



COMPUTER EDUCATION

Unleash your potential

Lorem ipsum dolor sit amet, quo sale
putant molestie an, ei assum voluptua
tractatos duo, in vel nihil ridens, malurum.

Take your IT career to the next level

ACCP Course - Nigeria

Product Note:

OV-7061 ACCP

Global IT Industry - A Changing Scenario



- IT Employment to mount up by **62 Million jobs in 2023**
- IT professional services market size worth **US\$ 1.07 Trillion by 2025**
- Global IT spending forecasted to reach **US\$ 4.3 Trillion by 2023**
- This shows the immense potential in the IT industry for a lucrative career



Market Overview (Africa)



- Africa is one of the emerging tech landscape in the digital transforming era.
- The region highlights the existence of roughly **200 African innovation hubs**, **3,500 new tech-related ventures**, and **US \$1 billion in venture capital (VC)** to a pan-African movement of start-up entrepreneurs.
- Revenue in Africa's eCommerce market is expected to show an annual growth rate (2021-2025) of **13.27%** resulting in market volume of **US \$40,758 million by 2025**.
- Africa has the fastest-growing rate of mobile penetration, with **44%** of the population owning a device in 2018, and unique mobile subscribers expected to reach **634 million by 2025**.
- Almost every booming industry in technology and data driven. Hence, there is an immense demand for technology skilled professional across the region.



Introduction



- **ACCP (Aptech Certified Computer Professional)** is a complete career-oriented program to prepare students for today's I.T. Industry.
- The course gives a strong foundation to students on various concepts related to software development and global technology insights
- The course introduces **Responsive website development, Application programming, Enterprise Apps development, Oracle Database Administration, Data Analytics Professional, Machine Learning Engineer** and a lot more
- The students get **hands-on training** as they **create projects** based on the course, they learn on.
- Aptech is an accredited partner with **NCC Education, UK** offering **Diploma (L5DC)** which helps students to pursue their **Degree program** at partnered Universities in **UK, Australia** or **Ireland**.
- Aptech also has alliance with globally renowned universities like **Middlesex University (London), Lincoln University College (Malaysia)**. This partnership helps students to Study Abroad for degree programs in **UK, Malaysia** or **Australia**.



Job Opportunities with ACCP



**Responsive Website
Developer**



C Programmer



**.NET & Java
Application
Programmer**



**Python Web
Application
Developer**



**Machine Learning
Engineer**



**Java/.NET Enterprise
Application Developer**



**Oracle Database
Administrator**



**Windows Server
Administrator**



**Data Analytics
Professional**



IoT Developer



ACCP Course - Software Training

Aptech 

COMPUTER EDUCATION

Unleash your potential

Term 1	Term 2	Term 3A (Java)	Term 3B (.NET)	Term 4A (OST & Java)	Term 4B (OST & .NET)	Term 4C (OST & Oracle)	Term 4D (OST & Networking)	Term 4E (Data Science)	Term 4F (AI & ML)	Term 4G (IoT)
NetBeans 8.1 or higher	NetBeans 8.1 or higher	Java EE 8	Visual Studio 2019	MySQL 8.x	MySQL 8.x	MySQL 8.x	MySQL 8.x	Python 3.6.x	Python 3.6.x	Python 3.6.x
CoffeeCup Free HTML5 Editor	Red Hat Linux v7	Spring 4.x	Flutter SDK 1.22 with Dart 2.10.x	Python 3.6.x	Python 3.6.x	Python 3.6.x	Python 3.6.x	MongoDB & R Studio 1.1.X	MongoDB	MongoDB
AngularJS 1.7x and Angular 9	Java SE 15, NetBeans 12	Flutter SDK 1.22 with Dart 2.10.x	-	Java EE 8	Visual Studio 2019	Oracle Database 20c or higher	Microsoft Windows Azure	Hadoop, Spark	R Studio 1.1.X	IoT Tools
Figma Toolkit	Visual Studio 2019	-	-	Project Professional 2019 or higher	Project Professional 2019 or higher	-	-	Hive 2, PigLatin v0.17.0	TensorFlow, Various ML APIs	Python Studio 1.1.x
MS SQL Server 2019	-	-	-	-	-	-	-	Tableau Desktop 10.5	-	-
-	-	-	-	-	-	-	-	Google Analytics Tools & SAS Analytics U	-	-

