



PRAGATI ENGINEERING COLLEGE

(Autonomous)

Approved by AICTE, Permanently Affiliated to JNTUK, KAKINADA & Accredited by NAAC with 'A' Grade)

Recognized by UGC under sections 2(f) & 12(b) of the UGC Act, 1956

ELECTRONICS & COMMUNICATION ENGINEERING DEPARTMENT

Members of Board of Studies(2016)

The following Committee members had attended Board of Studies Meeting for the ECE Department on 09-07-2016 and 10-07-2016 at Conference hall in ECE Department.

1. Chairperson - Dr.V.Sailaja, HOD of ECE *sailaja*
2. Experts in the subject from outside
 - 1. Dr.M.Ramasubba Reddy, Professor, Dept. of Applied Mechanics, IIT Madras *Ramasubba*
 - 2. Dr. Narasimha Sharma N V S, Professor of ECE, NIT Warangal *NVSS*
3. Expert From University - Dr.A.M.Prasad Professor & HOD of ECE JNTUK, Kakinada *A.M.Prasad*
4. Representative from industry /corporate sector - CYINET *— Absent*
5. Postgraduate Meritorious alumnus - Sri. G.Lokesh Kumar RF Engineer Andhra Electronics, Kakinada *G.Lokesh*
6. Members (Present)

Minutes of the meeting of the Board of Studies in Electronics and Communication Engineering held on 09-07-2016 and 10-07-2016 in the Conference hall of the Department of Electronics and Communication Engineering.

Board of Studies Members:

1. Chairperson - Dr.V.Sailaja, HOD of ECE *Sailaja*
2. Experts in the subject from outside - 1. Dr.M.Ramasubba Reddy, *Ramasubba*
Professor, Dept. of Applied
Mechanics, IIT Madras, Chennai
2. Dr. Narasimha Sharma N V S, *Narasimha*
Professor of ECE, NIT Warangal
3. Expert From University - Dr.A.M.Prasad
Professor & HOD of ECE *A.M.Prasad*
JNTUK, Kakinada
4. Representative from industry
/corporate sector - *Abeena*
CYINET
5. Postgraduate Meritorious alumnus - Sri. G.Lokesh Kumar *G.Lokesh*
RF Engineer
Andhra Electronics, Kakinada
6. Representative from the Department - 1. Dr.G.Raghuram *G.Raghuram*
2. Mr.V.Prasanth *V.Prasanth*
3. Mr.G.S.Siva Kumar *G.S.Siva Kumar*
4. Mr.D.Nataraj *D.Nataraj*
5. Mr.K.Raghuram *K.Raghuram*
6. Mrs.P.Sunitha *P.Sunitha*
7. Mrs.B.S.S.Vidya *B.S.S.Vidya*
8. Mr.Ch.Satish *Ch.Satish*
9. Mr.T.Sivaram *T.Sivaram*

Agenda:

1. Welcome Address by Chairman-BOS
2. Discussion on proposed course structure of B.Tech & M.Tech and ratification of the same.
3. Discussion on proposed B.Tech First Year courses syllabi & M.Tech Subjects syllabi and ratification of the same.
4. Ratification of the proposed modal papers for internal and external examinations of both theory and laboratory courses.
5. Finalization of names of reputed institutions for setting question paper and valuation of answer scripts.
6. Finalization of text books and reference books.
7. Any other item.



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1-378, ADB Road, Surampalem – 533 437, Near Peddapuram, E.G.Dist, A.P.
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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

RESOLUTIONS:

Considered Item no 2: it is resolved to ratify the Proposed 4 years course subjected to the following modification and suggestion.

UG-B.Tech

1. The computer Programming subject must run with lab hence **Computer programming** subject is swapped with **Environmental studies** in I-II semester.
2. To lower the burden on subjects it is resolved to move **Switching theory and logic design** from II-II semester in place of **Random variables and stochastic process** II-I Semester.
3. Title change of Antenna & Wave Propagations to Antennas and propagation in III-I Semester.
4. In open Elective For III-I Semester – Title Change of **Biomedical Engineering** to **Biomedical Instrumentation**.
5. **MEMS** Subject must be included in OPEN ELECTIVE in Place of Artificial Neural Networks
6. **Digital Signal Processing Lab** must include half Lab as Software and Half lab as Hardware
7. Title change of **Radar Systems** name must be changed with **Radar Engineering**.
8. Elective-I – New Subject Digital TV Engineering must be included in place of TV Engineering with reference of NIT Warangal Syllabus.
9. **Computer Networks** is compulsory subject and **Radar Engineering** must be elective.
10. Elective III- Title change of **Wireless Sensors Networks** to **Wireless Sensors and actuators Networks**.
11. **PHYTON / UML / Web technologies** subject should be included instead of **Operating System** subjects.

