

2<sup>nd</sup>

Board of Studies

2<sup>nd</sup> BOS

**NARASARAOPETA ENGINEERING COLLEGE :: NARASARAOPET  
(Autonomous Institution)**

**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

**BOARD OF STUDIES MEETING ON 20<sup>th</sup> May, 2017**

**AGENDA**

1. Welcome by the Chairman
2. Discussion on II B.Tech., Curriculum and Syllabus
3. General suggestions by members
4. Vote of thanks

  
Chairman, BoS  
(Dr. V. Venkata Rao)



**NARASARAOPETA ENGINEERING COLLEGE, NARASARAOPET**  
(Autonomous Institution)

**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

20<sup>th</sup> May, 2017

**Minutes of the 2<sup>nd</sup> Board of studies Meeting held on 20<sup>th</sup> May, 2017**  
**at 10:00 AM in the Principal's Chamber**

Dr. V. Venkata Rao, Chairman, Board of Studies chaired the meeting and welcomed all the members to the second Board of Studies meeting in the department of Electronics and Communication Engineering. The chairman (BOS) briefed the profile of the Electronics and Communication Engineering Department through his presentation. Further, the discussion on the items mentioned in the Board of Studies meeting agenda was taken up and the following resolutions mentioned in the subsequent paragraphs were passed by the external and internal BOS members.

**MEMBERS PRESENT**

<b>1</b>	Dr. V. Venkata Rao Professor and Head Department of ECE Narasaraopeta Engineering College, Narasaraopet	Chairman, BOS <i>16/5</i>
<b>2</b>	Dr. A.M. Prasad Professor and Head of the Department, Department of ECE, UCEK, JNTUK, Kakinada.	Nominee of JNTUK, Kakinada <i>S. monesab</i>
<b>3</b>	Dr. V. Anil Kumar Alumni, Assistant Professor, IIITH, Hyderabad.	Member <i>V. Anil Kumar</i>
<b>4</b>	Dr. B. Chandra Mohan Professor and Head of the Department, Department of ECE, Bapatla Engineering College, Bapatla.	<i>B. Chandra Mohan</i> Member Nominee of Academic Council
<b>5</b>	Dr. D. Venkata Rao Professor and Principal, Narasaraopeta Institute of Technology, Narasaraopet.	<i>D. Venkata Rao</i> Member Nominee of Academic Council
<b>6</b>	Mr. Jayachandra Aradhya CEO, Silicon Micro Systems, Bengaluru	Special Invitee <i>J. Aradhya</i>
<b>7</b>	Dr. B.V. Rama Mohana Rao Professor & Principal Narasaraopeta Engineering College, Narasaraopet	Member

8	Mr. J. V. K. Ratnam Professor Department of ECE Narasaraopeta Engineering College, Narasaraopet	Internal Member <i>Ratnam J. V. K.</i>
9	Mr. P. S. S. Chakravarthy Professor Department of ECE Narasaraopeta Engineering College, Narasaraopet	<i>P. S. S. Chakravarthy</i> Internal Member
10	Mr. J. Narasimha Rao Associate Professor Department of ECE Narasaraopeta Engineering College, Narasaraopet	Internal Member <i>J. Narasimha Rao</i>
11	Mr. N. Sayedu Khasim Associate Professor Department of ECE Narasaraopeta Engineering College, Narasaraopet	Internal Member <i>N. Sayedu Khasim</i>

#### ITEM No. 1

##### Discussion on change of course structure of B.Tech. Electronics and Communication Engineering.

After detailed discussions, the board members expressed that the number of theory subjects and labs should be kept as previous BOS approved in the course structure of B.Tech., ECE. The changes in the number of subjects and labs will be considered in the next regulations.

#### ITEM No. 2

##### Discussion on changes in the Syllabus of II B.Tech. Electronics and Communication Engineering courses.

The following suggestions/amendments/recommendations given by the members of the board in the following Courses.

##### Electronic Devices and Circuits:

1. Include topics 'Transistor as a switch' and 'Transistor switching times' in Unit-IV.
2. CO3 is rewritten as 'Analyze and identify applications of BJT and its thermal stability'.

##### Signals and Systems:

1. Rename title of the Unit-VI as 'Convolution, Correlation and PSD of Signals'.
2. Spell correctly Poly-Wiener as Paley-Wiener in Unit-IV.



### **Control Systems:**

-No modifications-

### **Electronic Devices and Circuits Lab**

1. CO1 and CO3 are appended with 'and their applications.'

### **Switching Theory and Logic Design**

1. Include 'Asynchronous state machines' in Course objectives.
2. Include 'implementation with gates' in Course objectives.
3. The topic 'Code converters' is removed from Unit-II and placed in Unit-IV as 'Implementation of Code converters'.
4. Replace 'Minimization of logic functions' with 'Minimization and implementation of logic gates' in Minimization Techniques topic of Unit-II.
5. Unit-IV is renamed as 'Introduction to PLDs'.
6. Include 'Analysis of Clocked sequential circuits' in Unit-VI.
7. Add 'Switching And Finite Automata Theory By Zvi Kohavi' as Text book.

### **Electronic Circuit Analysis**

1. Rewrite Course objectives and outcomes.
2. Limit Course outcomes to 4.
3. RC Phase shift oscillator is repeated in Unit-V and remove it.

### **Pulse and Digital Circuits**

1. Add Text book 'Pulse and Digital Circuits, M.S. Prakash Rao, Tata McGraw Hill'.
2. Add Text book 'Pulse and Digital Circuits, K. Venkata Rao, Pearson Education India, 2010.
3. Remove Text book authored by R. Venkataraman.

