VIGNAN'S
Foundation for Science, Technology & Research
UNIVERSITY
(Estd. u/s 3 of UGC Act of 1956)

(DEPARTMENT OF ELECTRONICS AND COMMUNCATION ENGINEERING

5th April, 2013

The following External members attended for the BoS meeting on 05/04/2013

1. Er. D. Ramakrishna. Managing Director, Efftronics, Vijayawada.
2. Dr. N. V.S.N. Sharma Professor, NIT Warangal.
3. Mr. M. Srinivasarao. Director, ICOMMTELE, Hyderabad.
4. Mr. Subba Rangaiah. Director, VEDA IIT, Hyderabad. 5/4/13
5. Mr. P. Haribabu, Scientist, C-DAC, Bangalore.

The Board of Studies Meeting for B.TECH (ECE) Program was held on 05-04-2013 in Board Room. The BOS Members Resolved and recommended the following:

- Er. D.Rama Krishna has given a short talk on "How to be successful in present age" and he has given points on what industry wants and the importance of course objectives, programme objectives linking and connectivity in syllabus.
- Dr. N.V.S. Sarma insisted the exposure of industry practices for faculty, importance of feedback from old students & industrial persons.
- Dr. Sudhakar insisted about creating the interest among faculty to improve industrial exposure.
- Dr. B. Seetharamanjaneylu discussed about choice based credit system, credits to skills and exit options to students.
- Lab and theory merging is discussed.
- Sri. P. Hari Babu suggested that electives selection should lead to project work.
- Dr. L. Rathaiah, Chairman welcomed BoS members and he has given some inputs for framing syllabus.

Reflections on ECE Syllabus

- Cyber security course can be offered instead of network security proposed by Dr. B.Seetha Ramanjaneyulu.
- Some of BoS members felt that cloud computing paper is not necessary for B.Tech ECE people and all accepted that.
- Sri. M.Srinivasa Rao and Sri. P. Hari Babu felt that no need of Professional Communication Lab for engineers.
- Power electronics course can be offered as elective for B.Tech students.
- Suggested by Sri. P. Hari Babu operating system course should made compulsory for B.Tech ECE students.
- Dr. N.V.S. Sarma proposed microprocessor course and computer organization courses can be merged.
- Er. D. Rama Krishna, Sri. Srinivasa Rao & Sri. P. Hari babu suggested that instead of 8086 introduce ARM Processor Architectures.
- Sri. P. Sudhakara Rao suggested to introduce multi-core processors in Microprocessor Subject.
- Control systems course can be moved for the previous semesters suggested by Dr. N.V.S. Sarma.
- For B.Tech students introduce ARM lab instead of 8086 and use either keil or GCC tools suggested by Er. D. Rama Krishna and Sri. P.Hari babu.
- Dr. N.V.S. Sarma suggested data structures subject should be in first year itself.
- Suggested by Dr. N.V.S. Sarma - Antennas course can be merged with Electromagnetic Field Theory (EMFT).
- Sri. M. Srinivasa Rao, Dr. N.V.S. Sarma, Er. D. Rama Krishna suggested to change the lab name from "VLSI design lab" to "VLSI Lab".
- Managerial Economics can be offered in any semester and it is useful for costing suggested by Er.D.Rama Krishna.
- DSP paper, EMI paper can be offered in earlier semesters.
- "Internet of things" couse can be offered as elective suggested by Sri. P. Hari Babu.
- Rename the lab from "EMI Lab" to "Instrumentation Lab".
- Zigbee topic can be offered in any one of suitable courses of wireless communications.
- Make optical or radars communication courses as compulsory, instead of Electives.
- Exposure classes are needed to select any one of the electives stream.

The Outcomes of BoS meeting are as follows:

1. Major restructuring has taken place in the Curriculum with theoretical courses and Practical courses, the curriculum focussed on Higher education, Employability, Entrepreneurship etc.
2. The curriculum follows the choice based credit system (CBCS).
3. The 4 years B.Tech programme is approved with effect from the academic year 2013-14. The proposed structure and syllabus is applicable for 2013 admitted batch onwards.
4. The finalised Course Structure is shown in Appendix I
5. Inclusion of new courses in the curriculum is reviewed and is provided as Appendix II.
6. In all the courses of the revised curriculum (R13) significant changes are made in the content. The percentage of revision from R10 to R13 is 21%.
7. The analysed Stakeholder's feedback in CDMC kept before the BoS and the priority is given to the feedback while designing the curriculum and their suggestions are implemented.