Course Structure

ACCP Course

Year 1

Year 2

Term 1

Term 2

Term 3

Term 4

3a (Java)

3b (.NET)

4a
(OST & Java)

4b
(OST & .NET)

4c
(OST & Oracle)

4d (OST &
Networking)

4e
(Data Science)

4f
(AI & ML)

4g
(IoT)

ACCP Program Info



Course Name	Aptech Certified Computer Professional (ACCP)
Curriculum Code	OV-7061
Delivery Pattern	4 days a week / 2 hours per day
Course Category	Career
Examination Pattern	Modular

Course details – as per Aptrack



Course Family Name	Course Code	Course Name
OV-7061-ACCP	OV-7061-CPISM	Certificate of Proficiency in Information Systems Management
	OV-7061-DISM	Diploma in Information Systems Management
	OV-7061-ADSE (OST & Java or OST &.NET or OST & Oracle or OST & Networking or Data Science or AI & ML or IOT)	Advanced Diploma in Software Engineering

ACCP Course Duration



Course name	Terms & Combination	Total Duration (Instructional Hours)
CPISM	1	166
DISM	1+2	314
ADSE	1+ 2+3a(Java) + 4a (OST & Java)	646
	1+ 2+3b(.NET) + 4b (OST & .NET)	626
	1+ 2+3a(Java) + 4c (OST & Oracle)	690
	1+ 2+3b(.NET) + 4c (OST & Oracle)	682
	1+ 2+3a(Java) + 4d (OST & Networking)	686
	1+ 2+3b(.NET) + 4d (OST & Networking)	678
	1+ 2+3a(Java) + 4e (Data Science)	730
	1+ 2+3b(.NET) + 4e (Data Science)	722
	1+ 2+3a(Java) + 4f (Artificial Intelligence & Machine Learning-AIML)	726
	1+ 2+3b(.NET) + 4f (Artificial Intelligence & Machine Learning-AIML)	718
	1+ 2+3a(Java) + 4g (Internet of Things-IoT)	626
	1+ 2+3b(.NET) + 4g (Internet of Things-IoT)	618

Course Flow



Term 1

**Certificate of
Proficiency in
Information
Systems
Management**

Term 1 - 2

**Diploma in
Information
Systems
Management**

Term 1 - 4

**Advanced
Diploma in
Software
Engineering**

Term 1



Module	Total Duration (Instructional Hours)	Theory	Lab	Self-Study
Programming Principles and Techniques	16	16	0	6
Logic Building and Elementary Programming	32	16	16	12
Building Modern Websites	40	20	20	10
AngularJS	16	8	8	4
eProject-Website Development	2	2	0	0
UI/UX for Responsive Design	12	12	0	6
Object-oriented Programming Concepts	16	16	0	6
Data Management with SQL Server	32	16	16	12
Total Hours - Term 1	166	106	60	56

Career / Job Opportunities

- **Responsive Web Developer**
- **C Programmer**

Learning Objectives

- Solve programming problems using flowcharts and pseudocodes
- Use programming constructs to write programs in C
- Use HTML 5 /CSS 3 /JavaScript to implement well structured Web sites
- Design and develop responsive Web sites using AngularJs
- Design and develop a responsive Website
- Learn the basic principles of effective web UX/UI design
- Develop object-oriented programming skills using OOP principles and Concepts
- Normalize raw data into well-organized database tables in SQL Server and perform advanced database operations



Term 1

Certificate of Proficiency in Information Systems Management



Term 2



Module	Total Duration (Instructional Hours)	Theory	Lab	Self-Study
Markup Language & JSON	12	6	6	8
Fundamentals of Linux Operating System	24	10	14	8
Java Programming - I	32	14	18	12
Java Programming - II	32	14	18	10
eProject-Java Application Development	2	2	0	0
Programming in C#	40	16	24	12
Fundamentals of IoT	6	6	0	4
Total Hours - Term 2	148	68	80	64

Career / Job Opportunities

- .NET & Java Application Programmer

Learning Objectives

- Perform efficient and secure data exchange using XML and JSON
- Use the various commands, shell script, and tools of Linux OS
- Design and develop desktop applications using Java
- Develop object-oriented applications using Java
- Develop an application using Java technologies
- Develop basic and advanced object-oriented applications using C#
- Understand the 'what, why and how' of IoT



