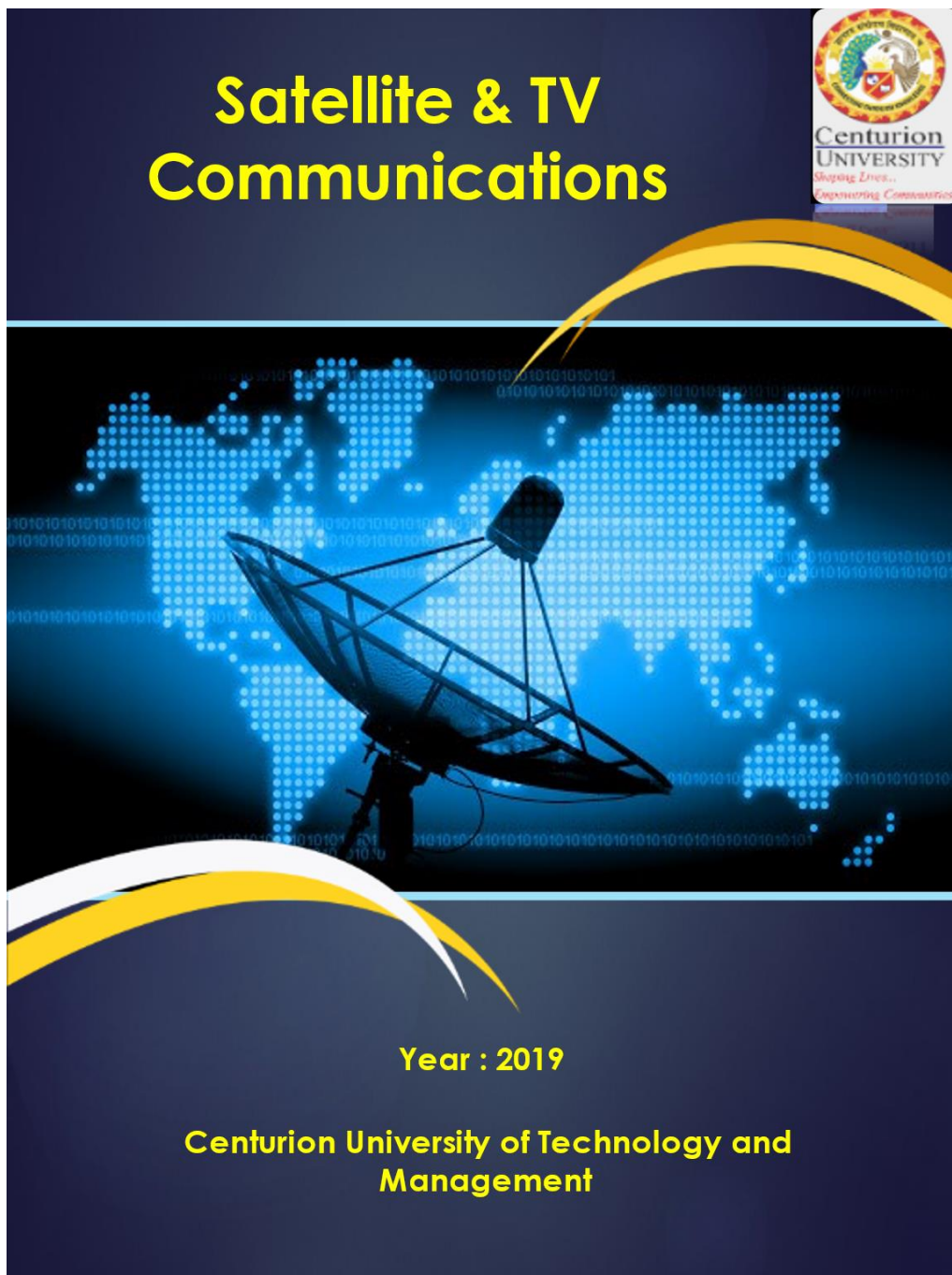


Satellite & TV Communications

Year:2019-20

Event Description:

This Satellite & TV Communication webinar was organized on the year of 2019-20 By Centurion University of Technology and Management





Pre-requisites: Nil
 Course Type : Audit
 (Workshop)
 Duration : 30 Hours

Course Objectives:

- Develop the skills required to design a next generation wireless networks
- To involve the students in the theory and practice of wireless communications