Chairman BoS

VIGNAN'S
Foundation for Science, Technology & Research
UNIVERSITY
(Estd. u/s 3 of UGC Act of 1956)

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Appendix-I

Course Structure

I year / I semester

S.No	Name of the Course	L	T	P	To	C
1	Engineering Mathematics I	4			4	4
2	Engineering Materials	4			4	4
3	Fundamentals of Electrical Engineering	4			4	4
4	Engineering Chemistry	4			4	4
5	Environmental Studies	3			3	3
6	Professional Ethics, Values and Human Rights	2			2	
7	Fundamentals of Electrical engineering Lab			3	3	2
8	Engineering Chemistry Lab			3	3	2
9	Engineering Graphics	1		3	4	3

I year / II semester

S. No	Name of the Course	L	T	P	To	C
1	Engineering Mathematics-II	4			4	4
2	Engineering Physics	4			4	4
3	Engineering Mechanics	4			4	4
4	Technical English Communication	3	2		5	5
5	Problem Solving and Computer Programming	5			5	5
6	Network Security	2			2	
7	Engineering Physics Lab			3	3	2
8	Computer Programming Lab			3	3	2
9	Workshop Practice			3	3	2
Total		22	2	9	31	28

II year / I semester

S. No	Name of the Course	L	T	P	To	C
1	COMPLEX VARIABLES AND SPECIAL FUNCTIONS	3	1		4	4
2	ELECTRONIC DEVICES AND CIRCUITS	4			4	4
3	NETWORK THEORY	3	1		4	4
4	SIGNALS AND SYSTEMS	3	1		4	4
5	DATA STRUCTURES USING C++	4			4	4
6	MINOR-I	4			4	4
7	SEMINAR			1	1	1
8	ELECTRONIC DEVICES AND CIRCUITS LAB			3	3	2
9	SIGNALS AND SYSTEMS LAB			3	3	2
10	SOFT SKILLS LAB			3	3	2
	TOTAL	21	3	10	34	31

II year / II semester

S. No	Name of the Course	L	T	P	To	C
1	PROBABILITY THEORY AND STOCHASTIC PROCESSES	3	1		4	4
2	ELECTRONIC CIRCUIT ANALYSIS	4			4	4
3	DIGITAL ELECTRONICS	3	1		4	4
4	ANALOG COMMUNICATIONS	4			4	4
5	ELECTRO MAGNETIC FIELD THEORY	3	1		4	4
6	MINOR-II	4			4	4
7	SEMINAR			1	1	1
8	ELECTRONIC CIRCUIT ANALYSIS LAB			3	3	2
9	ANALOG COMMUNICATIONS LAB			3	3	2
10	PROFESSIONAL COMMUNICATION LAB			3	3	2
	TOTAL	21	3	10	34	31

III year / I semester

S. No	Name of the Course	L	T	P	To	C
1	LINEAR IC'S AND APPLICATIONS	4			4	4
2	MICROPROCESSORS AND MICROCONTROLLERS	4			4	4
3	DIGITAL COMMUNICATIONS	4			4	4
4	TRANSMISSION LINES AND WAVEGUIDES	4			4	4
5	DEPT ELECTIVE -I	4			4	4
	OPERATING SYSTEMS					
	OBJECT ORIENTED PROGRAMMING THROUGH JAVA					
	DIGITAL IC APPLICATIONS					
6	MINOR-III	4			4	4
7	SEMINAR			1	1	1
8	IC APPLICATIONS LAB			3	3	2
9	MICROPROCESSORS AND MICROCONTROLLERS LAB			3	3	2
10	DIGITAL COMMUNICATIONS LAB			3	3	2
TOTAL		24	0	10	34	31

III year / II semester

S. No	Name of the Course	L	T	P	To	C
1	LINEAR CONTROL SYSTEMS	4			4	4
2	VLSI DESIGN	4			4	4
3	ANTENNA PROPAGATION	4			4	4
4	COMPUTER ARCHITECTURE AND ORGANIZATION	4			4	4
5	DEPT ELECTIVE -II	4			4	4
	OPTICAL COMMUNICATION					
	EMBEDDED SYSTEMS					
	ELECTROMAGNETIC INTERFERENCE AND COMPATIBILITY					
6	MINOR-IV	4			4	4
7	SEMINAR			1	1	1
8	DATA STRUCTURES USING C++ LAB			3	3	2
9	VLSI DESIGN LAB			3	3	2
10	MINI PROJECT			3	3	2
	TOTAL	24	0	10	34	31

