Department of Electronics and Communication Engineering

3/11/2019

Submitted to the Principal for Approval

As part of Faculty Development, it is proposed to conduct a Faculty Development Programme in EC 8652 Wireless Communication offered as a core subject for VI Sem ECE students under Anna University, Regulations 2017.

The FDP is approved, partially sponsored and certified by the affiliating Anna University and it is planned to be conducted for six days at our college during 09/12/2019 to 14/12/2019.

A minimum of 20 sessions covering the entire syllabus needs to be accomodated. As per the university norms, it is planned to have 20 External and 4 Internal resource people(as backup) for handling the technical sessions. The targeted audience would be our faculty and faculty members from various Engineering colleges. University had worked out a budget of Rs 70000/-, with the break up details as well. Partial financial support of Rs 30000/- is provided by the university towards honorarium alone. Hence it is requested that the balance amount of Rs 40000/- be approved to meet out travel and other expenses.

It will be helpful while taking up NBA/NAAC Inspection in the recent years. I request you to accept this proposal in the interest of Faculty Development at our college and grant us the fund for the same.

Dr.S.Muthukumar

Convenor-FDP & HoD-EC

REGISTRATION FORM

Faculty Development Training Programme

on

EC8652 WIRELESS COMMUNICATION

2nd to 7th December 2019

- 1. Name:
- 2. Age and DoB:
- Designation:
- 4. Name of the Institution:
- Institution Affiliated to Anna University: Yes/No
- Address for Communication:
- 7. Official Address:

E-mail: Phone:

- Subjects Handled in last Two years:
- Professional Experience(in years)
 Industry: Teaching:

Signature of the Applicant

DECLARATION

The information furnished by me is true to the best of my knowledge. I agree to abide by the rules and regulation governing the FDTP. If selected, I shall attend the program for the entire duration.

Date : Place :

Signature of the Applicant

SPONSORSHIP

Dr./Mr./Ms....

an employee of our institution is hereby allowed to attend the FDTP on "EC8652 Wireless Communication", approved and jointly sponsored by Anna University, Chennai. He/She will be permitted to attend the program for the entire duration, if selected.

Signature of the HOD/Principal

Date : Place :

Registration form can be sent by post/email.

Co-coordinators

Ms.D.Menaka, Assistant Professor Ms.S.Kalyani, Assistant Professor Ms.L.Anju, Assistant Professor Mr.M.K.Varadarajan, Assistant Professor

Contact Email/Mobile:

srivi@svce.ac.in/7550010500 menaka@svce.ac.in/ 9655955257 kalyani@svce.ac.in / 8248128355 anju@svce.ac.in/ 9840159602 rajan@svce.ac.in/ 8778979128

SIX DAY FOTP

ON

EC8652
WIRELESS COMMUNICATION

2nd to 7th December 2019

Co-ordinators

Dr. S.Muthukumar & Ms.K.Srividhya



Anna University
Chennai
and



Department of Electronics and Communication Engineering Sri Venkateswara College of Engineering

(Autonomous - Affiliated to Anna University)
Pennalur, Sriperumbudur (Tk) - 602 117
Tamil Nadu, India

Phone: 044 27152000, Extn: 200

ABOUT THE COLLEGE

a premier self-financing Engineering college was started in the year 1985 and is managed by Sri Venkateswara Educational and Health Trust. The college attained autonomous status in the year

Sri Venkateswara College of Engineering (SVCE),

2016. The college conducts 10 UG Programmes, 10 PG Programmes in Engineering/Technology. The courses are approved by AICTE and affiliated to

accredited by National Assessment and Accreditation Council (NAAC). The college is also certified by IRQS for ISO 9001-2015. A 280 Mbps leased Internet connectivity is available. The campus is Wi-Fi enabled. The college is fittered in

Anna University, Chennai. The college is

campus is Wi-Fi enabled. The college is situated in a quiet environment about 37 km from Chennai and situated on Chennai-Bangalore National Highway (NH4) at Pennalur, in Sriperumbudur taluk, Kancheepuram district.

