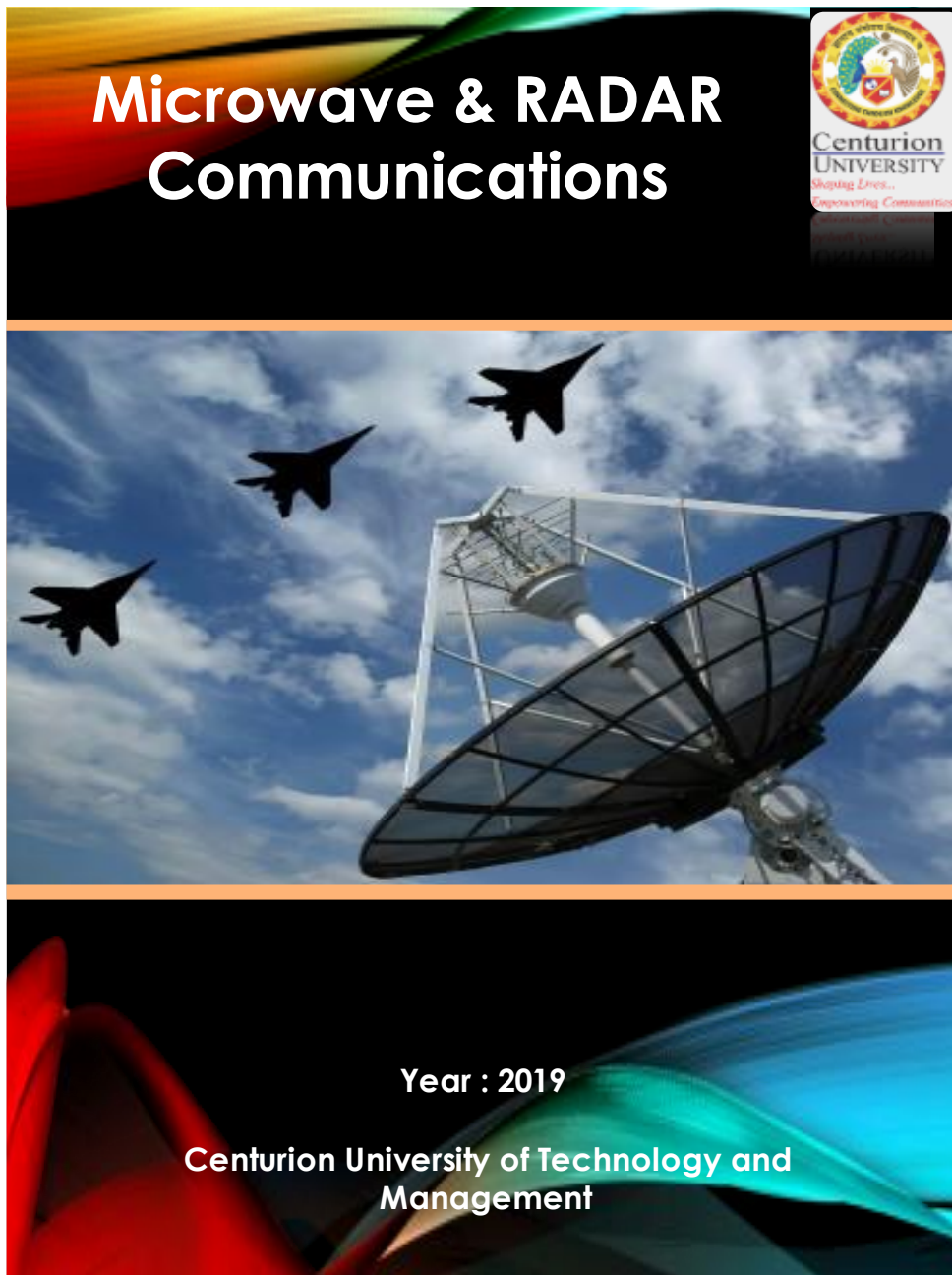


Microwave & RADAR Communications

Year:2019-20

Event Description:

