sports therapy and other related areas.

### **Unit 21 – Physical Activity, Lifestyle and Well-being**

**Level 4**

#### **Aims:**

The aim of this unit is to give learners the skills, knowledge and understanding to assist individuals with positive lifestyle changes in order to improve personal health.

#### **Abstract:**

An understanding of the effects lifestyle can have upon health and how to improve the lifestyle of an individual is important to individuals working in the sport and fitness sector. This unit is particularly relevant for individuals wanting to work in health promotion and exercise and fitness instruction.

The unit covers exercise, diet, stress, smoking and alcohol consumption and the ways that these factors can affect the quality of life of an individual. In this unit, learners will examine the relationship between lifestyle and health and look at current recommended dietary guidelines as well as methods

## Pearson BTEC Level 4 HNC Diploma Sport and Exercise Sciences (QCF)

of weight management. Learners will also explore strategies to manage stress, reduce alcohol consumption and stop smoking, analysing their success and effect on the 'health of the nation'. This unit provides opportunities for learners to plan, cost and manage a lifestyle improvement programme for a selected individual.

### Unit 22 – Instructing Physical Activity and Exercise

Level 3

#### Aims:

The aim of this unit is for learners to be able to design, plan, deliver and review exercise sessions which meet the needs of different client groups.

#### Abstract:

The number of people attending gyms and exercise sessions has increased significantly over the last decade as people seek to get themselves fit, lose weight, improve their health or reduce the effects of the ageing process. Each client will have different needs and it is the job of the instructor to meet their needs by providing them with safe and effective exercise programmes and sessions.

Instructors will require a good understanding of the health-related components of fitness and how the body adapts to training within different client groups. They will require knowledge of health screening methods and risk assessments to ensure the safe and effective delivery of the exercise sessions. Each exercise session will require some form of warm-up and cool down activity and this unit will provide the underpinning knowledge so learners have the opportunity to develop their own ideas in-line with the latest research.

### Unit 25 – Work Based Experience

Level 5

#### Aims:

This unit aims to enable learners to experience the scope and depth of learning which may take place in a work-based context by planning, monitoring and evaluating the work experience.

#### Abstract:

A significant amount of learning can be achieved by carrying out practical activities in a workplace. Learning may be enhanced by taking a more formal approach to work-based activities – by planning, carrying out the activities and reflecting on the benefits of the activities to the business and to the learner.

This unit is designed to allow flexibility of study for part-time and full-time learners. It is expected that learners are supervised in the workplace in addition to their academic supervisor.

### Unit 33 – Functional Exercise Physiology

Level 5

#### Aims:



## Pearson BTEC Level 4 HNC Diploma Sport and Exercise Sciences (QCF)

This unit provides learners with an in-depth understanding of functional physiological responses to physical activity, extending knowledge of anatomy and physiology and exploring their links with performance.

### **Abstract:**

In this unit learners will use their knowledge and understanding of anatomy and physiology and apply the basic principles and concepts in a practical physical activity setting. Throughout this unit learners will look at how energy release is utilised and controlled, how cardiovascular and respiratory responses to physical activity are affected and adapted, and how neuromuscular and hormonal changes occur when undertaking both acute and chronic exercise.

In addition to these elements, learners will consider the effect of environmental influences such as heat and altitude. The emphasis of the unit is on the application of knowledge in a practical setting, and the use of laboratorial techniques gained from previous study would be advantageous.

### **Mentorship / Industrial Attachment**

All students who choose to undertake the work-based experience module (Unit 25) will be required to undertake a mentorship / industrial attachment with a mentor of his/her choice within the industry.

This mentorship / industrial attachment is the practical part of the programme, involving 200 hours of lectures and practical sessions under the supervision and guidance of an approved trainer in the sports related industry. Students are also required to submit a 5000 words project report for assessment.

## **Pearson BTEC Level 4 HNC Diploma Sport and Exercise Sciences (QCF)**

### **DELIVERY METHODS**

The course will be delivered using one or more of the following methods:

- Classroom;
- Theory; or
- Practical.

### **ASSESSMENT METHODS**

Assessment methods can include one or more of the following:

- Questions and answers;
- Panel of workplace presenters/personal trainers;
- Simulation;
- Role plays;
- Written and/or oral examinations;
- Projects and case studies;
- Observation;
- Third party report; or
- Practical demonstration and assessment.

### **RECOGNITION OF PRIOR LEARNING**

Recognition of Prior Learning (RPL) is a process where a candidate may be granted credit or partial credit towards a qualification in recognition of skills and knowledge gained through work experience and/ or formal training. For additional information relating to RPL for this course, please contact our admissions team.

### **CREDIT TRANSFER**

The organisation recognises qualifications issued by the Australian Qualification framework, the United Sports Academy, and statements of attainment which are issued by any other Registered Training Organisation.

Students may be entitled to a credit transfer in the following circumstances:

- Completed units of competency from a relevant National Training Package.
- Approved units of competency from a National Training Product.
- Successful RPL application.

## Pearson BTEC Level 4 HNC Diploma Sport and Exercise Sciences (QCF)

### QUALIFICATION FEE (LOCAL Students)

FEES STRUCTURE		
Fees Breakdown	Total Payable (S\$) (with GST)	
Application Fee (Non-Refundable)	190.50	
<b>Course fee</b>	<b>6,800.00</b>	
Course material fee	270.00	
Examination fee	1,430.00	
<b>TOTAL FEES PAYABLE</b>	<b>8,500.00</b>	
NO. OF INSTALMENTS	Full Time:	9
	Part Time:	18
INSTALMENT AMOUNT	Full Time:	\$ 2,125.00
	Part Time: (8 Instalments)	\$ 1,062.50

## Pearson BTEC Level 4 HNC Diploma Sport and Exercise Sciences (QCF)

### QUALIFICATION FEE (INTERNATIONAL Students)

FEES STRUCTURE		
Fees Breakdown	Total Payable (S\$) (with GST)	
Application Fee (Non-Refundable)	345.50	
Medical Insurance Fee	96.30	
Fees for Banker's Guarantee (Non-Refundable)	To be determined	
<b>Course fee</b>	<b>8,160.00</b>	
<b>Course material fee</b>	<b>324.00</b>	
<b>Examination fee</b>	<b>1,716.00</b>	
<b>TOTAL FEES PAYABLE</b>	<b>10,200.00</b>	
<b>NO. OF INSTALMENTS</b>	<b>Full Time:</b>	<b>2</b>
<b>INSTALMENT AMOUNT</b>	<b>Full Time:</b>	<b>\$ 5,100.00</b>

## Pearson BTEC Level 4 HNC Diploma Sport and Exercise Sciences (QCF)

**MISCELLANEOUS FEE (Applicable for both LOCAL and INTERNATIONAL Students)**

<b>MISCELLANEOUS FEES</b>	
<b>Purpose of Fee</b>	<b>Amount (with GST S\$)</b>
Deferment Fee (if applicable)	<b>235.40</b>
Re-Assessment per unit	<b>214.00</b>
Re-Module per unit	<b>856.00</b>
Penalty for late payment (each week of late payment)	<b>10.70</b>
Printing cost per Sheet	<b>0.20</b>
Replacement of student ID	<b>21.40</b>
Medical Insurance (if applicable)	<b>96.30</b>
ISA T-shirt	<b>30.00</b>

Note: Miscellaneous Fees refer to any optional fees which the students pay only when applicable.