Diploma in Engineering & Structured Cabling

With the rapid growth and advancement in the field of computers and information technology, the need for skilled personnel in computer repair, data recovery and structured cabling is rising across all industries.

Why does the course exists – This course provide candidates with a broad view of PC Repair and also focusing on other essential topics like data recovery, wireless technology and structured cabling. Every organisation require computers, be it health, tourism, government agencies, education, airline, banking etc. They all need network cabling for computers to be connected, data is likely to crash and computers will fail.

How it fits into the larger programme – Computer repair, wireless technology, data recovery and structured cabling training are essential skills for those interested in working with information systems, desktop support, and improving efficiency over a network or organisation. These skills are rare, hence chances of getting employment are high.

For whom it was designed – The course is designed for those who complete the Certificate in Networking or holders of equivalent qualifications interested in pursing vital new networking technology implementation.

How it will benefit candidates – Job options and career opportunities for technicians look promising as demand for highly trained professionals in the field is increasing with the growth of new technologies, software programs, and electronic devices, besides; every organisation use computers. As more companies become technologically advanced, the need for well-trained technicians and professionals is a necessary outcome.

Subjects:
- PC Engineering
- Data Recovery & System Diagnostics
- Structured Cabling
- Wireless Networking
- Computer Security

PC Engineering – A computer has many parts and sometimes these parts malfunction. Some of the major parts include memory, hard drive, CPU and motherboard. Computer technology changes rapidly, hence PCs are frequently upgraded with newer technology.

Data Recovery & System Configuration- data recovery is the retrieval of inaccessible or contaminated data from media that has been damaged in some way. There are several causes of data loss: data loss can occur from unexpected incidences including national tragedies such as floods and earthquakes; often power failure can cause loss of data from hard drives. Sudden power surges can also cause a lot of damage to a computer's hard drive; accidentally deleting a file or

formatting a hard drive or floppy disk is a common reason for data loss. Recovering the data involves locating it and transforming it into human readable form, though not all data may be recoverable.

Structured Cabling - is a system that provides a very "structured" approach to the entire cabling system—a single-mixed media network that handles all information traffic like voice, data, video, and even big complex building management systems. In brief, it could be described as a system that comprises a set of transmission products, applied with engineering design rules that allow the user to apply voice, data, and signals in a manner that maximizes data rates. Structured cabling divides the entire infrastructure into manageable blocks and then integrates these blocks to produce the high-performance networks that we have now come to rely on.

Wireless Networking - a more modern alternative to wired networking that relies on copper and/or fiber optic cabling between network devices. A wireless network offers advantages and disadvantages compared to a wired network. Advantages of wireless include mobility and elimination of unsightly cables. Disadvantages of wireless include the potential for radio interference due to weather, other wireless devices, or obstructions like walls. Wireless is rapidly gaining in popularity for both home and business networking. Wireless technology continues to improve, and the cost of wireless products continue to decrease. Popular wireless local area networking (WLAN) products conform to the 802.11 "Wi-Fi" standards.

Computer Security – The Certificate in Networking (Network Security) look at Network Security. As we know in life, mostly, perpetrators are closer to home than one might think – making Computer Security an important topic. If one can not secure their computer, where a few people have access; then implementing network security would be impossible.