The Department of Electronics and Communication

Engineering was started in the year 1985 with an under graduate program in Electronics and

ABOUT THE DEPARTMENT

Communication Engineering. A PG program in Communication Systems was started in the year 2002 and PG program in Applied Electronics was started in the year 2012.It has strength of around 750 students guided by a team of devoted and diligent faculty members. There are about 33 faculty members in the department, 9 of them being doctorates. The department is equipped with Spartan 3E, Spartan 6, Cadence and Tanner Softwares.ADS and IE3D Simulation softwares and S band Network Analyser.The Department organizes a National Level Student Technical Symposium "UPAGRAHA", a National Level Conference "National Conference on Signal Communication & Networking Processing, (NCSCN)" every year and also organizes

Workshops, Seminars and FDPs periodically.

ABOUT THE FDTP

The FDTP is approved by Anna University, Chennai. All topics of the syllabus of the forthcoming semester subject EC8652 Wireless Communication will be covered.

TOPICS TO BE COVERED

- > Introduction to Wireless Communication
- Link budget analysis and design
- > Time dispersion and Fading
- Cellular Architecture
- Multiple Access techniques
- Digital Signaling For Fading Channels
- Error performance in fading channels
- > OFDM principle
- Multipath Mitigation Techniques
- MIMO systems

journey.

Capacity in fading and non-fading channels

The course is offered by the Anna University,

REGISTRATION FEE

Chennai with free of cost to the faculty members of Anna University, Chennai and its affiliated colleges. Application form can be downloaded from college web site, www.svce.ac.in. The registration is restricted to 30, with first come first basis. No TA/DA will be provided. The participants can use the college bus for to and fro

ORGANIZING COMMITTEE

CHIEF PATRON: Dr.M.K.Surappa Vice-Chancellor, Anna University,

Chennai

PATRON: Dr. L.Karunamoorthy

Registrar(i/c), Anna University, Chennai.

CHAIR: Dr. D. Sridharan,

Dr.I.Arul Aram.

Addl. Director, CFD

CO CHAIR: Dr. S. Ganesh Vaidyanathan, Principal, SVCE

> Dr.S.Muthukumar HoD - Department of Electronics & Comm

Engineering
CO-ORDINATORS:

Dr. S.Muthukumar Professor

Dept of Elec & Comm Engg
Ms.K.Srividhya
Assistant Professor

Assistant Professor, Dept of Elec & Comm Engg

VENUE: Function Hall
Department of Electronics
& Communication

Engineering,
IMPORTANT DATES:

Submission of Application :25.11.2019
Intimation of selection :27.11.2019

Confirmation by participants :28.11.2019

Department of Electronics and Communication Engineering Anna University approved

Six Day FDTP on EC8652-Wireless Communication 2nd-7th December, 2019

SCHEDULE

Morning Tea Break: 10:00 AM -10:15 AM

Lunch: 11:45 AM 12:30 PM

SI. No	Date / Day	08.30 AM to 10.00 AM	10.15 AM to 11.45 AM	12.30 PM to 2.00 PM	02.15 PM to 03.15 PM
1	02/12/2019 Monday	Registration &Inauguration Introduction and Wireless Path loss models: Free Space and Two-Ray models Dr.Arun Janarthanan Senior staff,Qualcomm	Phenomena of Time dispersion and Fading,Link budget analysis and design Dr.N.Kumaratharan SVCE	Structure of a wireless communication link, Principles of Offset- QPSK, pi/4-DQPSK Ms.T.J.Jeyaprabha SVCE	Cellular Architecture Frequency reuse - channel assignment- hand off- interference & system capacity Dr.Swaminathan, Saveetha Institute of Medical & Technical Sciences
2	03/12/2019 Tuesday	Measurements on RF Signal Generator, Spectrum Analyser and Vector Network Analysers Mr. A. Senthil CEO & Founder, Eaglesight Measurement Technologies and Pvt. Ltd		Multiple Access techniques - FDMA, TDMA, CDMA Dr.R.Vani, SRMIST	Coverage and capacity improvement Trunking & grade of service Dr.L.Vanitha, Prathyusha Engg College
3	04/12/2019 Wednesday	Digital Signaling For Fading Channels- Minimum Shift Keying, Gaussian Minimum Shift Keying Dr.M.Meenakshi, CEG-AU	Spectrum sensing,SDR,Cognitive radio Dr.G.Padmavathi SVCE	Error performance in fading channels Ms.K.Srividhya SVCE	Recent trends in 5G communications Dr.G.Amudha, RMD Engg College
4	05/12/2019 Thursday	Multipath Mitigation Techniques Equalization - Adaptive method, Linear and Non-Linear equalization zero forcing and LMS algorithms Dr.R.Amutha, SSN College of Engg	Diversity – Micro & Macro diversity, Diversity combining technique,Error probability in fading channels with diversity receptions Dr.S.Chitra, REC	Spread spectrum and Rake receiver Dr.N.Venkateswaran, SSN College of Engg	OFDM principle – Cyclic prefix, Windowing, PAPR Dr.Vydeki,VIT
5	06/12/2019 Friday	MIMO systems - spatial multiplexing, System model, Pre-coding - Beam forming Dr.P.Muthukannan, Saveetha Institute of Medical & Technical Sciences	MIMO systems- Transmitter diversity, Receiver diversity, Channel state information Dr.M.A.Bhagyaveni, CEG-AU	Wireless Communication System design using HFSS Entuple Technologies Mr.Kaviyarasu& Mr.Lakshman Kumar Senior Application Engineer Entuple Technologies,Chennai.	
6	07/12/2019 Saturday	Test for Participants	Group / Panel Discussion	Presentation by Participants	Test paper Discussion and certificate Distribution

