

Telecommunication Engineering

ECE 4107



Introduction

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Lecturer

Electronics and Communication Engineering

Discipline

Khulna University

Khulna-9208



References

- ❖ Telecommunication Switching Systems and Networks
 - Thiagarajan Viswanathan
- ❖ Telecommunications and the Computer
 - James Martin
- ❖ Telecommunications Principles Circuits Systems and Experiments
 - S. Ramabhadran
- ❖ Internet Articles
- ❖ Research Papers

Syllabus for ECE 4107 (Section A*)

- ❖ **Introduction:** Principle, evolution and telecommunication networks, National and International regulatory bodies. Basic elements of telecommunication, message source and bandwidth.
- ❖ **Transmission medium and impairments:** Twisted pair cable, coaxial cable, wireless channel and electromagnetic spectrum, satellite channel and fibre optic cable, transmission impairment, noise and noise to signal ratio, transmission capacity.
- ❖ Analogue and digital transmission, telephone apparatus, telephone exchanges, subscriber loop, supervisory tones, PSTN.
- ❖ **Switching systems:** Introduction to analogue system, strowger and crossbar switching system, stored program controlled system (SPC), Digital switching system, space division switching, time division switching. Traffic analysis, traffic characterization, grade of service, network blocking probabilities, delay system and queuing.

Course Contents

❖ <https://sites.google.com/site/mamuns30/home/course-contents?authuser=0>



*Thank
you
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