Aptech
Unleash your potential

COURSE ORIENTATION

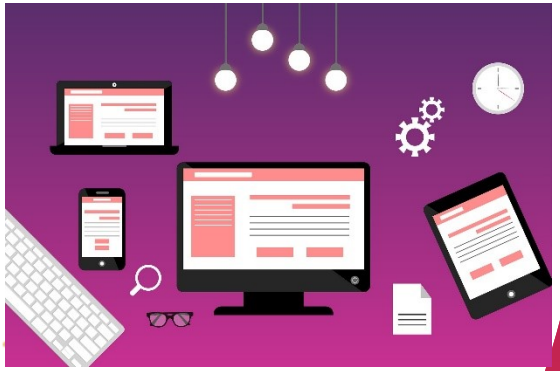
ACCP

Agenda

- Industry Scenario (Global and Africa-specific)
- Introduction to ACCP Course
- Term 1 Merits, Module Outcomes, and Job Profiles
- Term 2 Merits, Module Outcomes, and Job Profiles
- Term 3 Merits, Module Outcomes, and Job Profiles
- Term 4 Merits, Module Outcomes, and Job Profiles
- The Aptech Advantage

Global Industry 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



Source: Research and Markets, Worldwide Technology Employment Impact Guide, IDC, International Data Corporation (IDC), www.grandviewresearch.com

Africa - Industry Scenario

- 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.

Source: statista.com, marketfinder

Trending Job Roles Worldwide

- Enterprise Application developer
- Cloud computing manager
- Data analyst
- Data Scientist
- AI specialist
- IT professional
- Business systems analyst
- Internet of Things specialist
- Information systems manager

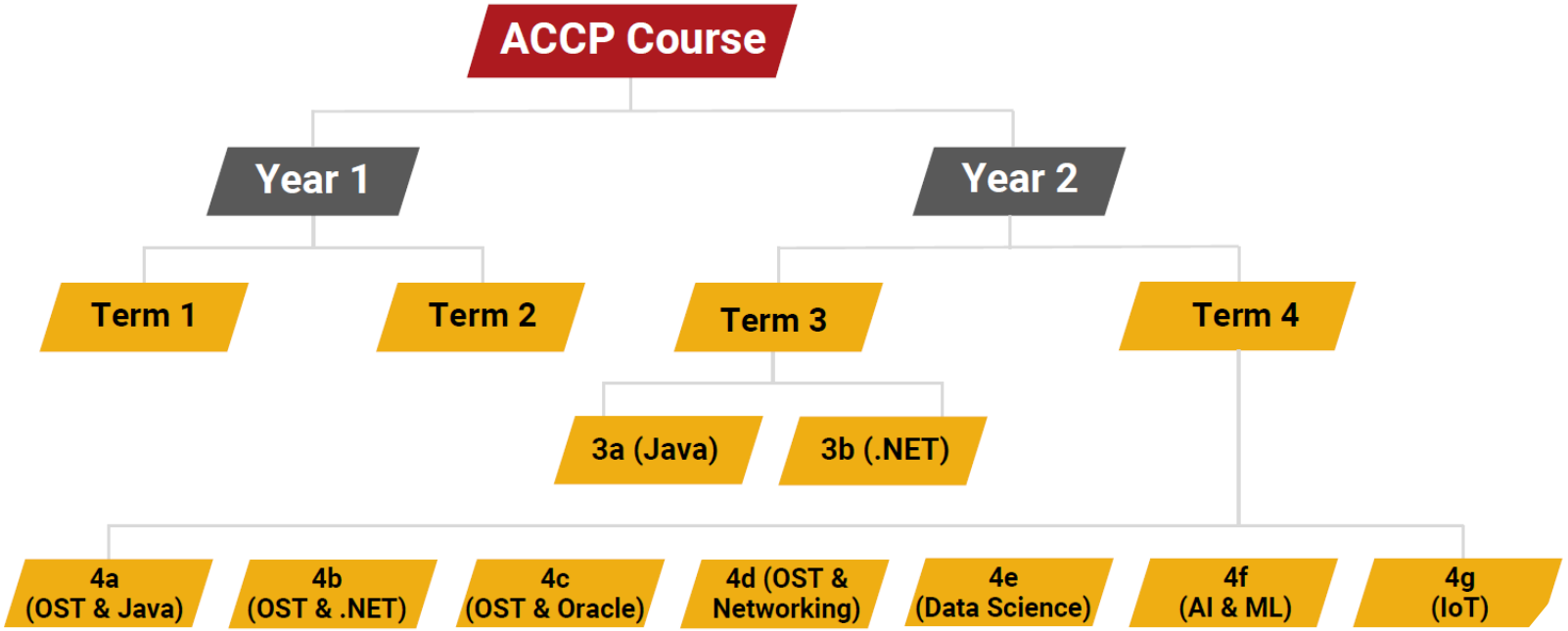
Source: https://www.getsmarter.com/blog/career-advice/job-demand-10-years/
https://www.weforum.org/reports/jobs-of-tomorrow-mapping-opportunity-in-the-new-economy