DR.S. MUTHUKUMAR, HODIECE

Ms. K. SRIVIDHYA

Dr.R. SWAMINATHAN,
Associate Professor,
ECE Department,
Saveetha School of Engineering,
Saveetha Institute Medical and Technical Sciences.
Chennai.

Professional with an experience of 11.5 years in the field of Electronics & Communication Engineering. Doctorate, Master's and Bachelor's in the field of Electronics & Communication Engineering. Worked abroad in Ethiopia also in top International universities in India (VIT University Vellore, Galgotias University Greater Noida)

Industrial Experience in Wipro Limited, United Telecom Services Ltd.

Part of Various Projects in Collaboration with Companies like NASSCOM and Capegemini.

Professional Membership in IEEE and IAENG.

Delivered various invited talks on Mobile Technologies (Including Various NOKIA BTS) and Antenna Design (Using FEKO and HFSS Simulation Software).

Published Papers in International Journals and Conferences.

Reviewer for International Journals and IEEE International Conferences.

Happy to be a Resource Person for this Event.

SRI VENKATESWARA COLLEGE OF ENGINEERING Department of Electronics and Communication Engineering

Anna University approved

Six Day FDTP on EC8652-Wireless Communication 2nd-7th December, 2019

External Participants

S.No	Participant Name	Designation	College Name
1	E.T.Jaba Jasphin	Assistant Professor	Saveetha Engg College
2	K.Padma Priya	Assistant Professor	Saveetha Engg College
3	A.Hema Malini	Assistant Professor	Saveetha Engg College
4	S.Saru Priya	Assistant Professor	Sri Venkateswaraa College of Technology
5	S.Selvin Pradeep Kumar	Assistant Professor	St.Xavier's Catholic College of Engg
6	R.Mahima	Assistant Professor	K.Ramakrishnan College of Engg
7	G.Subhasri	Assistant Professor	K.Ramakrishnan College of Engg
8	C.Hemalatha	Teaching fellow	University College of Engg, Kancheepuram
9	S. Edwin Lawrence	Assistant Professor	St.Xavier's Catholic College of Engineering
10	TK.Srinivasan	Assistant Professor	Saveetha Engg College
11	A.R.Dinesh Kumar	Assistant Professor	Bharathidasan Engg. College
12	M.Vijaya Suresh	Assistant Professor	Bharathidasan Engg. College
	N.Nazrin Fathima	Assistant Professor	Aalim Mohammed Salegh College of Engineering
	B.Abinaya	Assistant Professor	St. Joseph College of Engineering
	Maheswaran.G	Assistant Professor	Chennai Institute of Technology
	Krithiga.J	Assistant Professor	Chennai Institute of Technology
	Mariya Princy.A	Assistant Professor	St.Joseph College of Engineering
	Agnes Shifani.S	Assistant Professor	Jeppiar Maamallan Engg College
9	Venmathi .A.R	Associate Professor	Kings Engineering College
-	Dr.A.Ameeila Roseline	Professor	Panimalar Engineering College

nternal Participants

S.No	Participant Name	Designation	College Name
1 K.S.Subhashini		Assistant Professor	Sri Venkateswara College of Engineering
2	G.Loganathan	Assistant Professor	Sri Venkateswara College of Engineering
3	A.Bharathipriya	Assistant Professor	Sri Venkateswara College of Engineering
4	N.Sathish	Assistant Professor	Sri Venkateswara College of Engineering
5	M.K.Varadarajan	Assistant Professor	Sri Venkateswara College of Engineering

DR. S. MUTHUKUMAR, HODIECE

FOTP COORDINATOR

(. /s - gly.

