

**J. Sargeant Reynolds Community College  
Course Content Summary**

**Course Prefix and Number:** ITN 255

**Credits:** 4

**Course Title:** Virtual Infrastructure: Deployment, Security and Analysis

**Course Description:**

Focuses on the deployment, security, and analysis of the virtual infrastructure, including scripted installations, advanced virtual switching for security, server monitoring for health and resource management, high-availability management, system backups, and fault analysis. Prerequisite: ITN 254. Lecture 3 hours. Laboratory 2 hours. Total 5 hours per week.

**General Course Purpose:**

Prepares students to configure, manage, monitor, and perform system backups in a virtual infrastructure. Can lead to industry certification.

**Course Prerequisites/Co-requisites:**

ITN 254 Virtual Infrastructure: Installation and Configuration

**Course Objectives:**

Upon completing the course, the student will be able to:

1. Install a virtual environment.
2. Develop scripts to manage a virtual infrastructure.
3. Configure virtual switching.
4. Monitor a virtual environment.
5. Configure and manage high-availability resources.
6. Troubleshoot virtual environment.

**Major Topics to be Included:**

1. Virtual Infrastructure
2. Scripts
3. Virtual Switching
4. Server Monitoring
5. High Availability Management
6. Scalability
7. Troubleshooting

**Effective Date of Course Content Summary:** August 2012