This Microwave & RADAR Communication webinar was organized on the year of 2019-20.
By Centurion University of Technology and Management





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

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

Module	Contents	Duration
Module-1	<ul style="list-style-type: none"> • Introduction to Microwaves: Microwave frequencies • Scattering matrix formulation • Passive microwave devices • Active Microwave Devices • Study of field pattern of various modes inside a rectangular waveguide • Microwave Measurements • Transit time limitations in Microwave Bipolar Transistors • Power frequency limitations Microwave Field Effect Transistors 	10 hours
Module-2	<ul style="list-style-type: none"> • Gunn Effect • IMPATT diodes • TRAPATT diodes • Microwave vacuum tube based devices • Limitations of conventional tubes at UHF • Microwave Klystron • Reflex klystron, • Traveling wave tube • Magnetron • Introduction to Smith chart and its application for the unknown impedance measurement 	10 hours
Module-3	<ul style="list-style-type: none"> • Scattering Matrix Parameters • Introduction to radar and RADAR Parameters • MTI RADAR • FM CW RADAR • Tracking RADAR • Monopulse RADAR • RADAR Receiver 	10 hours
TOTAL		30 hours

Anita Patra



Dr. Anita Patra, Registrar, CUTM



Convener



Report on Microwave & RADAR Communications

Total number of participants: 59

Academic year: 2018-19

Date:12.11.2019

Microwave & Radar Engineering provides a theoretical basis from which the design, construction, and operation of satellite and cellular radio communications can be understood.

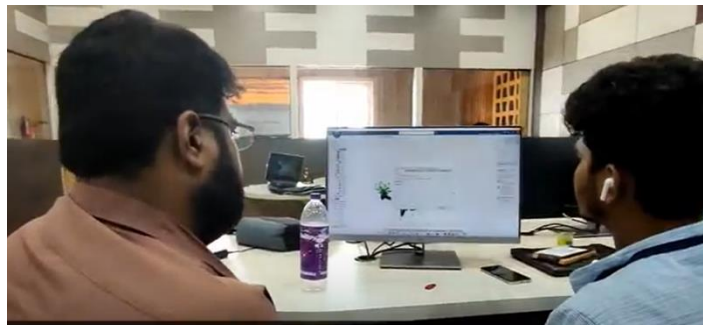
The Microwave & Radar Engineering course provides depth for further research as well as knowledge and skills for employment in RF and Microwave Engineering and related fields in Communication Engineering. The Master of Engineering course in Microwave & Radar Engineering is career-orienting in nature that provides many opportunities after its completion both in private and government fields.

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.

The following major areas were covered in the programme:

- Introduction to Microwaves: Microwave frequencies
- Scattering matrix formulation
- Passive microwave devices
- Active Microwave Devices
- Gunn Effect
- IMPATT diodes

- TRAPATT diodes
- Microwave vacuum tube-based devices
- Limitations of conventional tubes at UHF
- Microwave Klystron
- Scattering Matrix Parameters
- Introduction to radar and RADAR Parameters
- MTI RADAR
- FMCW RADAR
- Tracking RADAR
- Mono pulse RADAR
- RADAR Receiver



Learning on radar Communication on 12.11.2019

M.E (Microwave & Radar Engineering) Course Suitability

- The course is suitable for those who have an intention to promote and engender a positive interest in current practice and through the dissertation an understanding of research methods.
- It helps those who want to develop the expertise to meet the increasing demands of the new technologies in Radio Frequency (RF) and Microwave Engineering.
- Candidates must be intelligent, brave, level-headed, and eager to learn as per the situation.

How is the M.E (Microwave & Radar Engineering) Course Beneficial?

- The program develops an ability to interpret user requirements and component specifications, to engineer effective designs within the constraints imposed by the available resources and the fundamental physical limits.
- The course helps to prepare students for careers in fields such as telecommunications networks, fibre optics, and robotics.
- After passing the course, candidates have good scope for further higher research studies.

