VASAVI COLLEGE OF ENGINEERING (Autonomous)

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Date: 27.07.2023

Minutes of the 14th meeting of Board of Studies in Electronics and Communication Engineering held on 24.06.2023 (Saturday) at 10.30 a.m.

Members Present:

1.	Dr. E. Sreenivasa Rao, Professor & Head	:	Chairman, BoS
2.	Dr. Rajendra Naik Professor, Osmania University, Hyderabad.	:	Osmania University Nominee & Member
3.	Dr. N. Bheema Rao Professor, Department of ECE, National Institute of Technology, Warangal, Telangana. (Subject Expert)	:	Member
4.	Dr. D. Ranganadham Deputy Director General, Doordarshan Kendra, Vijayawada. (Industry Representative)	:	Member
5.	Sri. Venkateswara Rao Somarouthu Director, AMD India Pvt. Limited, Hyderabad, Telangana. (Industry Representative)	:	Member
6.	Sri. J. Sunil Vaaluka Solutions India Pvt. Ltd., Hyderabad. (Industry Representative)	:	Member
7.	Sri. Thati Rahul Senior Systems Design Engineer, Xilinx India Technologies Pvt. Ltd., Hyderabad, Telangana. (Alumnus)	:	Member
8.	Sri. Anand S. Moghe Formerly Vice-President (Engineering) M/s. Qualcore Logic Limited.	:	Special Invitee
9.	Dr. K. Veera Swamy, Professor, Dept of ECE, VCE.	:	Member
10.	Dr. Arun Kumar, Professor, Dept of ECE, VCE.	:	Member
11.	Ms. G.R. Padmini, Associate Professor, Dept of ECE, VCE.	:	Member
12.	Dr. N.S.S. Reddy, Associate Professor, Dept of ECE, VCE.	:	Member
13.	Dr. Srilakshmi Aouthu, Associate Professor, Dept of ECE, VCE.	:	Member
14.	Dr. D.M.K. Chaitanya, Associate Professor, Dept of ECE, VCE.	:	Member
15.	Dr. K. Deepti, Associate Professor, Dept of ECE, VCE.	:	Member
16.	Dr. K. Krishna Kishore, Associate Professor, Dept of ECE, VCE.	:	Member
17.	Mr. M. Prashanth, Assistant Professor, Dept of ECE, VCE.	:	Member
18.	Ms. R. Leelavathi, Assistant Professor, Dept of ECE, VCE.	:	Member
19.	Mrs. V. Aruna, Assistant Professor, Dept of ECE, VCE.	:	Member

20.	Mrs. S. Aruna Deepthi, Assistant Professor, Dept of ECE, VCE.	: Member
21.	Mr. V. Krishna Mohan, Assistant Professor, Dept of ECE, VCE.	: Member
22.	Mrs. Vibha D.K, Assistant Professor, Dept of ECE, VCE.	: Member
23.	Mrs. Ch. Neethu, Assistant Professor, Dept of ECE, VCE.	: Member
24.	Dr. N. Abid Ali Khan, Assistant Professor, Dept of ECE, VCE.	: Member
25.	Mrs. K.R. Deepthi, Assistant Professor, Dept of ECE, VCE.	: Member
26.	Mr. K. Rama Krishna Reddy, Assistant Professor, Dept of ECE, VCE.	: Member
27.	Mr. M. Ramanjaneyulu, Assistant Professor, Dept of ECE, VCE.	: Member
28.	Mr. B. Uma Mahesh Babu, Assistant Professor, Dept of ECE, VCE.	: Member
29.	Dr. Ch. Vijaya Durga	: Member
30.	Mrs. S. Jhansi Naga Laxmi	: Member
31.	Mr. S. Naveen Kumar	: Member
32.	Mr. H. Shravan Kumar, Assistant Professor, Dept of ECE, VCE.	: Member
33.	Mr. K. Ramakrishna	: Member
34.	Mr. B. Srinivasa Rao	: Member
35.	Mr. Hafizuddin Mahmad	: Member

The following members of Board of Studies could not attend the meeting.

1. Dr. Sumohana S. Channappayya,
Associate Professor, IIT – Hyderabad. (Subject Expert)

2. Dr. Veeresh Babu Vulligaddala,
Manager - Analog Design, AMS Semiconductors India Pvt. Ltd., Hyd. (Industry Representative)

3. Sri. T. Srisailam,
Application Engineer, Keysight Technologies, Hyderabad. (Alumnus)

4. Mr. K. Srikanth, Assistant Professor, Dept of ECE, VCE.

Dr. E. Sreenivasa Rao, Chairman BoS presided over the meeting. The following agenda items were taken up for discussion.