Statistics from global organizations re-emphasize need of reskilling for 2030 job market

McKinsey Global Institute estimates that 14% of global workforce would have to switch occupations or acquire new skills by 2030 because of automation and artificial intelligence.

The Pandemic impact on the business world, need for reskilling and re-learning is felt strongly from the organizational to individual level.

Introduction to ACCP Course


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)

Term 1

A short summary of what students will gain by completing Term 1

Term 1

Programming Principles and Techniques

Solve programming problems using flowcharts and pseudocodes

Logic Building and Elementary Programming

Use programming constructs to write programs in C

Building Modern Websites

Use HTML 5 /CSS 3 /JavaScript to implement well structured Web sites

AngularJS

Design and develop responsive Web sites using AngularJs

UI/UX for Responsive Design

Learn the basic principles of effective web UX/UI design

Object-oriented Programming Concepts

Develop object oriented programming skills using OOP principles and concepts

Data Management with SQL Server

Normalize raw data into well-organized database tables in SQL Server and perform advanced database operations

Exit Profiles:

- Responsive Web Developer
- C Programmer

166

Hours

eProject (Website Development)

Certification

Term 1

Certificate of Proficiency in

Information Systems Management

Term 2

A short summary of what students will gain by completing Term 2

Term 2

Markup Language and JSON

Use XML & JSON to store and exchange data

Fundamentals of Linux Operating System

Use the various commands, shell script, and tools of Linux OS

Java Programming-I

Develop object-oriented applications using Java

Java Programming-II

Use advanced language features and Application Programming Interfaces (APIs) of Java

Programming in C#

Develop basic and advanced object-oriented applications using C#

Fundamentals of IoT

Understand the 'what, why and how' of IoT

Exit Profiles:

.NET & Java Application Programmer

148
Hours

eProject - Java Application Development

Certification

Term 1 and 2

Diploma in Information Systems Management

Term 3

A short summary of what students will gain by completing Term 3

Term 3a (Java)

Web Component Development

Build Web applications suited to any Java EE application server using JSP and Servlet technologies

Integrating Applications with Spring Framework

Develop powerful Web applications with the Spring framework

Agile and DevOps

Implement software development process using Agile methodology

Exit Profiles:

NO EXIT

Introduction to Dart Programming

Learn to code Flutter apps using Dart programming language

Application Development Using Flutter and Dart

Use Flutter framework and Dart programming language to develop cross platform mobile apps

130
Hours

eProject-Cross Platform App Development

Term 3b (.NET)

Developing ASP.NET CORE Web Applications

Develop Web applications implementing server side programming using ASP.NET Core

Introduction to Dart Programming

Learn to code Flutter apps using Dart programming language

Application Development Using Flutter and Dart

Use Flutter framework and Dart programming language to develop cross platform mobile apps

Agile and DevOps

Implement software development process using Agile methodology

Exit Profiles:

