




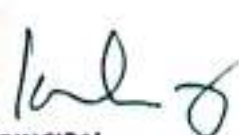
G.NARAYANAMMA INSTITUTE OF TECHNOLOGY & SCIENCE
(For Women)


AUTONOMOUS
Shaikpet, Hyderabad – 500104
Department of ECE

Faculty Development Program on “2x2 MIMO using NI USRP with hands on sessions”
23rd August, 26th August and 27th August 2019

S.No	Name of the document	Status
1.	Proposal by the Coordinator/Convenor to Principal along with budget, and permission for the venue.	NA
2.	Invitation to the resource person	NA
3.	Acceptance along with the bio-data	NA
4.	Poster/brochure/Banner (Not photo)	NA
5.	Programme schedule	Yes
6.	Circular	NA
7.	Registration/Attendance of the participants	Yes
8.	Certificates (sample)	NA
9.	All participants filled Feedback, analysis – action	Yes
10.	Resource person filled Feedback – plan of action	NA
11.	One page photos with atleast 6 with description as per the format	NA
12.	Budget utilisation sheet	NA
13.	Press note/Newspaper publication	NA
14.	Single page report as per the format	NA


Workshop Coordinator


PRINCIPAL
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Dept HOD

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11.08.2019

3 day workshop on 2 x 2 MIMO using NI USRP 2920 with Hands on

22/8/19

All the staff are requested to note that there will be a training session from National Instruments company on 2 x 2 MIMO using USRP 2920 in ECE Dept e-class room from 23/8/19, 26th and 27/8/19 from 9.30 AM to 3.30 PM

Agenda

Day 1 (23rd Aug 2019):

- 1 Navigating NI LabVIEW
- 2 Troubleshooting and debugging in NI LabVIEW
- 3 Implementing a VI
- 4 Developing Modular Application in NI LabVIEW
- 5 Data Structures
- 6 Managing resources and Variables
- 7 Implementing a State machine architecture (shall include all the concepts covered)

Day 2 (26 8-19) (1st Half)

- 1 Presentation on NI USRP Architecture
- 2 USRP Device Driver programming
- 3 Simple Tx/Rx using USRP (hands on)
- 4 Introduction to modulation Toolkit, Mathscript RT module and Spectral Measurement Toolkit

Day 2 (2nd Half)

- 1 Designing of a FM demodulator using Modulation Toolkit and Mathscript RT (hands on)
- 2 Implementing a m-PSK Transmitter and Receiver using USRP (hands on)
- 3 Simple Spectral Monitoring (hands on)

Day 3 (27 8 19)

- 1 Spectrum Sensing using basic Energy Threshold algorithm (hands on)
- 2 Timing and synchronization for a MIMO system
- 3 Interfacing Octoclock with USRP (hands on)
- 4 Interfacing synchronization signals for TX and RX channel (hands on)
- 5 Methodology for algorithm development for MIMO system

Dr. B. Venkateshulu & Coordinators M. Madhurilatha & C. Padma Raja

Dr. K. Ramesh Babu

Principal



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23/8/19

List of Faculty and Students attending workshop on 2x2 MIMO

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1	Dr. B. Venkateshulu	Faculty	NA	ven66@rediffmail.com	
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Shaikpet, Hyderabad- 500008

9

"3-Day workshop on 2X2 MIMO using NI USRP 2920 with Hands on sessions"

Conducted by Department of ECE

National Instruments & Techfluent Solutions Private Limited

On 23rd, 26th and 27th August 2019

FEEDBACK FORM

Name of the Resource Persons: 1) Nilutpal Choudhury, CEO & Founder, AVGARDE Systems
2) Vijay Chandan. A, Sr. Field Application Engineer

Date and session: 23rd, 26th and 27th August 2019

1. Did you have sufficient information about the following before you arrived to the workshop? (Tick the appropriate one).

- i). Objectives of the program Yes No
- ii). Content of the program Yes No

2. Was the content of the program is of any direct relevance to your present or future teaching work? (Tick the appropriate one). Yes No

3. Are you clear with the contents of the topic? (Tick the appropriate one). Yes No

4. Methodology adopted and learning resources used: (Tick the appropriate one).

Methodology and Learning Resources	Effectiveness		
	High	Moderate	Poor
i). Lecture Sessions	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
ii). Use of power point		<input checked="" type="checkbox"/>	
iii). Any other (Please Specify)			

5. Are you satisfied with course organization? (Tick the appropriate one). Yes No

6. Considering the program and its conduct, Would you rate the program as (Tick only one).
 Excellent Very Good Good Satisfactory Poor

7. Are you satisfied with the delivery of the content by the resource person? Yes No

8. What in your opinion was the major highlight or strength of this program which contributed most to its success/effectiveness?

Good explanation is the highlight of program success

9. Give SUGGESTIONS by which you think the usefulness of the program can be improved.

[Signature]
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G. NARAYANAMMA INSTITUTE OF TECHNOLOGY & SCIENCE

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Shaikpet, Hyderabad- 500008

"3-Day workshop on 2X2 MIMO using NI USRP 2920 with Hands on sessions"

Conducted by Department of ECE

National Instruments & Techfluent Solutions Private Limited

On 23rd, 26th and 27th August 2019

FEEDBACK FORM

Name of the Resource Persons: 1) Nilutpal Choudhury, CEO & Founder, AVGARDE Systems
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3. Are you clear with the contents of the topic? (Tick the appropriate one). Yes No

4. Methodology adopted and learning resources used: (Tick the appropriate one).

Methodology and Learning Resources	Effectiveness		
	High	Moderate	Poor
i). Lecture Sessions	<input checked="" type="checkbox"/>		<input type="checkbox"/>
ii). Use of power point			<input checked="" type="checkbox"/>
iii). Any other (Please Specify)			

5. Are you satisfied with course organization? (Tick the appropriate one). Yes No

6. Considering the program and its conduct, Would you rate the program as (Tick only one).

- Excellent Very Good Good Satisfactory Poor

7. Are you satisfied with the delivery of the content by the resource person? Yes No

8. What in your opinion was the major highlight or strength of this program which contributed most to its success/effectiveness?

9. Give SUGGESTIONS by which you think the usefulness of the program can be improved. *more basi.*

Classes before the actual programming

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