### **Important Information**



## Course Description

This course aims to provide a broad introduction to the fundamentals of data communication and network technology. The emphasis is on data communication from the perspective of computer scientists and information technologists. The course covers the underlying mechanisms and their characteristics that need to be considered by communicating application software.

# Topics include:

- principles and reference models of data communication,
- basic operation of communication systems,
- protocols, error handling and applications in networked environments.



Pre-requisites, Co-requisites and Assumed Knowledge

None



### **Capabilities**

#### **Program Learning Outcomes**

This course contributes to the program learning outcomes for the following program(s):

**BP355 - Bachelor of Cyber Security** 

**BP356 - Bachelor of Cyber Security (Professional)** 

Major - Cyber Security

- BP094P23 Bachelor of Computer Science
- BP340P23 Bachelor of Data Science
- BP347 Bachelor of Computer Science (Professional)
- BP348 Bachelor of Data Science (Professional)
- BP162P23 Bachelor of Information Technology
- BP349 Bachelor of Information Technology (Professional)

PLO 1 Knowledge - Apply a broad and coherent set of knowledge and skills for developing user-centric information technology solutions for contemporary societal challenges.

PLO 2 Problem Solving - Apply systematic problem solving and decision-making methodologies to identify, design and implement information technology solutions to real world problems, demonstrating the ability to work independently to self-manage processes and projects.

PLO 3 Cognitive and Technical Skill - Critically analyse and evaluate user requirements and