## **DIPLOMA AND CERTIFICATE COURSES-COMPUTING**

# 1. Diploma of Cyber security

**Duration:** 2 years

Overview: This diploma program focuses on cybersecurity principles, including network

security, ethical hacking, and risk management.

**Course Structure:** 

Cyber security Fundamentals

**Network Security** 

**Ethical Hacking Techniques** 

Cyber Threat Intelligence

Security Policy and Governance

**Incident Response and Management** 

Industry-Based Cyber security Project

# 2. Certificate in Programming

**Duration:** 1 year

**Overview:** Geared towards programming skills, this certificate covers programming languages,

software development, and coding practices.

## **Course Structure:**

Introduction to Programming Concepts

Software Development Fundamentals

Programming Languages (e.g., Java, Python)

Web Development Basics

**Problem-Solving in Programming** 

Work-Based Coding Projects

**Industry Internship in Software Engineering** 

# 3. Certificate in Networking

**Duration**: 1 year

**Overview**: This certificate program focuses on networking skills, covering topics such as

network configuration, troubleshooting, and security.

## **Course Structure:**

**Networking Fundamentals** 

Routing and Switching

**Network Security** 

Wireless Networking

IP Addressing and Sub netting

**Network Troubleshooting** 

**Work-Based Networking Projects** 

## 4. Diploma of Artificial Intelligence

**Duration:** 2 years

**Overview:** This diploma delves into artificial intelligence, covering machine learning, natural language processing, and AI application development.

**Course Structure:** 

Machine Learning Algorithms
Natural Language Processing
AI Ethics and Governance
Deep Learning and Neural Networks
AI Application Development
Industry-Based AI Project

## 5. Diploma of Information Technology

**Duration**: 2 years

**Overview:** This diploma program provides a comprehensive understanding of information technology, covering areas such as system administration, network management, and software

development.

#### **Course Structure:**

Introduction to Information Technology

System Administration

**Network Security** 

**Database Management** 

**Programming Fundamentals** 

Web Development

**Industry-Based IT Project** 

## 6. Certificate in Web-Based Technologies

**Duration**: 1 year

**Overview:** Geared towards web technologies, this certificate covers web development, content management systems, and e-commerce.

## **Course Structure:**

Web Development Fundamentals

HTML and CSS

**JavaScript Programming** 

Content Management Systems (CMS)

**E-commerce Platforms** 

Responsive Web Design

Work-Based Web Development Project

# 7. Certificate in Cyber Security

**Duration:** 1 year

**Overview:** This certificate program focuses on cybersecurity principles, including network security, ethical hacking, and risk management.

#### Course Structure:

Cybersecurity Fundamentals

**Network Security** 

Ethical Hacking Techniques Cyber Threat Intelligence Security Policy and Governance Incident Response and Management Work-Based Cybersecurity Project

# 8. Diploma of Network Security

**Duration:** 2 years

**Overview**: This diploma delves deeper into network security, covering advanced topics such as penetration testing, security architecture, and threat intelligence.

#### **Course Structure:**

**Advanced Network Security Concepts** 

Penetration Testing and Vulnerability Assessment

Security Architecture and Design

Threat Intelligence and Analysis

**Cloud Security** 

Security Compliance and Governance

**Industry-Based Network Security Project** 

## 9. Certificate in Information Technology Networking

**Duration**: 1 year

**Overview:** This certificate program focuses on IT networking skills, covering areas such as network administration, security, and troubleshooting.

#### **Course Structure:**

**Networking Fundamentals** 

Network Administration

**Network Security** 

TCP/IP Protocols and Routing

Wireless Networking

**Network Troubleshooting** 

Work-Based IT Networking Project

## 10. Diploma of Cloud Engineering

**Duration:** 2 years

**Overview**: Focused on cloud computing, this diploma covers cloud architecture, deployment, and management of cloud-based services.

# **Course Structure:**

**Cloud Computing Principles** 

Cloud Infrastructure and Services

**Cloud Security** 

DevOps Practices in the Cloud

Cloud Deployment and Management

Cloud-Based Application Development

Industry Internship in Cloud Engineering

# 11. Certificate in Data Analysis

**Duration:** 1 year

**Overview:** This certificate program focuses on data analysis skills, covering data visualization, statistical analysis, and data-driven decision-making.

#### **Course Structure:**

Introduction to Data Analysis
Data Cleaning and Transformation
Data Visualization Tools
Statistical Analysis in Data
Data-driven Decision-making
Work-Based Data Analysis Project

## 12. Certificate in Fish Processing

#### **Course Overview:**

The Certificate in Fish Processing is designed to provide participants with the essential skills and knowledge required for the efficient and sustainable processing of fish and seafood products. This program covers various aspects of fish processing, including handling, preservation, quality control, and industry regulations. Participants will gain practical insights into the techniques and technologies involved in transforming raw fish into market-ready products.

# **Duration**: 1 year **Course Structure:**

## **Introduction to Fish Processing:**

Overview of the fish processing industry and its significance.

Introduction to different types of fish and seafood products.

## **Fish Handling and Quality Control:**

Best practices in fish handling to maintain product quality.

Understanding and implementing quality control measures in fish processing.

# **Processing Techniques:**

Filleting, deboning, and portioning techniques for various fish species.

Smoking, curing, and other preservation methods.

## **Fishery Regulations and Compliance:**

Understanding local and international regulations governing fish processing.

Compliance with sustainability standards and ethical considerations.

# Seafood Safety and Hygiene:

Implementing strict hygiene standards in fish processing facilities.

Adhering to seafood safety regulations to ensure consumer well-being.

## **Value-Added Fish Products:**

Developing skills in creating value-added fish products.

Introduction to product diversification and market trends.

# **Fish Processing Equipment Operation:**

Safe operation and maintenance of fish processing machinery.

Understanding the role of technology in modern fish processing.

## **Environmental Impact Awareness:**

Understanding the environmental impact of fish processing activities.

Exploring sustainable practices in the seafood industry.

# **Practical Hands-On Training:**

Hands-on experience in a simulated or real-world fish processing environment.

Practical exercises in filleting, processing, and packaging.

# **Industry Visits and Guest Lectures:**

Field trips to fish processing facilities.

Guest lectures from industry experts to provide real-world insights.

# **Final Assessment and Certification:**

Culminating assessments to evaluate theoretical and practical knowledge.

Awarding of the Certificate in Fish Processing upon successful completion.