Anita Patra

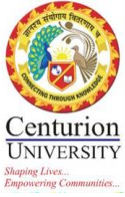


Dr. Anita Patra, Registrar, CUTM

A handwritten signature in blue ink, appearing to read "H. Chandra".



Convener



List of Participants Microwave & RADAR Communications

Organized by: Centurion University of Technology and Management

Date: 12 November 2019

Event Description:

This Microwave & RADAR 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	MAMIDI CHANDRIKA	180101120044	Present
2	VADI ADITYA	180101120048	Present
3	SAIPRABHA SWAIN	180101120050	Present
4	D.SHILPA	180101120051	Present
5	SRIYA RAUTO	180101120052	Present
6	ASHISH	180101120056	Present
7	TAPAN KUMAR PRUSTI	180101120058	Present
8	GORLE HARISH	180101120059	Present
9	RASHMITA PANIGRAHI	180101180054	Present
10	J.NILAKANTESHWAR RAO DORA	180101120001	Present
11	BAISHNABI RANI GANTAYET	180101120002	Present
12	ADITYA BEBORTA	180101120003	Present
13	GORU SHIVA	180101120004	Present
14	SOMBIT KUMAR MISHRA	180101120005	Present
15	G.SIVA PRASAD	180101120006	Present
16	BISHNUPRIYA MALLIK	180101120007	Present
17	VYSYARAJU SUPRIYA	180101120008	Present
18	KILLAMSETTY SUPRIYA	180101120009	Present
19	RATTI RACHANA	180101120010	Present
20	DEBASISH RATH	180101120011	Present
21	KIRAN KUMARI DAS	180101120012	Present
22	KETHATI SRIRAM REDDY	180101120013	Present
23	L.KIRAN KUMAR	180101120014	Present
24	ANSHIDEEPA PATRA	180101120015	Absent
25	AMPOLU JAI CHANDU	180101120016	Present
26	CHALLA PRASANTH	180101120017	Present

27	DIPRIYAM KUMAR BHUYAN	180101120018	Present
28	ROKKAM DINESH KUMAR	180101120019	Present
29	BODALA JYOTISUBRAMANYUM	180101120020	Present
30	SOUMYA DARSAN PATTNAIK	180101120021	Present
31	VOOMI SANDEEP	180101120022	Present
32	NARAMSETTY MANI KUMAR	180101120023	Present
33	V NETHAJI	180101120024	Present
34	PEDDINTI MANIDEEP	180101120025	Present
35	CHOUDHARI MANASA	180101120026	Present
36	BANDARU HARIKA	180101120027	Present
37	ALYANA VANDANA	180101120028	Present
38	SINDIRI KARTHIK	180101120029	Present
39	GEDALA NIKHIL	180101120030	Present
40	PONDARA MURALI	180101120031	Absent
41	DIBYANI PATRO	180101120032	Present
42	BALI PAVAN KALYAN	180101120033	Present
43	ANDHAVARAPU SRIVALLI	180101120034	Present
44	GUMPU RAMYA	180101120035	Present
45	ISAI TILLOTHAMA	180101120036	Present
46	AMIT PRASAD JENA	180101120037	Present
47	ANIL KUMAR PRADHAN	180101120038	Present
48	KADAMBALA GUNASRI	180101120039	Present
49	BOINA SARAYU	180101120040	Present
50	BADAL SHUKLA	180101120041	Present
51	Y.PADMINI	180101120042	Present
52	G.V.NARASIMHA RAO	180101120043	Absent
53	DARSI GNANA RAJU	180101120045	Present
54	B.PRASANTHI	180101120046	Present
55	SUDHIR NAYAK	180101120047	Present
56	CH.HARSHITA	180101120049	Present
57	G.KHIRASINDHU REDDY	180101120053	Present
58	S.POOJA	180101120055	Present
59	E.SRINU	180101120057	Present

Anita Patra



Dr. Anita Patra, Registrar, CUTM

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Convener