NO EXIT

122
Hours

eProject-Cross Platform App Development

Term 4

A short summary of what students will gain by completing Term 4

Term 4a (OST & Java)

Working with MySQL

Use MySQL, the world's most popular open source database

Programming with Python

Understand syntax and logic of Python programming and learn how Python is used for data analysis and other applications

Web Application Development using Python

Build Web applications using Python

Enterprise Application Development using EJB

Build and deploy enterprise applications using EJB

Creating Services for the Web

Use Web services in Java Web Applications

Software Engineering Principles

Use software engineering principles to design software on time, within scope, and budget

Software Project Management

Manage software projects efficiently using Microsoft Project

202

Hours

eProject (Python-Web Application Development)

Exit Profiles:

Python Web Application Developer

Java Enterprise Application Developer

Term 4b (OST & .NET)

Working with MySQL

Use MySQL, the world's most popular open source database

Programming with Python

Understand syntax and logic of Python programming and learn how Python is used for data analysis and other applications

Web Application Development using Python

Build Web applications using Python

Exit Profiles:

Python Web Application Developer
.NET Enterprise Application Developer

Developing Microsoft Azure and Web Services

Develop enterprise applications and Web services using .NET technologies using the Microsoft Azure cloud platform

Software Engineering Principles

Use software engineering principles to design software on time, within scope, and budget

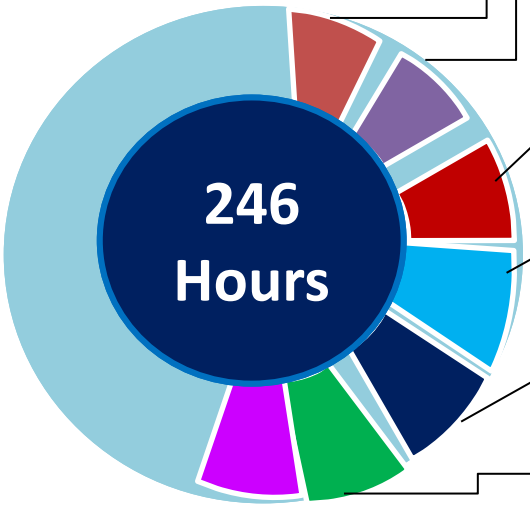
Software Project Management

Manage software projects efficiently using Microsoft Project

190
Hours

eProject (Python-Web Application Development)

Term 4c (OST & Oracle)



Working with MySQL — Use MySQL, the world's most popular open source database

Programming with Python — Understand syntax and logic of Python programming and learn how Python is used for data analysis and other applications

Web Application Development using Python — Build Web applications using Python

Oracle Database SQL — Gain expertise in relational database, data management, and learn how to use SQL commands effectively against your data

Program with PL/SQL — Learn PL/SQL with examples on cursors, triggers, functions, procedures, strings, exceptions, arrays, collections, packages, transactions, and so on

Oracle Database Administration I — Develop stored procedures, functions, packages, and database triggers and manage an Oracle database instance, configure the Oracle network environment, and perform database maintenance

Oracle Database Administration II — Develop appropriate strategies for backup, restore, and recovery procedures from provided scenarios

Exit Profiles:

Python Web Application Developer
Oracle Database Administrator

eProject (Python-Web Application Development)

Term 4d (OST & Networking)