### **Analog Communications**

1. Mention 'PTM' in Unit-VI.
2. Add Text book 'Electronic Communication System, George Kennedy and Bernard Davis'.

### **EM Waves and Transmission Lines**

1. Add 'To understand Maxwell's equations and Boundary conditions' in Course objectives.
2. Remove 'Illustrative problems' in Unit-I, Unit-II and Unit-VI.
3. Add Text book 'Electromagnetic Field Theory and Transmission Lines, G. S. N. Raju, Pearson Education India, 2006.

### **Electronic Circuits & Pulse and Digital Circuits Lab**

1. Remove experiments 7 and 8 in II) Pulse and Digital Circuits.
2. Add experiment '7. Study and implementation of logic gates'.
3. Add experiment '8. Implement applications of Flip-flops - Counters and Registers'.
4. Rewrite the Software requirement as 'Analog and digital design/simulation software'.

### **Analog Communications Lab**

1. Rewrite Course objectives and outcomes.

### **ITEM No. 3**

### **Discussion on changes in the Syllabus of II B.Tech. Electrical and Electronics Engineering courses.**

The following suggestions/amendments/recommendations given by the members of the board in the following Courses.

#### **Electronic Devices and Circuits:**

1. Common syllabus for both ECE and EEE branches by removing the topic 'thermal stability' in Unit-V for EEE syllabus.

#### **Analog Electronics:**

1. Keep 'Feedback Amplifiers' as Unit-I.
2. Keep 'Linear and Non-linear Wave Shaping' as Unit-II.
3. Keep 'Operational Amplifiers and its characteristics' as Unit-III.
4. Keep Unit-IV as 'Multivibrators, Timers and Oscillators'.
5. Keep Unit-V as 'Active filters'.
6. Keep Unit-VI as D/A and A/D converters.

#### **Digital Electronics:**

1. Remove Unit-VI: Logic families.
2. Split Unit-V into Unit-V and Unit-VI.

#### **Electronic Devices and Circuits Lab:**

-No Change-

#### **Analog and Digital Electronics Lab:**

1. Modify Experiment 1 as 'Realization of logic gates'.
2. Rewrite Experiment 3 as 'Verification of SR and JK Flip flops operation'.
3. Experiment 10 is done by using OP-Amp instead of BJT.
4. Experiment 12 is conducted by using OP-Amp.



#### ITEM NO. 4

##### General Comments

The following general comments/suggestions are made by the board.

1. Append 'Yoga and Meditation' in Sports & Games / NSS of II B.Tech – II Semester curriculum.
2. Rewrite course objectives and outcomes appropriately.
3. Mention publisher name and latest edition number in text books and reference books.

Meeting concluded with thanks to the Chair.

*10/20/5/17*  
**(Dr. V. VENKATA RAO)**

Chairman  
BOS (ECE)

HEAD OF THE DEPARTMENT  
DEPT. OF ELECTRONICS AND COMMUNICATION ENGG  
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NARASARAOPET-522 601

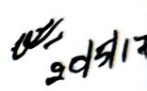


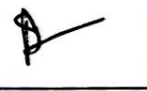
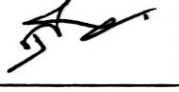
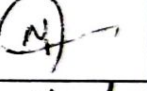
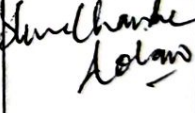
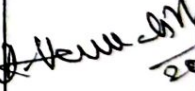
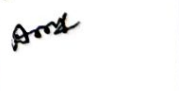
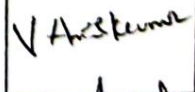
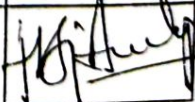


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20<sup>th</sup> May, 2017

**Board of studies of Electronics & Communication Engineering**

**ATTENDANCE SHEET**

S. No.	Name	Category	Designation	E-Mail id. & Mobile No.	Signature
1	Dr. V. Venkata Rao	Professor and Head of the Department	Chairman	vvenkatarao2k9tec@gmail.com 94411 27485	
2	Dr. B. V. Rama Mohana Rao	Professor & Principal	Member	nrtec_principal@yahoo.com 99897 34703	
3	Mr. J. V. K. Ratnam	Professor	Member	ratnamjvklakshmi@yahoo.co.in 94409 43215	
4	Mr. P. S. S. Chakravarthy	Professor	Member	chakri.pss@gmail.com 98858 54901	
5	Mr. J. Narasimha Rao	Associate Professor	Member	jnarasimharao09@gmail.com 97036 32376	
6	Mr. N. Sayedu Khasim	Associate Professor	Member	sayedukhasim@gmail.com 99855 95567	
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9	Dr. A.M. Prasad	Professor and Head of the Department, Department of ECE, UCEK, JNTUK, Kakinada.	Nominee of JNTUK, Kakinada	a_malli65@yahoo.com 94415 64840	
10	Mr. K. Pavan Kumar	Staff Design Engineer, Marvel India Pvt. Ltd., Second Floor, Leela Galleria, 23 <sup>rd</sup> Old Airport, Bangalore- 8.	Member	indrapavan@gmail.com 99164 84837	
11	Dr. V. Anil Kumar	Alumni, Assistant Professor, IIITH, Hyderabad.	Member	anil.vuppala@iiit.ac.in 85007 27346	
12	Mr. Jayachandra Aradhya	CEO, Silicon Micro Systems, Bengaluru	Special Invitee	aradhya@simsindia.net 98440 40444	

20/5/17  
**Chairman**  
**BOS, ECE**

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NARASARAOPETA ENGINEERING COLLEGE