Learning Outcomes:

- Various Communications available and its challenges in modern era

Module	Contents	Duration
Module-1	<ul style="list-style-type: none"> • Configuration of a satellite communications system • Types of orbit • Radio regulations • Keplerian orbits • Useful orbits for satellite communication • Perturbations of orbits • Digital video broadcasting via satellite (DVB-S) 	10 hours
Module-2	<ul style="list-style-type: none"> • Second generation DVB-S • Digital transmission of telephony • Digital broadcasting of television • Configuration of a link • Uplink received power • Downlink received power • Additional losses • Noise power spectral density at the receiver input 	10 hours
Module-3	<ul style="list-style-type: none"> • Individual link performance • Influence of the atmosphere • Mitigation of atmospheric impairments • Overall link performance with transparent satellite • Overall link performance with regenerative satellite 	10 hours
TOTAL		30 hours

Anita Patra



Dr. Anita Patra, Registrar, CUTM

(Signature)



Convener



Report on Satellite & TV Communications

Total number of participants: 60

Academic year: 2018-19

Date:06.11.2019

Many undergraduate programs in electrical and computer engineering require a course in linear systems, signal processing, or communications. While students recognise the importance of developing a deeper understanding of the fundamental concepts, they find the content of these courses mathematical and harder to grasp. Without compromising the rigor of the required concepts, we strived to make the course fun, with application based hands-on laboratory projects. We describe two third-year level laboratory projects used in a linear systems and signal processing course. These projects can be used in communication, computer networks, and information systems courses. One project addresses topic in satellite communications and the other covers data communications.

The participants were asked to understand the concept of developing the skills required to design a next generation wireless network and to involve the students in the theory and practice of wireless communications. Furthermore, the participants were briefed on the various Communications available and its challenges in the modern era.

Aim & Objective

1. To understand the basics of satellite orbits.
2. To analyse the geo stationary and non geo stationary orbits.
3. To acquire the knowledge about launching procedures.



Satellite and TV Communication on 06.11.2019

The followings were points of discussion in the programme

- Configuration of a satellite communications system
- Types of orbits
- Radio regulations
- Keplerian orbits
- Useful orbits for satellite communication
- Perturbations of orbits
- Digital video broadcasting via satellite (DVB-S)
- Second generation DVB-S
- Digital transmission of telephony
- Digital broadcasting of television
- Configuration of a link
- Uplink received power
- Downlink received power
- Additional losses

- Noise power spectral density at the receiver input
- Individual link performance
- Influence of the atmosphere
- Mitigation of atmospheric impairments
- Overall link performance with transparent satellite
- Overall link performance with regenerative satellite

Anita Patra



Dr. Anita Patra, Registrar, CUTM

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Convener



List of Participants Satellite & TV Communications

Organized by: Centurion University of Technology and Management

Date: 06 November 2019

Event Description:

This Satellite & TV Communication webinar was organized in the year of 2019 By Centurion University of Technology and Management

List of Participants:

S.No.	Name	Reg. No.	Presence/Absent
1	ALOK KIRAN PANIGRAHY	180301130001	Present
2	VIJAY KUMAR MAHTO	180301130002	Present
3	ANAND KUMAR TIWARI	180301130003	Present
4	MANGALDEEP CHAKRABORTY	180301130004	Present
5	SUBHANGI PATRO	180301130005	Present
6	SANDEEP PRADHAN	180301130006	Present
7	SATYABRATA DASH	180301130007	Present
8	NILESH KUMAR	180301130008	Present
9	SAUBHAGYA MALLICK	180301130009	Present
10	RAHUL KUMAR	180301131010	Present
11	DEBASHIS MAHANTY	190301130001	Present
12	DEEPAK KUMAR SINGH	190301130002	Present
13	MD AZAM ANSARI	190301130003	Present
14	ASHISH KUMAR	190301130004	Present
15	BINIT KUMAR RAM	190301130005	Present
16	M.KISAN KUMAR	190301130006	Present
17	MD TABISH	190301130007	Present
18	HARSH B DHAWALIA	190301130008	Present
19	GOURI SANKAR JENA	190301130009	Present
20	KIRTI RANJAN SWAIN	190301130010	Present

Anita Patra



Dr. Anita Patra, Registrar, CUTM

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