Term 1 – 2

Diploma in Information Systems Management



Term 3A (Java)



Module	Total Duration (Instructional Hours)	Theory	Lab	Self-Study
Web Component Development using Java	32	14	18	12
Integrating Applications with Spring Framework	16	8	8	6
Introduction to Dart Programming	16	8	8	8
Application Development Using Flutter and Dart	40	20	20	16
Agile and DevOps	24	24	0	0
eProject-Cross Platform App Development	2	2	0	0
Total Hours - Term 3a (Java)	130	76	54	42

Exit – Not Applicable

Learning Objectives



- Design secure Web applications using Servlets and JSP
- Understand and work with the Spring framework
- Learn to code Flutter apps using Dart programming language
- Use Flutter framework and Dart programming language to develop cross platform mobile apps
- Implement software development process using Agile methodology
- Develop an App using Dart and Flutter



Term 3B (.NET)



Module	Total Duration (Instructional Hours)	Theory	Lab	Self-Study
Developing ASP.NET CORE MVC Web Applications	40	20	20	12
Introduction to Dart Programming	16	8	8	8
Application Development Using Flutter and Dart	40	20	20	16
Agile and DevOps	24	24	0	0
eProject-Cross Platform App Development	2	2	0	0
Total Hours - Term 3b (.NET)	122	74	48	36

Exit – Not Applicable

Learning Objectives

- Develop Web applications implementing server-side programming using ASP.NET MVC
- Learn to code Flutter apps using Dart programming language
- Use Flutter framework and Dart programming language to develop cross platform mobile apps
- Implement software development process using Agile methodology
- Develop an App using Dart and Flutter



Term 4A (OST & Java)



Module	Total Duration (Instructional Hours)	Theory	Lab	Self-Study
Working with MySQL	24	12	12	8
Programming with Python	36	18	18	12
Web Application Development using Python	40	20	20	12
eProject (Python-Web Application Development)	2	2	0	0
Enterprise Application Development using EJB	36	18	18	12
Creating Services for the Web	12	6	6	4
Software Engineering Principles	16	16	0	0
Software Project Management	36	18	18	12
Total Hours - Term 4a (OST-Java)	202	110	92	60

Career / Job Opportunities

- **Python Web Application Developer**
- **Java Enterprise Application Developer**

Learning Objectives



- Use MySQL, the world's most popular open-source database
- Understand syntax and logic of Python programming and learn how Python is used for data analysis and other applications
- Build Web applications using Python
- Design and develop a Web application using Python
- Build and deploy enterprise applications using EJB
- Use Web services in Java Web Applications
- Use software engineering principles to design software on time, within scope, and budget
- Manage software projects efficiently using Microsoft Project



Term 4B (OST & .NET)



Module	Total Duration (Instructional Hours)	Theory	Lab	Self-Study
Working with MySQL	24	12	12	8
Programming with Python	36	18	18	12
Web Application Development using Python	40	20	20	12
eProject (Python-Web Application Development)	2	2	0	0
Developing Microsoft Azure and Web Services	36	18	18	12
Software Engineering Principles	16	16	0	0
Software Project Management	36	18	18	12
Total Hours - Term 4b (OST-.NET)	190	104	86	56

Career / Job Opportunities

- **Python Web Application Developer**
- **.NET Enterprise Application Developer**

Learning Objectives

- Use MySQL, the world's most popular open-source database
- Understand syntax and logic of Python programming and learn how Python is used for data analysis and other applications
- Build Web applications using Python
- Design and develop a Web application using Python
- Develop enterprise applications and Web services using .NET technologies using the Microsoft Azure cloud platform
- Use software engineering principles to design software on time, within scope, and budget
- Manage software projects efficiently using Microsoft Project



Term 4C (OST & Oracle)



Module	Total Duration (Instructional Hours)	Theory	Lab	Self-Study
Working with MySQL	24	12	12	8
Programming with Python	36	18	18	12
Web Application Development using Python	40	20	20	12
eProject (Python-Web Application Development)	2	2	0	0
Oracle Database SQL	32	16	16	10
Program with PL/SQL	32	16	16	10
Oracle Database Administration I	40	20	20	12
Oracle Database Administration II	40	20	20	12
Total Hours - Term 4c (OST-Oracle)	246	124	122	76