1. **Welcoming the members.**
   Chairman welcomed all the members to the 14th BoS meeting.
2. **Confirmation of the minutes of 13th BoS meeting held on 4.6.2022.**
   The minutes of the 13th meeting of the Board of Studies held on 4.6.2022 were read and confirmed.
3. **Approval of the action taken report on the resolutions of the 13th BoS meeting held on 4.6.2022**
   The following action taken report was reviewed by the members:

Suggestion(s)	Action Taken

Dr. L. Nirmala Devi, Professor, ECE D, OU-Hyd.
Draw industry experts where ever possible, to offer small module of a course / full course.
	The following courses were offered by industry experts
	1. M.E (ES&VLSID) III-Semester, SoC Design course was offered by Mr. Nagendra Bandi, Team Lead-Physical Design, M/s. Cyient Ltd Bangalore.
	2. B.E (ECE), Honours Degree in **System on Chip Design**, VI – Semester course was offered by Sri. Anand S Moghe, formerly Vice President (Engineering), M/s. Qualcore Logic Limited, Hyderabad.
	3. B.E (ECE) IV – Semester Technical Skills-I courses was offered
	   – **Advanced Digital System Design**
	     Sri. Anand S Moghe, formerly Vice President

	(Engineering), M/s. Qualcore Logic Limited, Hyderabad. – **Hardware Design for Embedded Systems** Mr. Ch. Dharanidhar, Associate Staff Hardware Engineer, Silicon Labs, Hyderabad. – **Mathematical Modelling & Simulation of Systems** Dr. K. Praveen Kumar, Research Scientist, M/s. Commscope India Networks Pvt. Ltd., Bangalore.
Dr. L. Nirmala Devi, Professor, ECE D, OU-Hyd. Dr. D. Ranganadham, Deputy Director General (Engineering), Doordarshan Kendra Vijayawada. • Give more emphasis on practical oriented training to M.E students using industry standard tools. • Explore the possibilities of collaborating with the Industry to carryout student Mini Projects, Theme based Projects and Major projects.	• In M.E (ES&VLSI Design) scheme of R-23, laboratory courses credit weightage is increase from 1.5 to 2 credits to enhance practical oriented training to M.E students using industry standard cadence tools. • 76 students in 2019-23 passed out batch students carried out major project / internships at 26 industries.
Sri. J. Sunil, CEO, Vaaluka Solutions, Pvt. Ltd, Hyderabad. • Suggested to habituate textbook reading culture among students. • E-mail communication is most widely used in industry and employees will submit status reports of technical work through e-mails very frequently. Therefore, he suggested to collect the status of technical activities / reports through e-mails from the students to improve the technical / general written skills.	• Open book internal examination was introduced in the A.Y. 2022-23 and conducted in the following courses to introduce text book reading culture among students encourage the students. B.E (ECE) III-Semester: Digital Logic Design B.E (ECE) V-Semester: Microprocessors and Microcontrollers B.E (ECE) IV-Semester: Electronic Circuits B.E (ECE) VI-Semester: Digital Signal Processing • In B.E (ECE) IV-Semester, Mini Project-I course, students are encouraged to submit the project status through emails to the project coordinators.
Sri. K. Sambasiva Rao, Scientist - E, RCI, Hyderabad. (Special Invitee) Suggested to use VNA, VSG test and measurement equipment, ADS, VSA software and	Following **student projects** were carried out during 2022-23 using VNA, VSG test and measurement equipment, ADS, VSA software and Systemvue modelling tools. • Wideband circularly polarized slotted microstrip antenna for wireless applications • CPW fed dual polarized H-shaped slot microstrip antenna for wireless applications

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Systemvue modelling tools extensively for carrying out UG, PG student projects and research work.	• Design of dual band MIMO antenna for 5G smart phone applications • Design of compact microstrip magic Tee for mono pulse radar applications • MIMO antenna with enhanced isolation technique • Design of dual circularly polarized array Following **research papers** were published by our faculty during 2022-23. • G. Srinivasu, T. Gayatri, Dr.D. M. K. Chaitanya and V. K. Sharma, "Quad-port octagon slotted high isolation MIMO antenna for GSM1800 to X-band wireless applications" Analog Integrated Circuits and Signal Processing, 114(1), pp. 125–141, 2023. • Dr D Manikya Krishna chaitanya, Sri lakshmi Aouthu, Dr. Farha Anjum, Dr. Mohammad Iliyas, A. Sindhuja " Design of Low Power CMOS RF Tx used for IE E E 802.15.4",NeuroQualntology, Volume 20, No 8 ,2022. ,pp.7853-7857 • T. Gayatri, G. Srinivasu, D.M.K. Chaitanya, and V.K. Sharma, "High Isolation Four-Port Wrench Shaped Compact UWB MIMO Antenna for 3.1-10.6GHz Band" Progress In Electromagnetics Research C, Vol. 122, pp.67-82, 2022. • T. Gayatri, G. Srinivasu, D.M.K. Chaitanya, and V.K. Sharma, "A Review on Optimization Techniques of Antennas Using AI and ML / DL Algorithms", International Journal of Advances in Microwave Technology (IJAMT) Vol.7, No.2, May 2022, pp-288-295. • Department received a **funding project** worth 5.9 Lakhs from CAS DRDO, Hyderabad for 2022-23 on "Investigation of signal reflections in PCM Telemetry link during Indoor testing" **Investigators**, Dr. D.M.K. Chaitanya, Dr. Arun Kumar, Dr. E. Sreenivasa Rao, Dr. Srilakshmi Aouthu.