Working with MySQL

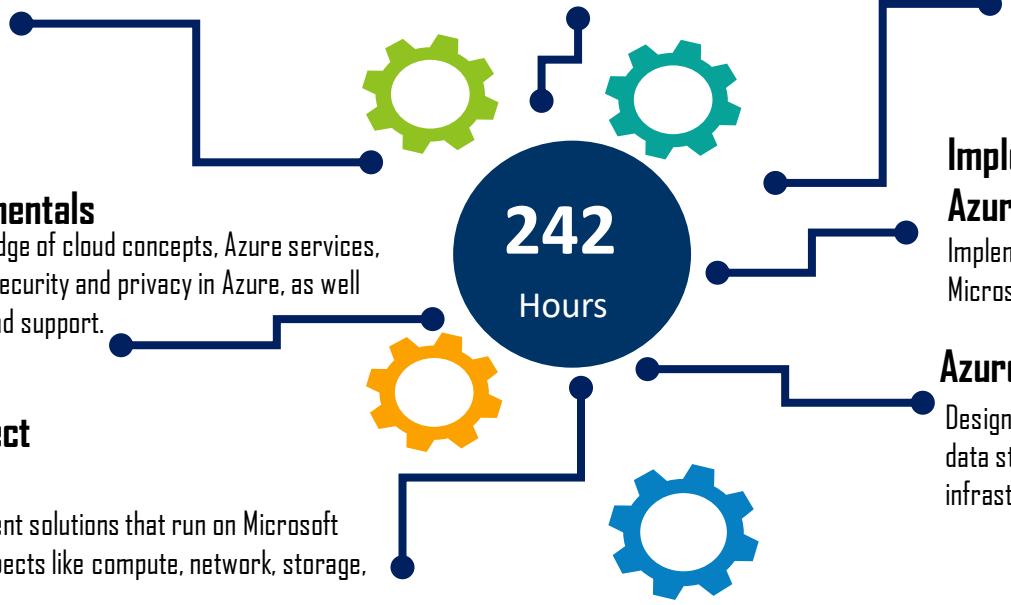
Use MySQL, the world's most popular open source database

Programming with Python

Understand syntax and logic of Python programming and learn how Python is used for data analysis and other applications

Web Application Development using Python

Build Web applications using Python



Azure Fundamentals

Prove your knowledge of cloud concepts, Azure services, Azure workloads, security and privacy in Azure, as well as Azure pricing and support.

Implementing, Managing and Monitoring Azure Environment

Implement, manage, and monitor an organization's Microsoft Azure environment

Azure Architect Design

Design monitoring, design identity and security, design data storage, design business continuity, and design infrastructure.

Azure Architect Technologies

Design and implement solutions that run on Microsoft Azure, including aspects like compute, network, storage, and security

Exit Profiles:

Python Web Application Developer
Azure Administrator

eProject (Python-Web Application Development)

Term 4e (Data Science)

Programming with Python	Understand syntax and logic of Python programming and learn how Python is used for data analysis and other applications
Large Data Management with MongoDB	Learn MongoDB concepts, features, architecture and data model, and how to install, configure and monitor open source databases
Emerging Job Areas-SMAC	Learn the basics of social media, mobile technology, analytics, and cloud computing along with an understanding of their interconnectivity
R Programming	Master data exploration, data visualization, predictive analytics and descriptive analytics techniques with the R language
Foundation of Big Data Systems	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
Processing Big Data [Hadoop-MapReduce, Hive, PigLatin]	Learn to work with adaptable, versatile frameworks based on the Apache Hadoop ecosystem
Visual Analytics with Tableau	Learn how to build visualizations, organize data, and design dashboards to empower more meaningful business decisions using Tableau Desktop data visualization and reporting tool
Web and Social Media Analytics (Google Analytics and SAS)	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

Exit Profile:

Data Analytics Professional

Project-Big Data

286 Hours

Term 4f (Artificial Intelligence & Machine Learning)

Programming with Python	Understand syntax and logic of Python programming and learn how Python is used for data analysis and other applications
Large Data Management with MongoDB	Learn MongoDB concepts, features, architecture and data model, and how to install, configure and monitor open source databases
Emerging Job Areas-SMAC	Learn the basics of social media, mobile technology, analytics, and cloud computing along with an understanding of their interconnectivity
R Programming	Master data exploration, data visualization, predictive analytics and descriptive analytics techniques with the R language
AI Primer [ML, DL, Neural N/Ws]	Understand AI concepts and workflows, machine learning and deep learning, and performance metrics
Natural Language Processing Toolkit	Learn essential concepts of Python programming and gain deep knowledge in data analytics, machine learning, data visualization, web scraping, and natural language processing.
Machine Learning	Master machine learning concepts and techniques including supervised and unsupervised learning, mathematical and heuristic aspects, and hands on modeling to develop algorithms
Deep Learning and Machine Learning APIs	Master deep learning concepts and TensorFlow open source framework, implement deep learning algorithms, and build artificial neural networks

