

# TFG Technology-Fort Gordon

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## **TFG 7531 Telecommunication Systems**

**3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.**

This course will provide students the ability to design a secure voice and data network for subscribers. A systems approach will be used to study telecommunications networks for the understanding of the function of individual components and subsystems. Attention will be given to the theory of different existing and emerging technologies. Students will receive an overview of public and private telecommunications systems, fundamentals of traffic engineering, switching, transmission, and signaling. Emphasis will be placed on the function of discrete components as well as complete systems.

## **TFG 7532 Network Operations and Management**

**3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.**

This course examines the management tools and software applications needed to manage the variety of local and wide area networks. The course will address data communication devices, telecommunication devices, simple network management protocol, remote monitoring, telecommunication management, and network operation and security.

## **TFG 7533 Network Security**

**3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.**

This course provides an in-depth study of network Security. Students will gain a respect for the threats and vulnerabilities facing U.S. voice and data networks and learn how networks are protected through organizational policy, software application, methodologies, and equipment. Topics discussed are: cryptography, Public Key Infrastructure (PKI), Internet Protocol Security (IPSEC), IP and bulk encryption, firewalls, intrusion detection systems, Certification and accreditation processes.

## **TFG 7534 Network Design**

**3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.**

This course examines a structured, systematic, top-down process to design telecommunications networks. Some specific objectives are: students will understand the structured network design process, the logical and physical design process for access, distribution and core networks and the planning processes for host/network security and management.