The chairman BoS, has informed the members that the department has implemented the above suggestions given by the members.

4. **Note on the department achievements.**
   Chairman has presented faculty, students and department achievements for the Academic Year 2022-23 to the members.

To review and recommend the Scheme of Instruction & Examination and Syllabi for all the semester of B.E (ECE), B.E (ECE) Honours and M.E (ES&VLSI Design) Programmes for the academic year 2023-24.

The Chairman has presented Scheme of Instruction & Examination as per the following agenda points to all the members.

5. a. Scheme of instruction & examination for B.E (ECE) I to VIII Semesters (R-23).
   b. Scheme of instruction & examination for B.E (ECE) Honors Degree Program in System on Chip Design.
   c. Syllabi for I and II semester courses (R-23).

6. Scheme of instruction & examination and syllabi for B.E (ECE) III & IV Semesters (R-22).

7. Scheme of instruction & examination and syllabi for B.E (ECE) V & VI Semesters (R-21).

8. Scheme of instruction & examination and syllabi for B.E (ECE) VII & VIII Semesters (R-20).

9. a. Scheme of instruction & examination for M.E (ES&VLSID) I to IV Semesters (R-23).

   b. Scheme of instruction & examination and syllabi for M.E (ES&VLSID) III & IV Semesters (R-22).

10. a. To review and finalize the stream based Open Electives to be offered to B.E (ECE) III to VI Semesters students for the academic year 2023-24.

    b. To review and finalize the stream based Professional Electives to be offered to B.E (ECE) VII & VIII Semesters students for the academic year 2023-24.

    c. To review and finalize the Open Electives to be offered to M.E (ES&VLSID) II Semester students for the academic year 2023-24.

    d. To review and finalize the stream based Professional Electives to be offered to M.E (ES&VLSID) I to III Semesters students for the academic year 2023-24.

After the deliberations, the members offered the following suggestions.

Name of the BoS member(s)	Suggestions offered
Dr. B. Rajendra Naik, Professor, ECE Dept, OU-Hyd.	• He suggested to arrange some local Industry visits to 2nd and 3rd year students during semester breaks
Dr. N. Bheema Rao, Professor, ECE Department, NIT – Warangal.	• Appreciated the Institute Incentive policy for students and staff • He said Cadence tools are mostly used in the PG program in most the Institutions. He appreciated the initiative for introducing the Cadence Tools in 4 courses for UG program.
Sri. J. Sunil CEO, Vaaluka Solutions, Pvt. Ltd, Hyderabad	• As there is no hostel facility in the campus, provide online cadence and other tools access to students through Internet/VPN, so that students will use the tools extensively for solving the Assignments, working on mini projects / Theme based projects/course projects/Major projects like IIITs, NITs and IITs. I told him that the department will explore the possibility of offering tools access not only to the students and but also to the faculty. • Involve industry experts in course projects of Honors degree program to discuss problem statements, Methodology and in project review process. When I requested his support, he agreed to give his support in this process. • With regard to IE course in II-Sem, He said that the Lateral Entry students are missing this important course. I explained that it is a basic level course and the students are given opportunity to opt advanced level IE course as open elective. • He enquired about the availability of Verification IPs in cadence tools libraries. He said these IPs are very useful for verifying the Designs. I explained him that the department procured the Cadence standard bundle not the Research bundle which is very expensive. I told him that I will discuss with vendor for getting access to the IPs with standard bundle.
Sri. Venkateswara Rao Somarouthu, Industry Representative, Director, AMD Hyderabad.	• He said that under present situation, some of companies are planning to cut down the costs and ready to offer the internships to B.E students during final year, if they are free and available for 6 months or more from December to May. Then I have explained him that during VIII-Sem, students are available from Monday to Friday in a week for about 14 weeks, as they have online class work only on Saturdays.