Career / Job Opportunities

- **Python Web Application Developer**
- **Oracle Database Administrator**

Learning Objectives

- Use MySQL, the world's most popular open-source database
- Understand syntax and logic of Python programming and learn how Python is used for data analysis and other applications
- Build Web applications using Python
- Design and develop a Web application using Python
- Gain expertise in relational database, data management, and learn how to use SQL commands effectively against your data
- Learn PL/SQL with examples on cursors, triggers, functions, procedures, strings, exceptions, arrays, collections, packages, transactions etc.
- Develop stored procedures, functions, packages, and database triggers and manage an Oracle database instance, configure the Oracle network environment, and perform database maintenance
- Develop appropriate strategies for backup, restore, and recovery procedures from provided scenarios



Term 4D (OST & Networking)



Module	Total Duration (Instructional Hours)	Theory	Lab	Self-Study
Working with MySQL	24	12	12	8
Programming with Python	36	18	18	12
Web Application Development using Python	40	20	20	12
eProject (Python-Web Application Development)	2	2	0	0
Azure Fundamentals	32	16	16	10
Implementing, Managing and Monitoring Azure Environment	36	18	18	12
Azure Architect Technologies	36	18	18	12
Azure Architect Design	36	18	18	12
Total Hours - Term 4c (OST-Networking)	242	122	120	78

Career / Job Opportunities

- **Python Web Application Developer**
- **Windows Server Administrator**

Learning Objectives

- Use MySQL, the world's most popular open-source database
- Understand syntax and logic of Python programming and learn how Python is used for data analysis and other applications
- Build Web applications using Python
- Design and develop a Web application using Python
- Prove your knowledge of cloud concepts, Azure services, Azure workloads, security and privacy in Azure, as well as Azure pricing and support.
- Implement, manage, and monitor an organization's Microsoft Azure environment
- Design and implement solutions that run on Microsoft Azure, including aspects like compute, network, storage, and security
- Design monitoring, design identity and security, design data storage, design business continuity, and design infrastructure.



Term 4E (Data Science)



Module	Total Duration (Instructional Hours)	Theory	Lab	Self-Study
Programming with Python	36	18	18	12
Large Data Management with MongoDB	40	20	20	12
Emerging Job Areas-SMAC	8	8	0	0
R Programming	40	20	20	12
Foundation of Big Data Systems	44	22	22	12
Processing Big Data [Hadoop-MapReduce, Hive, PigLatin]	36	18	18	12
Visual Analytics with Tableau	40	20	20	12
Web and Social Media Analytics (Google Analytics and SAS)	40	20	20	12
Project-Big Data	2	2	0	0
Total Hours - Term 4e (Data Science)	286	148	138	84

Career / Job Opportunities

- **Data Analytics Professional**

Learning Objectives



- Understand syntax and logic of Python programming and learn how Python is used for data analysis and other applications
- Learn MongoDB concepts, features, architecture and data model, and how to install, configure and monitor open-source databases
- Learn the basics of social media, mobile technology, analytics, and cloud computing along with an understanding of their interconnectivity.
- Master data exploration, data visualization, predictive analytics and descriptive analytics techniques with the R language
- Learn how the components of the Hadoop ecosystem, such as Hadoop, Yarn, MapReduce, HDFS, Pig, Impala, HBase, Flume, and Apache Spark fit in with the Big Data processing lifecycle
- Learn to work with adaptable, versatile frameworks based on the Apache Hadoop ecosystem
- Learn how to build visualizations, organize data, and design dashboards to empower more meaningful business decisions using Tableau Desktop data visualization and reporting tool
- Understand the major aspects of Google Ads network including Search, Display, Mobile, and Video
- Master different techniques in SAS to access and manage data, create data structures, generate reports, and handle errors
- Develop a real-world project using Big Data tools



Term 4F (AI and Machine Learning)