PG- M.Tech (Embedded Systems):

- (a) Mathematics Course must be Included in M.Tech like Soft Computing Techniques.

M.Tech Course Structure (VLSI SD):

- (a) Analog and Digital labs should be Separated.
- (b) Include Micro chip Fabrication techniques Subject in either Elective – I or Elective II

Considered Item no 3

1. Basic Network theory Syllabi is ratified along with text books and reference books.
2. M.Tech Syllabus for both VLSI SD & ES is ratified subjected to change in course structure.
3. Basic Electrical and Electronics Engineering Subject for IT Department in I-II semester is Ratified subjected to Changes in Text Books and reference Books.

Considered Item no 4

1. It is resolved to ratify all the proposed model papers for Internal and External Examination of both theory and Laboratory Courses.

Considered Item no 5

- (a) It is resolved to request Examination section to identify reputed institutions Like IITs, NITs, Reputed Universities and Autonomous Colleges for selection of Examiners and Faculty Members for Paper Valuation for End semester Examinations.

Considered Item no 6

- (a) It is resolved to ratify the text books and reference books for R-16 B.Tech course Structure from 2 year to 4 Year subjected to Next BOS meetings.
- (b) It resolved to include 3 textbooks and 2 reference books for every subject in Course structure.

Considered Item no 7

- (a) Fundamentals should be strong and methodologies adopted should enrich the knowledge of students.
- (b) Program Objectives and Program outcomes were reviewed in line with Department vision and mission and advised Faculty Members to finalize course objectives and outcomes of each subject.
- (c) External experts insisted to include Tutorial period for each theory subject "4+1"
- (d) Every lab experiment must be on design oriented.
- (e) Every student alone has to design and construct a mini project covering subjects up to III-I Semester
- (f) SDR (Software Design Ratio) Platform must be purchased so to have to communication oriented labs for research purpose and doing Mini/Major Projects.

SUGGESTIONS:

1. In Physics subject more emphasis should be given to semiconductor Physics for ECE Branch.
2. Chemistry subject – IC fabrication process and Basics to be included in a chapter.
3. One more labs must be included in I-I and I-II of M.Tech Course Structure of Embedded Systems and VLSISD.
4. Industry Oriented Mini Project must be included in III and IV semester of M.Tech Course(Embedded Systems & VLSISD) and allot 2 credits and Reduce project credits to 16
5. PDA lab and subject should be included in M.Tech Embedded Systems Course structure
6. Committee has advised that either one of the faculty Member should be internal for Paper valuation or paper setting for End semester Examinations

Sailaja V
BOS - chairman

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PRAGATI ENGINEERING COLLEGE: SURAMPALEM (Autonomous)

I Year

I SEMESTER

Sub Code	Subjects	L	T	P	Credits
16BH1T01	English – I	3	1	--	3
16BH1T03	MATHEMATICS-I	3	1	--	3
16BH1T05	MATHEMATICS-II (Numerical Methods and Complex Variables)	3	1	--	3
16BH1T10	Applied Physics	3	1	--	3
16BH1T13	Environmental Studies	3	1	--	3
16ME1T02	Engineering Drawing	1		3	3
16BH1L01	English - Communication Skills Lab -1	--		3	2
16BH1L03	Engineering/Applied Physics Laboratory	--		3	2
16BH1L04	Engineering Physics – Virtual Labs - Assignments	--		2	--
16ME1L01	Engineering Workshop & IT Workshop	--		3	2
Total credits					24

I Year

II SEMESTER

Sub Code	Subjects	L	T	P	Credits
16BH2T02	English – II	3	1	--	3
16BH2T06	MATHEMATICS-III	3	1	--	3
16BH2T12	Applied Chemistry	3	1	--	3
16EE2T02	Electrical and Mechanical Technology	3	1	--	3
16CS2T01	Computer Programming using C	3	1	--	3
16EC2T01	Basic Network Theory	3	1	--	3
16BH2L05	Applied Chemistry Laboratory	--		3	2
16BH2L02	English - Communication Skills Lab -2	--		3	2
16BH2L01	C Programming Lab	--		3	2
Total credits					24

Sailaja V.