IV year / I semester

S. No	Name of the Course	L	T	P	To	C
1	MANAGERIAL ECONOMICS	4			4	4
2	DIGITAL SIGNAL PROCESSING	3	1		4	4
3	RF AND MICROWAVE ENGINEERING	4			4	4
4	ELECTRONIC MEASUREMENTS AND INSTRUMENTATION	4			4	4
5	DEPT ELECTIVE -III	4			4	4
	DATA COMMUNICATION AND COMPUTER NETWORKS					
	SATELLITE COMMUNIACATION					
	MEMS					
6	DEPT ELECTIVE -IV	4			4	4
	DIGITAL DESIGN THROUGH VERILOG					
	CELLULAR AND MOBILE COMMUNICATIONS					
	NANO ELECTRONICS					
7	DIGITAL SIGNAL PROCESSING LAB			3	3	2
8	MICROWAVE ENGINEERING LAB			3	3	2
9	INSTRUMENTATION LAB			3	3	2
	TOTAL	23	1	9	33	30

IV year / II semester

S. No	Name of the Course	L	T	P	To	C
1	MINOR-V	4			4	4
2	DEPT ELECTIVE -V	4			4	4
	SENSORS AND ACTUATORS					
	WIRELESS SENSOR NETWORKS					
	BIOMEDICAL SIGNAL PROCESSING					
3	DEPT ELECTIVE -VI	4			4	4
	DIGITAL IMAGE PROCESSING					
	RADAR SYSTEMS					
	VLSI TESTING AND VALIDATION					
	PROJECT			20	20	10
	TOTAL	12	0	20	32	22

The students opting for semester long industrial internship during eight semester, carry out Minor-V in seventh semester itself as additional courses eighteen credits are allocated to internship as given below

IV year / II semester

1	Project / Internship			36	36	18

ECE Minor Stream

S.No	Name of the Course	L	T	P	To	C
1	ELECTRONIC DEVICES	4			4	4
2	ELECTRONIC CIRCUITS	4			4	4
3	DIGITAL ELECTRONICS	4			4	4
4	COMMUNICATION SYSTEMS -I	4			4	4
5	LINEAR IC APPLICATIONS	4			4	4
6	MICROPROCESSORS AND INTERFACING	4			4	4
7	COMMUNICATION SYSTEMS -II	4			4	4
8	SENSORS AND TRANSDUCERS	4			4	4

Note: The courses that are highlighted denotes the implementation of "Choice Based Credit System (CBCS)"

N.L

Chairman BoS

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
Estd. u/s 3 of UGC Act 1956

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

Appendix-II

List of new courses in the R-13

B.Tech Electronics and Communication Engineering Curriculum

S.No	Year/ Semester	Name of the Course
1	II/I	ELECTRONIC DEVICES ANDvCIRCUITS
2	II/I	NETWORK THEORY
3	II/I	SIGNALS AND SYSTEMS
4	II/I	Data Structures using C++
5	II/I	Seminar
6	II/II	PROBABILITY THEORY AND STOCHASTIC PROCESSES
7	II/II	ELECTRONIC CIRCUIT ANALYSIS
8	II/II	DIGITAL ELECTRONICS
9	II/II	ANALOG COMMUNICATIONS
10	II/II	Electro Magnetic Field Theory
11	II/II	Seminar
12	III/I	Linear IC's and Applications
13	III/I	Microprocessors and Microcontrollers
14	III/I	Digital Communications
15	III/I	Transmission Lines and Waveguides
16	III/I	Operating Systems
17	III/I	Object Oriented Programming Through Java
18	III/I	Digital IC Applications
19	III/I	Seminar
20	III/II	LINEAR CONTROL SYSTEMS

21	III/II	VLSI Design
22	III/II	Antenna Propagation
23	III/II	Computer Architecture and Organization
24	III/II	Optical Communication
25	III/II	Embedded Systems
26	III/II	ELECTROMAGNETIC INTERFERENCE AND COMPATIBILITY
27	III/II	Seminar
28	III/II	Mini Project
29	IV/I	Managerial Economics
30	IV/I	Digital Signal Processing
31	IV/I	RF and Microwave Engineering
32	IV/I	Electronic Measurements and Instrumentation
33	IV/I	Data Communication and Computer networks
34	IV/I	Satellite Communiacation
35	IV/I	MEMS
36	IV/I	Digital Design through Verilog
37	IV/I	Cellular and Mobile Communications
38	IV/I	Nano Electronics
39	IV/II	Sensors and Actuators
40	IV/II	Wireless Sensor Networks
41	IV/II	Biomedical Signal Processing
42	IV/II	Digital Image Processing
43	IV/II	Radar Systems
44	IV/II	VLSI Testing and Validation
45	IV/I	Project
46	IV/II	Project / Internship

Chairman BoS