Module	Total Duration (Instructional Hours)	Theory	Lab	Self-Study
Programming with Python	36	18	18	12
Large Data Management with MongoDB	40	20	20	12
Emerging Job Areas-SMAC	8	8	0	0
R Programming	40	20	20	12
AI Primer [ML, DL, Neural N/Ws]	16	16	0	0
Natural Language Processing Toolkit	44	22	22	12
Machine Learning	40	20	20	12
Deep Learning and Machine Learning APIs	56	28	28	16
Project-ChatBot and Recommendation Engine	2	2	0	0
Total Hours - Term 4f (AI & ML)	282	154	128	76

Career / Job Opportunities

- **Machine Learning Engineer**

Learning Objectives



- Understand syntax and logic of Python programming and learn how Python is used for data analysis and other applications
- Learn MongoDB concepts, features, architecture and data model, and how to install, configure and monitor open-source databases
- Learn the basics of social media, mobile technology, analytics, and cloud computing along with an understanding of their interconnectivity
- Master data exploration, data visualization, predictive analytics and descriptive analytics techniques with the R language
- Understand AI concepts and workflows, machine learning and deep learning, and performance metrics
- Learn essential concepts of Python programming and gain deep knowledge in data analytics, machine learning, data visualization, web scraping, and natural language processing.
- Master machine learning concepts and techniques including supervised and unsupervised learning, mathematical and heuristic aspects, and hands on modeling to develop algorithms
- Master deep learning concepts and TensorFlow open-source framework, implement deep learning algorithms, and build artificial neural networks
- Develop a project to implement chatbot and recommendation engine



Term 4G (IoT)



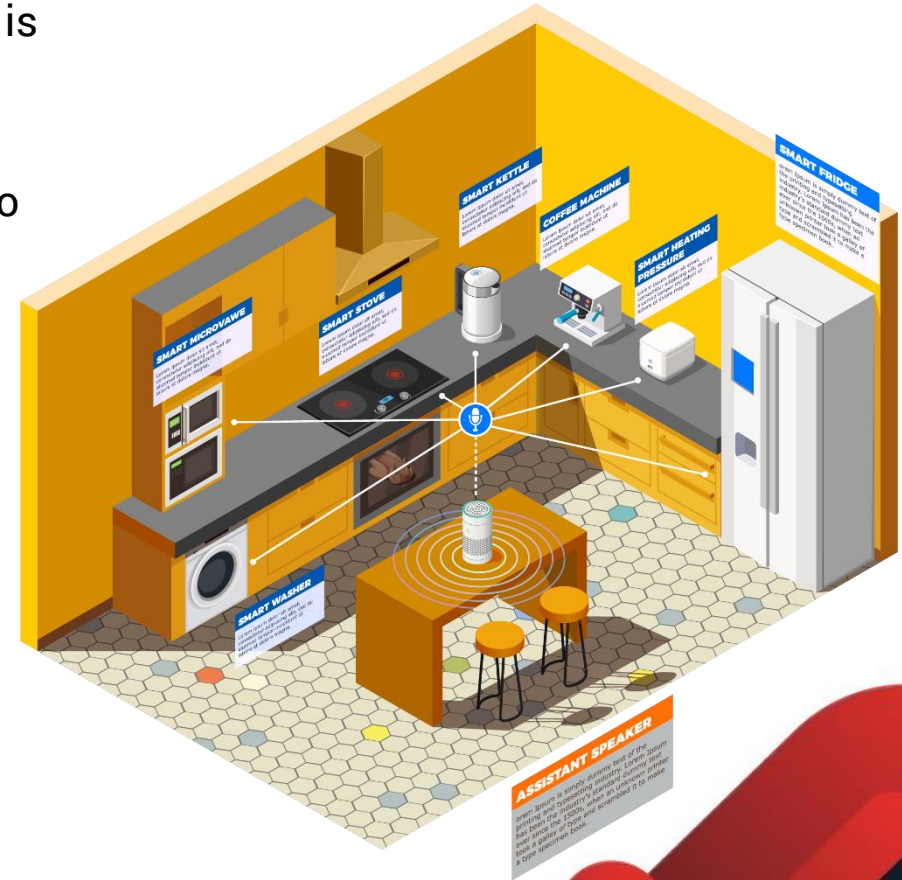
Module	Total Duration (Instructional Hours)	Theory	Lab	Self-Study
Programming with Python	36	18	18	12
Large Data Management with MongoDB	40	20	20	12
Emerging Job Areas-SMAC	8	8	0	0
IoT Hardware	40	20	20	12
IoT Networking	16	16	0	0
Programming the IoT with Python	40	20	20	12
Project-IoT	2	2	0	0
Total Hours - Term 4g (IoT)	182	104	78	48

