

Module Introduction

Course Code: ELE1157

Course Name: Network Routing Management

Credits: 15

Module Leader: Seb Blair BEng(H) PGCAP MIET MIHEEM FHEA

Module Aims

To develop [your] knowledge of the protocols used in both large organizations and in internetworking; to enable [you] to appreciate the issues that need to be addressed in the development and management of a large computer network system; to equip [you] with practical router-configuration skills and use appropriate tools to analyse networking protocols and knowledge to design and implement the repair; to allow for critical reflection upon the technologies used in LANs and their social consequences.

Module Learning Outcomes

On successful completion of this module a student will be able to:

- [1] Create policies for and configure appropriate routing protocols in a large network.
- [2] Analyse and solve problems involving the applications and configuration of hardware and software components of a communications network.
- [3] Compare and contrast in practical design and implementation of LANs within given parameters and have the ability to choose the appropriate technology for a given situation.
- [4] Apply diagnostic tools and configure a network to specific design specifications to support a wide range of networked environments.

Indicative Content

- Routing protocols and their configuration: Using various routing protocols such as RIPv2, EIGRP, Single and Multi-area OSPF.
- Remote access technologies: using various technologies such as MODEM, XDSL, and other Broadband.
- Network problems and troubleshooting methodologies.

Assessments

1. Nature of FORMATIVE assessment supporting student learning: Coursework.

- LO: 1-4.
- Grading Mode: Numeric.
- Pass Mark: 30%.

2. Examination (Practical) - 40%

- LO: 1-4.
- Grading Mode: Numeric.
- Pass Mark: 30%.
- Practical based exam, a crib sheet is recommended.