Project-ChatBot and Recommendation Engine

282 Hours

Exit Profile:

Machine Learning Engineer

Term 4g (Internet of Things-IoT)

182
Hours

Programming with Python

Understand syntax and logic of Python programming and learn how Python is used for data analysis and other applications

Programming the IoT with Python

Build rich IoT applications using IoT technologies, systems, and Python programming language

Large Data Management with MongoDB

Learn MongoDB concepts, features, architecture and data model, and how to install, configure and monitor open source databases

Emerging Job Areas-SMAC

Learn the basics of social media, mobile technology, analytics, and cloud computing along with an understanding of their interconnectivity

IoT Hardware

Work with IoT hardware, sensors, and systems

IoT Networking

Implement networking in IoT applications

Project-IoT

Exit Profile:

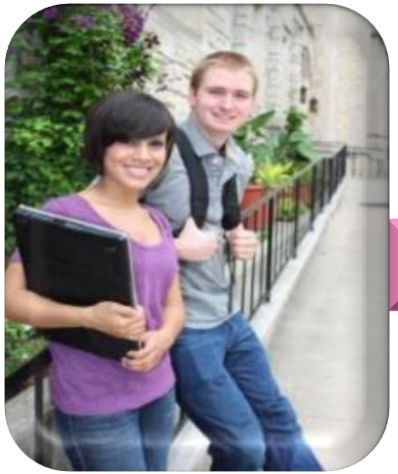
IoT Developer

Certification

Term 1 – 4

Advanced Diploma in Software Engineering

Why Aptech Certification?



Through Certification

Up-gradation of skills

Through Online/Classroom learning

- Higher Salary Package
- Faster Career Growth
- Improves Work Performance
- Enables Specialization
- Scope for Senior Positions
- Builds Confidence

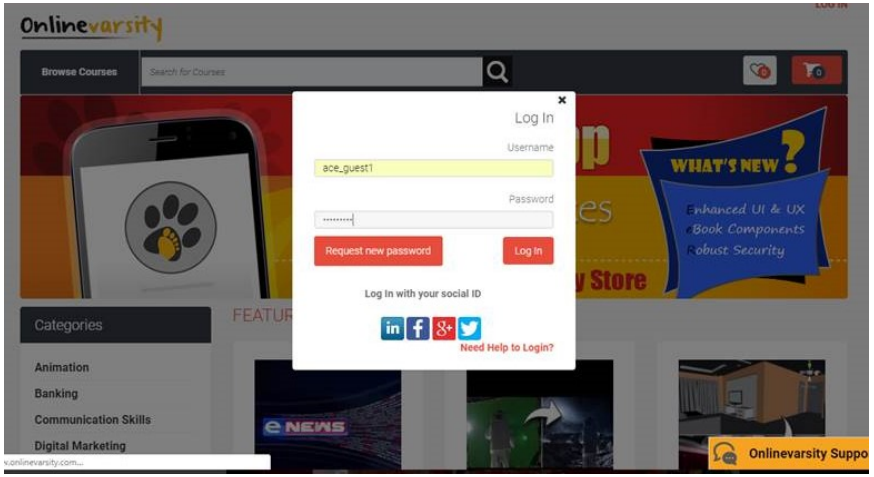
The Aptech Advantage

How is Aptech Different from Competitors?

- Single comprehensive structured course
- Learning in a chronological manner
- Blended learning approach
  - Instructor-led live virtual classrooms
  - Online classes
  - Project work
  - Round the clock teaching assistance
- Robust evaluation
  - Objective (MCQ) exams
  - Practical exams
  - Hands-on e-Projects
  - Assignments
- Value addition
- www.onlinevarsity.com (Standardized Platform)

Onlinevarsity

OnlineVarsity – Collaborative Platform



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THANK YOU