Link to Everything:

<https://github.com/JosRami/UAT-Degree-Objective-Projects>

Network Engineering Objectives:

**1. Translate physical and organizational needs into network design(s) that fully address and support logical, physical, and/or virtualized operational requirements.**

NTW216 Active Directory Diagram

NTW270 Customer Request Diagram

**2. Implement, support, and evaluate network services (active directory, email, DNS, servers, clients and data storage), routed and switched network infrastructures (wired and wireless) that incorporate networking concepts and industry best practices.**

NTW216 Active Directory Diagram

NTW270 Customer Request Diagram

**3. Design network architectures that incorporate emerging networking technologies.**

NTW275 Network Improvements

NTW270 Customer Request Diagram

**4. Produce professional and accurate visualizations and documentation related to network architecture and services.**

NTW216 Active Directory Diagram

NTW270 Customer Request Diagram

**5. Given cost and operational parameters, design network, hardware and system options with evaluations and recommendations of how they meet the requirements of specific projects.**

NTW270 Customer Request Diagram

NTW275 Network Improvements

**6. Design and implement a secure network infrastructure using industry best practices.**

NTW275 Network Improvements

NTS435 IDPS Integrations

Network Security Objectives:

**1. Create a network infrastructure design communications document that includes identified hardware components, connections to outside world, identified physical layer connectivity (media) and addressing, including operational and security components in the design.**

NTW275 Network Improvements

NTS435 IDPS Integrations

**2. Install, configure and test security hardware and software tools with supporting documentation such as port scanners, vulnerability detection systems, intrusion detection systems, firewalls, system hardening, anti-virus tools, patch management, auditing and assessment.**

NTW330 Scanning and Enumerating

NTW275 SOP 03 SEC NAT Policy

**3. Construct, implement and document a script or a program to automate a security related process or other tasks such as installation, administration, management, mapping resources, logon scripts, patch management, updates, auditing, analysis and assessment.**

NoPingPlease – Python Script

CreateFirewallRule – Powershell Script

**4. Create a policy or procedure that addresses events such as: a disaster recovery plan, a business continuity plan, an incident response policy, an acceptable usage document, an information security policy, a physical security policy, assessments or troubleshooting procedures.**

NTW440 BCP (Team CLP)

NTS405 BCDR, Incident Response, Computer Forensics and Crisis Management

**5. Develop a research report or implementation plan concerning legal and ethical best practices and mandated requirements that pertain to information security.**

NTS435 IDPS Integration (SP800)

NTW275 NIST-AC-17-and-RA-5-Summary-and-Examples

**6. Research, document, test and evaluate several current industry information security-based threats, risks, malicious activities, covert methodology, encryption technologies, mitigation techniques or unconventional tactics to prevent loss of sensitive information and data confidentiality, integrity and availability.**

NTS330 Exploit Research Presentation

NTS350 Exploited!!