

# Information & Computer Technology Skillset Certifications Course Outlines

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## Web Application Skillsets

### 1. Google Analytics

(2.5 hours)

If you have been looking for a way to learn more about the people who visit your website, along with their needs and behaviours while there, Google Analytics is perfect for you. This is a free tool that you can connect to virtually any website, as long as you have access to the source code.

Once connected, Google Analytics can deliver almost any information you want regarding your web content, advertising efforts and the way your audience interacts with your web content.

While logging in for the first time can feel a bit overwhelming, a bit of knowledge about the tool can help you navigate with ease its user-friendly dashboard.

This course goes into detail about Google Analytics, so you can confidently find the information you need to ensure your company succeeds.

We begin by giving you a brief overview of Google Analytics, including how it works and why you should use it with every website you run.

Next, we give you information regarding navigating your dashboard, including details about widgets and how to customise the information you see.

We also give you a rundown of the most popular types of reports you can run.

Finally, we review information regarding campaign and conversion tracking.

#### Learning Outcomes

- How Google Analytics can track details regarding your users and traffic sources
- The definitions of key terms relating to Google Analytics
- What a segment is and how you can use segments to better analyse data
- All about a relatively new type of report available to Google Analytics users
- How to use UTM parameters to ensure that you are achieving your website's goals

### 2. Introduction to Cloud Computing

(0.75 hours)



Learning with an Introduction to Cloud Computing is vital for everyone looking to improve the way they interact with IT in today's modern environment. Whether you're part of a start-up or a well-established company, or simply curious about what cloud computing can offer individuals, this is an invaluable introductory guide.

This course provides a comprehensive guide to truly understanding cloud computing by providing a full definition and discussing the types and categories available. From the capabilities and benefits for companies and individuals, to a detailed description of the cloud computing services available to best suit your needs, this course covers everything you need to know about cloud computing.

### **Learning Outcomes**

- A full definition and the different categories of cloud computing
- The capabilities and potential of cloud computing and how to harness it
- The benefits of cloud computing for companies of all sizes as well as individuals
- The different cloud services available and how to choose the right one for your needs

## **3. Introduction to IoT (Internet of Things)**

(0.75 hours)

Learning about the Internet of Things is vital for everybody who wants to improve the way they communicate and get up-to-date on the most exciting technology available.

IoT can improve the way you work, play and live your life and is essential knowledge for businesses and individuals.

This course covers everything you need to know about IoT, including a full definition and comprehensive analysis of the different devices available.

From the complete guide to Smart Home, Smart Environments and Smart Vehicle solutions to an analysis of the technology which brings it all together, this course is the ultimate introductory guide to IoT.

### **Learning Outcomes**

- A full definition of IoT and the different devices involved
- A comprehensive guide to Home Automation (Smart Home) solutions
- Practical applications of IoT, including Smart Environments and Vehicles
- The various technologies used to enable IoT devices and objects

## **4. Web Application**



(15 hours)

This comprehensive course, covering the whole spectrum of web applications will equip you with all of the skills that you need, in order to start effectively working with such programmes.

If you employ staff members who deal with the IT elements of your business from a web perspective, this course will provide them with a thorough overview of the main technologies of HTML, JavaScript and PHP, to name but a few, as well as how to effectively develop and maintain web application.

This knowledge will enable your business to perform competitively in this fast-moving market.

### **Learning Outcomes**

As the content of this course is structured in modules, it allows learners to benefit from a wealth of information about web applications. The key areas that are covered are as follows:

- Definitions of web applications, including how they integrate with browsers and servers and some of the key web application methodologies and how they are used;
- How to structure a web app project, including identifying the features and technical processes that are required and how to clearly define and plan the scope of the apps;
- JavaScript frameworks and how to use them, as well as details of the most cutting edge technologies in the web application field;
- How to use front end and back end coding;
- The differences and uses of User Interfaces, User Experiences and Material Designs and how to effectively use them;
- What relational and non-relational databases are, how they are used and why they are important.

## **5. Website Development Foundations**

(12 hours)

This stimulating and informative course is perfect if you have responsibility for your company website and are looking to take the next step in their career. It is equally useful if you are a new team member starting out in these fields and are looking to expand your knowledge and skills.

Web development is regarded as a fast-growing field, and this is only likely to increase, as more and more businesses rely on their web presence, in order to attract and retain customers.