Ms. K. SRIVIDHYA, APIECE

FOTP COORDINATOR

Department of Electronics and Communication Engineering

Anna University approved and sponsored

Six Day FDTP on EC8652-Wireless Communication 2nd-7th December, 2019

A Report

The Department of Electronics and Communication Engineering organized Six Day Faculty Development Training Programme on EC8652-Wireless Communication from 2nd-7th December, 2019 approved and sponsored by Centre for Faculty Development, Anna University, Chennai. The Programme was inaugurated by Dr.Arun Janarthanan, Senior staff, Qualcomm Technologies. He delivered an introductory talk on the significance of wireless communication and the various tools and techniques to carry out the communication process effectively.

A total of 20 lecture sessions covering all the major topics as prescribed by Anna University for the subject EC8652-Wireless Communication' was conducted (List enclosed). These technical lectures were handled by the experts invited from various institutions, industries and also senior faculty members of the host college.

The Faculty Development Training Program was intended to provide an opportunity to faculty members employed in institutions affiliated to Anna University for upgrading their knowledge in the area of Wireless Communication. The FDTP was conducted with 20 external participants in and around TamilNadu and 5 internal participants (List enclosed).

The program provided an insight to the recent updates and current technologies prevailing in the industry which was touched upon by the industrial experts. The participants provided a positive feedback about the sessions handled by both the academic and industrial experts. The sessions were also helpful to the participants to understand the performance analysis and applications of Wireless Communication. The participants were made familiar with various hardware and software tools of modeling communication scenario.

We would like to express our gratitude to Anna University for providing us approval and also partly sponsoring an amount to conduct the faculty development training programme. We also express our heartfelt thanks to our management and the Principal for their support including financial assistance for the conduct of the programme.

Dr.S.Muthukumar, FDTP Coordinator, Professor & Head, ECE Dept.

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SVCE

Ms.K.Srividhya

FDTP Coordinator, Assistant Professor,

ECE Dept.

SVCE

Session by Mr. A. Senthil, CEO & Founder, Eaglesight Measurement Technologies and Pvt.Ltd



Talk by Dr.M.Meenakshi, College of Engineering, College of Engineering, Anna University





FEEDBACK FROM THE SPEAKER - GUEST LECTURE

DEPARIMENT	: ECE
Name of the Speaker	: DR. VYDEKI
Designation	: ASSOCIATE PROFESSOR
Institution/University/Organisatio	SCHOOL OF ELECTRONICS ENGG. 1: VIT, CHENNAI
Mobile / E-mail	· Vydeki. d@vit-ac. vi
Title of the Lecture	:
Date	: 05/12/19
Time	;
Venue	:
Comments by the Speaker	: The audience
The arrangements	were good. The auddence and affective.
were interactive	and attention
Suggestions for improvement	
	1.0
Signature of the Speaker	: M/11/19

Signature of Coordinator

Signature of HOD 2149

CENTRE FOR FACULTY DEVELOPMENT

Anna University, Chennai-600025.

FACULTY DEVELOPMENT TRAINING PROGRAMME - Winter - 2019

FEEDBACK FORM Title of the Programme Duration ECS652 - WIRELESS COMMUNICATION 08-12-2019-07-12-2019 Name & Designation HEMALATHA. C TEACHING FELLOW 2. Name of the College PAGINEFRING UNIVERSITY COLLEGE OF No. of Resource Persons Internal 03 External Comments about the following: (Please tick the relevant box e.g. 5 - highest, 1 - lowest) i. Subject content Coverage of syllabus Technical Presentation by iii. Internal Faculty iv. Technical Presentation by **External Faculty** Course Materials Supplied **Tutorials** vii Laboratory facilities / Site visit 5. Level of Excellence and Academic Standards of FDTP Ability to Identify, formulate i. and solve the problems Ability to use IT techniques and Tools to Deliver Lecturer Developed new skills / improved the ones had already 7. The example and practical exercises helped to understand Reception & Hospitality Accommodation & Catering 50

11. Opinion / Suggestion / Effectiveness of the course :

O. Hemalathan
Signature of the Participant
Date: 07:12:2019