Career / Job Opportunities

- IoT Developer

Learning Objectives

- Understand syntax and logic of Python programming and learn how Python is used for data analysis and other applications
- Learn MongoDB concepts, features, architecture and data model, and how to install, configure and monitor open-source databases
- Learn the basics of social media, mobile technology, analytics, and cloud computing along with an understanding of their interconnectivity
- Work with IoT hardware, sensors, and systems
- Implement networking in IoT applications
- Build rich IoT applications using IoT technologies, systems, and Python programming language
- Develop a project to implement IoT technologies



Term 1 – 4

Advanced Diploma in Software Engineering



Onlinevarsity

LEARN | ANYTIME | ANYWHERE

Aptech
COMPUTER EDUCATION
Unleash your potential



- Aptech's new remarkable learning portal with 24*7 student access
- Content and collaboration platform for Aptech students, helping them learn new programs and technologies
- Aptech students will get course content via Onlinevarsity
- They can refer to books at any time, anywhere, and on any operating system (Windows, iOS, Android)
- Please contact your Academic Head for more details on Onlinevarsity

Benefits of Onlinevarsity



**Online Video
Lectures**



**24 x 7
Access**



**Learning on
the 'Go'**



Certification



Guidance



Study Abroad & Degree Pathway



- Aptech has collaborated with the best education institutes and universities in the world for the benefit of our students
- Aptech enables students to gain an International degree via Credit Transfer Facility (CTF).
- Our Education Alliances:



Collaboration with NCC Education



- Aptech is now an **NCC Education Accredited Partner Centre** enabling candidates to study in their home countries and obtain a **Dual Diploma (ADSE and Level 5 Diploma in Computing)** from NCC Education)
- With Dual Diploma students can opt for **higher education in UK, Australia or Ireland** for a **Degree program** at NCC education partnered universities.



Collaboration with Lincoln University College



- Aptech aims to promote International Degree via Credit Transfer Facility.
- We have now collaborated with Lincoln University College, Malaysia enabling candidates to study **Advanced Diploma in Software Engineering (ADSE)** Program from Aptech for 2 years and get entry into final year of degree program at Lincoln University College , Malaysia
- Students can obtain **Bachelor of Information Technology (Hons)**



Collaboration with Middlesex University



- Aptech's partnership with **Middlesex University, London** offers students an opportunity to earn an international I.T. degree with Credit Transfer Facility, at any of Middlesex University's 3 international campuses in London, Malta, or Dubai
- Post completing **Advanced Diploma in Software Engineering (ADSE)** Program from Aptech for 2 years students get entry into final year of degree program at Middlesex University.



London



Dubai



Malta



ADSE to Degree Pathway

Aptech 

COMPUTER EDUCATION

Unleash your potential



Pathway Details in a Glimpse



Pathway into	NCC Education Partners	Middlesex University	uClan	Lincoln University College
Requirement	ADSE from Aptech L5DC from NCC Education	ADSE from Aptech	ADSE from Aptech L5DC from NCC Education	ADSE from Aptech
Location of study	18 different Universities in UK or Ireland or Australia	UK, Dubai or Malta	UK or Online	Malaysia or Online
Program of study	Bachelor degree (Direct entry to final year)	BSc (Hons) Information Technology, BSc (Hons) Information Technology Business Information, BSc (Hons) Computer Networks / Computer Science (Direct entry to final year)	BSc (Hons) Business Computing and Information Systems (Direct entry to final year)	Bachelor (Hons) of Information Technology (Direct entry to final year)
Other requirement	IELTS 6.0 (with minimum 5.5 in all four components) & Student Visa requirements as per respective Country	IELTS 6.0 (with minimum 5.5 in all four components) & Student Visa requirements as per respective Country	IELTS 6.0 (with minimum 5.5 in all four components) & UK Student Visa requirements	IELTS 6.0 or confirmation letter from College/Center on pursuing studies in English & Malaysia Student Visa requirement



COMPUTER EDUCATION

Unleash your potential

THANK YOU