Therefore, ensuring that team members who have responsibility for web development are knowledgeable in the most up-to-date processes and technologies is a vital consideration for your business.

### **Learning Outcomes**

The following is covered in detail, plus much more:

- A history and overview of the internet – how it was developed and how its use has changed and evolved to the key importance that it has in today’s business world;
- A useful guide to the terminology and language used in this field, such as client-side, server-side and types of coding;
- An easy-to-follow guide to setting up a basic web page and creating a simple HTML document, plus how to effectively use HTML, when designing different parts of a web page;
- How to format and design a web page, in the most attractive and eye-catching fashion, including using styling code in internal and external style sheets, using CSS;
- The key importance of coding in web design and development - specifically, the CSS Box Model, the HTML DOM model and JavaScript’s Object Orientation are covered in detail;
- Great tips on how to effectively implement JavaScript code with HTML documents, to add interest to web pages

## 6. WordPress

For businesses with employees who are responsible for setting up and maintaining the company’s websites, this comprehensive WordPress Certification could be the ideal course in which to help them build upon their existing knowledge and learn new skills in the area.

The 30 engaging and interactive course modules provide learners with everything that they need, in order to effectively use the key functions of WordPress. What’s more, it’s easy for team members to study at their own pace and around their existing work commitments.

### Learning Outcomes

In this course, enrolled staff will learn about the following areas:

- The main features and functions of WordPress and handy tips on how to use the WordPress site, including using the Settings and Updates fields and creating Menus;
- Ways in which to write, publish and manage/maintain both new posts and new pages of the website, plus adding media, content and headings to them;
- How to clearly and concisely organise a website, by using categories and tags, in the best possible way for the user;
- Website themes, including how to format text, insert links and tables and manage these themes, in order to keep the website fresh and up-to-date;
- How to get the most out of the Media Centre and how images and videos can add interest to the existing content of your website;
- What widgets and plugins are and how to customise them on your website;
- Working with website permissions on a WordPress site;
- How to get the best from user contact forms and comments on the site, for an enriched user experience.

## Programming Skillsets

### 7. Coding Foundations

(12 hours)

The ability to code is one of the most sought-after skills in today's competitive job markets. Whether you have team members who are already in the field and are looking to advance their position or outsiders who would like to get their foot in the door, understanding the basics of coding is a must.

This interesting 10 module course will teach your team members everything that they need to know, in order to get started writing simple code. Over the course of 12 hours, they'll learn the history of coding, the importance of mathematics in the field and how to code in some of the most well-known and commonly used languages.

#### Learning Outcomes

In this course, learners will learn about:

- The roles that ciphers and cryptography played in the development of modern day coding;
- The concepts and terminology that are essential, in order to write proper code;
- The role that mathematics plays in coding and the basics of binary;
- In the context of coding, your team member will learn what the basics of variables are, why they're so important and how to use them;
- The different types of data that exist and the various ways in which they're used;
- How to limit the time spent on and increase the quality of your code, by using built-in functions;
- The proper way to organise your programme and why it's important to do so;
- The basics of Object-orientated Programming and the 4 principles that define it;
- Why it is so important to use code.

### 8. C++ Certification Level 1

(1 hour)

As a reliable and fundamental programming language, C++ code can be used to programme several apps, games and software. Newer versions of C++ have been cleared of earlier issues, and it is considered a highly portable programming language.

If you're interested in developing your own apps, it's a significant advantage to be familiar with C++. Many top-rated apps and games in the world use its features. Using the vast library of code, you can build an app or game prototype right from scratch.

This video course on C++ will cover the following topics:

- How to run the text editor, prior to running your C++ code, and why it's important;
- The best browser to use for learning and running C++ code;
- How to create 'cout' statements and titles for your code;
- How to interpret error messages, and how to avoid common errors in syntax, etc.;
- How to call codes one after the other, and how to show separate pieces of code with the correct syntax;
- How to write integer and other types of variables and use indentation for improved readability of code;
- An introduction to passing variables to function codes and use if, else statements and operators in your code.

## **9. Java Certification Level 1**

(3 hours)

A lot of programming uses Java. It was created with efficiency and uniformity in mind. The goal was to create a program with greater capabilities than C/C++ but with more simplicity. In this Java Programming for Beginners course you will learn the basics of programming using the Java language as well as many of the benefits that will pave the way for efficient programming.

