

## ADVANCED DIPLOMA IN CONSUMER SCIENCES IN FOOD AND NUTRITION

The purpose of the Advanced Diploma is to promote the wellbeing of the consumer. This is done through the application of scientific theoretical and practical food and nutrition knowledge in convenience food development and by developing food and nutrition training and research capacities. The main modules in this qualification is **Food and Food Science, Nutrition, and Food and Nutrition Training**. The module **Statistics** has been incorporated into the qualification to assist students to gain an understanding of statistical concepts for application in this field.

This qualification will also afford you the opportunity to specialize in either one of the following electives: **Food Safety and Quality**, or **Food Marketing and Communication**. Please note however that **10 students** must register for the elective for it to be offered.

The programme is offered on a **full-time** basis. The cost is **approximately R28 000**. There is **no NSFAS or NRF funding available**.

**You should apply** directly to the Department of Food and Nutrition by the **end of September**. Ms Onwaba Makanjana ([onwabam@dut.ac.za](mailto:onwabam@dut.ac.za)) can be contacted in this regard.

The intake is limited to **20 students**. The applications will **be ranked** according to academic merit as the average will be calculated of all subjects excluding Food Practice II, Consumer Science Practice I and II. You will be notified in November if you are successful.

The table below shows the various modules you will be doing.

Year	Modules	NQF level	SAQA credit
1	Semester 1		
	Statistics	7	16
	Nutrition	7	28
	<b>Elective - Student to select one module:</b>		
	Food Safety and Quality	7	24
	Food Marketing and Communication	7	24
	Semester 2		
	Food and Food Science	7	32
	Food and Nutrition Training	7	24

## CONTENT OF MODULES

The following content is covered in the various modules:

### COMPULSORY MODULES:

1. **Food and Food Science:** This module equips the student with recipe and product development skills to prepare healthy convenience meals/products through the application of scientific food and nutrition knowledge.

On completion of this module, students should be able to action the following for a food enterprise brief:

- Interpret market research and current food trends and apply scientific food and nutrition knowledge.
- Develop new healthy convenience meals and products using scientific principles, food regulatory guidelines, sensory analysis, shelf life tests, costing and nutritional analyses.
- Apply the pricing and distribution strategy to maximise competitive advantage and profitability for the recipe/product developed.

2. **Nutrition:** To provide students with scientific nutrition knowledge so that they are able to address nutrition related issues and disseminate sound nutrition information and solutions to communities and the food industry.

On completion of this module, students should be able to:

- Demonstrate knowledge and understanding of different methods of dietary, biochemical and clinical assessment of nutritional status
- Plan, develop, implement and evaluate nutrition education programmes for various target groups
- Understand the food and nutrition security framework
- Identify the causes of a nutritional crises and recommend suitable strategies to promote good nutrition for communities during nutrition emergencies
- Critically analyse current diet trends and discuss short and long-term effects on the health status of an individual
- Understand the role of functional foods in disease prevention and health promotion
- Examine the advantages and concerns regarding the use of genetically modified foods
- Demonstrate understanding of the importance and suitability of supplementation
- To understand current health issues using position statements published by public health organizations

3. **Statistics:** The purpose of this module is to introduce statistical methods useful for applied research.

On completion of this module, students should be able to:

- Use appropriate graphical methods
- Calculate descriptive statistics
- Use the Normal distribution
- Calculate a correlation coefficient and fit a linear regression model
- Conduct appropriate hypothesis tests for means
- Apply the Chi-squared test for independence.

4. **Food and Nutrition Training:** This module is essential to ensure consumer well-being, on-the-job training programs are required for past students who work in fresh food production, food retail or food service industries as supervisors/ managers or quality controllers as part of their day-to-day duties. This is supported by the Skills Development Act where employers are required to uplift the previously

disadvantaged by using the workplace as an active learning environment to improve their employment prospects.

So the purpose of this module is to enable students to design, apply and evaluate effectiveness of a training program in food and nutrition.

On completion of this module, students should be able to:

- Determine food and/ nutrition training and development needs for a target group.
- Analyse and apply learning theories to develop a food and/ nutrition training program.
- Evaluate and Implement a food and/ nutrition training program to address needs of a target group.
- Design and implement tools to evaluate the effectiveness of the food and/ nutrition training program.
- Apply legislation relating to training and development in South Africa.

### **ELECTIVES:**

**Food Safety and Quality:** To review, apply principles and evaluate effectiveness of food safety and food quality assurance systems in food manufacture, distribution and services from the farm to the consumer.

On completion of this module, students should be able to:

- Demonstrate an understanding of the principles of food safety management systems directed towards the control of food quality.
- Analyse the mandatory regulations applicable to food processing from the perspective of food safety and quality assurance and their effects on operational activities in a food manufacturing and food service facility.
- Develop procedures and approaches to identify food safety hazards in food processing.
- Develop quality control strategies.
- Prepare for a food safety audit, report on findings and evaluate the effectiveness of food safety management and quality assurance systems.

### **OR**

**Food Marketing and Communication:** To introduce the fundamentals of food marketing and strategically communicate food marketing messages through digital and print media

On completion of this module, students should be able to:

. Understand and apply key terms and concepts in the field of food marketing and communication

- Apply the marketing process in a given context.
- Identify and apply food marketing trends influencing consumer communication influencing consumer-purchasing habits in a competitive and promotional environment.
- Develop, design and implement a food marketing promotions strategy  
Develop, implement and evaluate food communication messages via digital, print media, product styling and photography.