Pre-Graduate Programme in Networking

1. Why study this programme

This is a focused programme of study involving advanced networking and software development technologies and architectures, for the design and management of modern distributed computer systems and networks. The programme aims to provide graduates, with the deep knowledge, skills and understanding required to allow them to contribute to the planning, design and Management of modern network based computer systems. Students will gain the understanding of current technologies and

Architectures necessary for the network and communications infrastructure of enterprise computer systems. Students will gain the necessary skills to develop and design modern distributed software systems using appropriate technologies, architectures and techniques e.g. distributed component technologies, web applications technologies, web-enabled distributed databases, e-commerce, data warehousing and data mining. They will understand the advanced network technologies supporting the upper layers, together with their planning, management and security.

The contents of this programme are benchmarked with University of Greenwich and same as the second year courses of BSc (Hons) Computer Systems and Networking.

2. What will you study?

On this programme students

- Demonstrate an understanding of network management issues and standards. They will also understand the capabilities

And benefits of automated network management

- Understand the installation costs and runtime overheads of network management
- Demonstrate a clear understanding of network performance and reliability and be able to relate these aspects to network management (how network management facilitates the achievement of these)
- Be able to design a network from analysis of user requirements to selection of equipment, configuration, implementation; and be able to relate aspects of the design to network management (ensuring that the design is manageable – use of managed devices, budgeting for the additional cost of network management etc)

- Understand routing concepts, strategy, algorithms, and protocols. Be able to differentiate between various routing protocols, identifying their features and their relative benefits and drawbacks. Be able to configure routers
- Configure routers for network management (specifically includes setting up the SNMP agent).
- Understand the security needs of networks, users and applications
- Show an understanding of algorithms and procedures: encryption, keys, digital signatures and certificates; strengths and weaknesses Show an awareness of the methodologies and software tools typically used by hackers
- Identify the relevant laws which apply to the security of information systems.

Couse Modules

- Unit1:Network Implementation
- Unit 2: Network Technology
- Unit 3: Embedded System Programming
- Unit 4: Web Application Development

Entry Requirements

Applicants should have:

- Diploma in Network Engineering with a minimum duration of 1 years from a Recognized institution and 2/3 years experience.
- Diploma in Network Engineering with a minimum duration of 1 years from a Recognized institution and 2/3 years experience and CCNA, CCNP, MCTS / MCITP/ MCSE/ MCTS / MCITP qualifications.
- CCNA, CCNP, MCTS / MCITP/ MCSE/ MCTS / MCITP qualifications and 3 years related industrial experience
- A selection Test to assess the knowledge level and an Interview by academic panel.

"Success is define by the choices you make"