Smartphones, parking key fobs, security badges and using a device to unlock a car door are some of the daily items that have been programmed to perform in a certain way. Understanding how to program, can be an amazing asset and while there are many different languages, none is quite as easy to learn as Java.

### **Learning Outcomes**

- How to set up a computer for Java programming and learn about pre-installed programs
- Learn about the 'modulus operator' and what it means
- How to identify a comment line and what the purpose of a comment is in a program
- Learn about the length method
- Learn about data structures
- Learn about class-object relationship and start learning about object-oriented programming in Java
- Learn about Booleans and what purpose they serve

## **10. jQuery Certification Level 1**



(1.25 hours)

JQuery is a subset of Javascript.

It's always nice to find something that can make life a bit simpler, without having to compromise on quality. In web programming, JQuery is a platform that makes the web design world a bit simpler. JQuery, does what Javascript does, but with less amount of work - or coding. Additionally, JQuery simplifies a lot of the complicated elements of Javascript with an API that is easy to use. To put it into perspective, one line of JQuery can sometimes equal 10-15 lines of Javascript code. JQuery also allows for a lot of creative flexibility, such as adding animated effects, creating image slideshows, and adding dropdown menus, to name just a few. In this course, you will learn the basics of JQuery coding and some of the main features that set JQuery apart from other similar coding libraries.

### Learning Outcomes

- The difference between JQuery and Javascript
- How to add a coding library
- How to incorporate various tag functionalities, such as fading in and out and the hide and show feature.
- Understand the difference between the 'id' and 'class' tag groups
- Understand how to code and identify the use of buttons on a page
- How to properly toggle in web programming

## **11. Python certification Level 1**

(5.0 hours)

This course is going to teach you the fastest, easiest and most comprehensive experience in learning basic Python. For those interested in computer programming, the Python language is a great option particularly because of its extensive support libraries. Additionally, the program provides a lot of learning ease and support. Python was created in the early 90s to code with greater uniformity, but with more simplicity than Java. Considered to be a 'fun' language, Python can be an interesting program, particularly for those who are creative, as it offers many dynamic features. Software development companies prefer to work with the Python language because of its versatility. Let's have a look at what this course will cover and what the many benefits are:

### Learning Outcomes

- How to write a code in Python
- Understand the Python Shell window and how to use it in 'interactive' mode
- The various functionalities
- How to write a formal program using IDLE
- The benefit of documentation and why it is vital to do so when coding
- How to use the editing platform's guidelines when writing a program
- How to print using every form of data



- About additional editing features such as indenting a region
- Understand the various variables and how the Python language uses them
- More escape functions (\n, \t) used for formatting strings
- About 'if' statements or conditionals to determine program flow
- About Python logical operators and how they work together with variables to complete and solve expressions
- About four loops and nested loops and the differences in their functionality
- About complex data structures and tuples
- How to use python

## Security Skillsets

### **12. IT Security**

(3 hours)

Understanding IT Security is vital for everyone involved in the modern workplace, whether in an administrative or end-user capacity. This course provides a comprehensive insight into every aspect of IT Security, including the history and background of security threats as well as the core objectives of IT protection. From the very real consequences of vulnerability to how to practically ensure a secure Information Technology infrastructure, this course covers every aspect all role players must know.

#### **Learning Outcomes**

- A comprehensive definition and history of IT Security
- The current objectives of IT Security and how to implement them
- All about the specific safety threats and the impact they have
- How to ensure IT safety as both an end-user and administrator
- The importance of assessing IT security vulnerability and how to avoid it

### **13. Mobile & Portable Device Security**

(3 hours)

An understanding of mobile and portable device security is vital for everyone at home and in the modern workplace, whether in an administrative or end-user capacity.

This course provides a comprehensive insight into every aspect of mobile and portable device security, including the history and background of security threats as well as the definition of the devices and threats involved.

From the very real consequences of vulnerability to how to practically ensure a secure mobile device, this course covers every aspect all role players must know.