BOS- chairman

HOD-ECE

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II Year

I Semester

Sub Code	Subjects	L	T	P	Credits
16EC3T03	Electronic Devices and Circuits	3	1		3
16EC3T04	Control Systems	3	1		3
16EC3T05	Signals and Systems	3	1		3
16EC3T06	Network Analysis and Synthesis	3	1		3
16EC3T07	Switching Theory and Logic Design	3	1		3
16BH3T14	Managerial Economics & Financial Analysis	3	1		3
16EC3L01	Electronic Devices and Circuits Lab			3	2
16EE3L02	Networks & Electrical Technology Lab			3	2
Total credits					22

II Year

II Semester

Sub Code	Subjects	L	T	P	Credits
16EC4T09	Electronic Circuit Analysis	3	1		3
16EC4T10	Random Variables and Stochastic Process	3	1		3
16EC4T11	Electromagnetic Waves and Transmission Lines	3	1		3
16EC4T12	Analog Communications	3	1		3
16EC4T13	Pulse and Digital Circuits	3	1		3
16CS4T12	Data Structures	3	1		3
16EC4L02	Electronic Circuit Analysis Lab			3	2
16EC4L03	Analog Communications Lab			3	2
Total credits					22

Sailaja V.

BOS Chairman
HOD-ECE

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III Year

I Semester

Sub Code	Subjects	L	T	P	Credits
16CS5T14	Computer Architecture and Organization	3	1		3
16EC5T14	Linear I C Applications	3	1		3
16EC5T15	Digital I C Applications	3	1		3
16EC5T16	Digital Communications	3	1		3
16EC5T17	Antennas and Propagation	3	1		3
16EC5L04	Pulse and Digital Circuits & I C Applications Lab			3	2
16EC5L05	Digital Communications Lab			3	2
16EC5L06	Digital I C Applications Lab			3	2
16BH5T17	Professional Ethics & Human Values		3		--
16EC5M01	MOOCs		3		
Total credits					21

III Year

II Semester

Sub Code	Subjects	L	T	P	Credits
16EC6T19	Digital Signal Processing	3	1		3
16EC6T20	Micro Processors & Micro Controllers	3	1		3
16EC6T21	VLSI Design	3	1		3
16BH6T15	Management Science	3	1		3
16CS6E06 16CS6E07 16ME6E01 16EE6E03 16EC6E02 16EE6E04	OPEN ELECTIVE 1. OOPs through Java 2. Data Mining 3. Robotics 4. Power Electronics 5. Bio-Medical Instrumentation 6. MEMS	3	1		3
16EC6L08	Micro Processors & Micro Controllers Lab			3	2
16EC6L09	VLSI Lab			3	2
16EC6P01	Mini Project			3	2
16BH6T16	IPR & Patents		2		--
Total credits					21

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BOS Chairman



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IV Year

I Semester

Sub Code	Subjects	L	T	P	Credits
16CS7T15	Computer Networks	3	1		3
16EC7T22	Digital Image Processing	3	1		3
16EC7T23	Micro Wave Engineering	3	1		3
16EC7T24	Optical Communications	3	1		3
16EC7D01 16EC7D02 16EC7D03	Elective I 1. Digital TV Engineering 2. Radar Engineering 3. System Design through Verilog	3	1		3
16EC7D04 16EC7D05 16EC7D06	Elective II 1. Embedded Systems 2. Analog IC Design 3. Network security & Cryptography	3	1		3
16EC7L10	Micro Wave Engineering & Optical Lab			2	2
16EC7L11	Digital Signal Processing Lab			2	2
Total credits					22

IV Year

II Semester

Sub Code	Subjects	L	T	P	Credits
16EC8T25	Cellular Mobile Communications	3	1		3
16EC8T26	Electronic Measurements and Instrumentation	3	1		3
16EC8T27	Satellite Communications	3	1		3
16EC8D07 16EC8D08 16IT8D19 16IT8D20	Elective III 1. Wireless sensors & Actuator Networks 2. Digital IC Design 3. Web Technologies 4. Python	3	1		3
16EC8S01	Seminar		3		2
16EC8P02	Project				10
Total credits					24

Total course credits = 48+44 + 42 + 46 = 180

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Sailaja V.
BOS chairman