### Learning Outcomes

- A comprehensive definition and history of mobile and portable device security
- A broad insight into the nature and function of each device as it pertains to security
- All about the specific safety threats and the impact they have
- How to ensure mobile safety in both a personal and professional context
- The importance of understanding security vulnerability and how to avoid it

## **14. Online Security**

(6 hours)

This course is beneficial to employees who handle company data but also to any employee who needs to learn the basics of internet security. The course is also a good basis as an introduction, in the case of the company having identified an employee to train, to take over online security for the whole system.

For smaller businesses and organisations that do not have a dedicated IT department, measures need to be in place, to ensure online security.

Cyber threats are not just aimed at big businesses. Any device connected to the internet is at risk of being hacked or infected with a virus or ransomware. Online security is not a one-off issue, in that, once you set up controls and safeguards, you can forget it. As technology becomes more and more sophisticated, so do those who look to abuse it. Keeping a company's sensitive information secure is essential.

### Learning Outcomes

Here is a list of the main topics that your team members will cover during this course:

- A comprehensive introduction to online security - what it is and what it entails;
- The duties and responsibilities of cyber security staff;
- An understanding of why online security is needed and for whom it is important;
- Online security, as it pertains to e-mail history, passwords and account security;
- The most important terms, definitions and concepts that are involved with online security;
- What is spam and the best ways in which to deal with all types of it;
- The most effective ways in which to prevent e-mail addresses from being shared with those who won't use them properly;
- The skills and tools needed, in order to protect all kinds of networks, as well as those needed to protect personal information;
- All aspects of security maintenance and how to protect social media security;

- How to efficiently and effectively deal with online security disasters.

## Network and Help Desk Skillsets

### 15. Computer Maintenance

(0.75 hours)

Learning about computer maintenance is vital for everyone looking to improve the functionality and lifespan of their most important investment - their computer.

Whether at home or at work, your computer is a vital piece of equipment which needs to be maintained.

This course provides a comprehensive guide to maintaining your computer in every possible way, including both the external factors as well as the system and software components.

From how to avoid common problems such as overheating and physical damage, to ways to clean up your system and allow your computer to run faster and more effectively, this course covers everything you need to know about computer maintenance.

#### Learning Outcomes

- How to avoid environmental damage by storing your computer safely
- Tips to avoid damaging your computer with everyday use
- Avoiding viruses and keeping your computer system healthy
- How to improve functionality by cleaning up your system

### 16. HTML 5 Certification Level 2

(4 hours)

Learning HTML5 can be an extremely useful thing for your job or business prospects. While some may like to learn HTML5 for developing their own web applications, others may like to improve their job prospects by adding a valuable skill set. If you're planning to become a fully-fledged web developer, becoming proficient at HTML5 can help provide support for more advanced forms of coding. This video course is designed to be fun as well as challenging.

#### Learning Outcomes

- A run through and revision of basic HTML rules for code and syntax, text editor and recommended browsers

- How to create and use different tags, elements and empty tags along with the functions of each
- How to create paragraphs, type text and indent lines for improved formatting on your website
- How to create formatted text, headings and different levels of headings
- How to use tags to create lists, arrays, quotations and citations
- How to use HTML5 code to create CVs, external and internal links and create attributes
- How to use HTML code to link webpages and also share resources with website visitors
- How to include different types of digital content including audio, video, animation and so on (Rich Internet Applications)
- How to create attractive, aesthetic and functional data tables with height, width, border adjustments
- How to create functional, efficient webpages with radio-buttons, checkboxes and work with numerical and date inputs
- Familiarity with concepts such as search engine readiness, sourcing code from external libraries, APIs
- Practice lab sessions where you can test your skills from the tutorials

## **17. IT Certification Level 2**

(0.75 hours)

Learning IT Level 2 is essential for everyone looking to improve their productivity and efficiency when working with spreadsheets, word processing and presentation software - whether you are looking to improve your skill sets and potential at your place of work or are simply looking to improve your capabilities for home use.

This course provides a comprehensive guide to using word processing, spreadsheets and presentation software in the most professional and effective way possible.

From how to align, space and organise Word documents and effective Excel formatting skills, to creating the most professional presentations in programs like PowerPoint, this course covers everything you need to know about IT Level 2!

### **Learning Outcomes**

- How to format, align and use different font styles in word processing software
- How to manage and format your spreadsheet data effectively
- The science of sorting and filtering data to improve the functionality of your spreadsheets
- How to create and format professional presentations and include elements such as imagery, graphs and audio