Sri. Anand S Moghe, Former Vice President, Qualcore Logic Ltd Special Invitee	• He suggested to include few topics in FPGA based system Design course in Honors program. • He said that students can access and use Xilinx Webpack Tools which are freely downloadable. • He enquired about the NPTEL courses recommended by the Department for Honors students. The list of the recommended courses are presented.
Dr. D. Ranganadham Deputy Director General, Doordarshan Kendra, Vijayawada. Industry Representative	• He enquired about the AI and ML based courses offered to the ECE students. Chairman explained the 2 AI and ML based courses introduced and offered to the students in Signal processing stream (Artificial Neural Networks and Image and Video processing using Machine Learning). He said he will go through the topics and offer suggestions
Sri. Thati Rahul, Alumnus, Senior Systems Design Engineer, Xilinx India Technologies Pvt. Ltd., Hyderabad.	• He suggested that for Lateral Entry students, add one more unit of OOPs topics in Programming Course in III-Sem, as these topics are very useful in system Verilog for verification course.

Chairman has also discussed the proposal of introducing Computer Science & Engineering as "Minor Programme" to be offered by CSE Department for the students of Civil, Mech., EEE and ECE branches with additional 18 credits weightage.

After review and deliberations, the BoS recommended the proposed schemes & syllabi for B.E. (ECE), B.E (ECE) Honours Degree Program in System on Chip Design and M.E. (ES&VLSI Design) programmes for the academic year 2023-24.
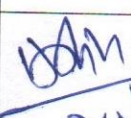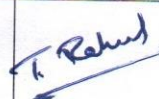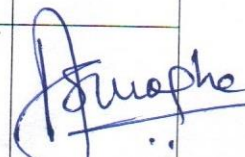
13. Any other item with the permission of the chair.

- It is resolved that the Chairman and external BoS members attended the meeting will be signing all the approved schemes of UG & PG programmes, indicating the approval of the BoS.

- It is also resolved that the Chairman will be signing all the syllabi of UG & PG programmes in ECE, indicating the approval of BoS.

The meeting concluded with a vote of thanks to the Chair.

(Dr. E. SREENIVASA RAO)
Chairman, BoS - E.C.E

Circulation to all the members through e-mail,
Copy to the Principal.
Copy to the file.

S.No.	Name of the member	Designation	Category	Affiliation	Signature
1.	Dr. E. Sreenivasa Rao	Prof. & Head	Chairman, BoS	Head, Dept of ECE Vasavi College of Engineering (Autonomous), Hyderabad.	
2.	Dr. B. Rajendra Naik	Professor	Osmania University Nominee	Department of ECE, University College of Engineering, Osmania University. Hyderabad.	24/6/2023
3.	Dr. N. Bheema Rao	Professor	Subject Expert	Department of ECE National Institute of Technology, Warangal, Telangana.	24/6/2023
4.	Dr. Sumohana S. Channappayya	Associate Professor	Subject Expert	Department of Electrical Engineering, IIT Hyderabad.	
5.	Dr. D. Ranganadham	Deputy Director General (Engineering)	Industry Representative	Doordarshan Kendra, Vijayawada.	24/06/2023
6.	Sri. Venkateswara Rao Somarouthu	Director	Industry Representative	AMD India Pvt. Limited Hyderabad, Telangana.	24/6/23
7.	Dr. Veeresh Babu Vulligaddala	Manager - Analog Design	Industry Representative	AMS Semiconductors India Pvt. Ltd., Hyderabad.	
8.	Sri. J. Sunil	CEO	Industry Representative	Vaaluka Solutions Pvt. Ltd., Hyderabad, Telangana.	
9.	Sri. T. Srisailam	Application Engineer	Alumnus	Keysight Technologies, Hyderabad, Telangana.	
10.	Sri. Thati Rahul	Senior Systems Design Engineer	Alumnus	Xilinx India Technologies Pvt. Ltd., Hyderabad, Telangana.	
11.	Sri. Anand S. Moghe	Formerly Vice-President (Engineering)	Industry Representative Special Invitee	M/s. Qualcore Logic Limited.	

S.No.	Name of the member	Designation	Category	Affiliation	Signature
1.	Dr. E. Sreenivasa Rao	Prof. & Head Chairman, BoS			
2.	Dr. K. Veera Swamy	Professor			
3.	Dr. Arun Kumar	Professor			
4.	Ms. G.R. Padmini	Assoc. Prof.			
5.	Dr. N.S.S. Reddy	Assoc. Prof.			
6.	Dr. Srilakshmi Aouthu	Assoc. Prof.			
7.	Dr. D.M.K. Chaitanya	Assoc. Prof.			
8.	Dr. K. Deepti	Assoc. Prof.			
9.	Dr. K. Krishna Kishore	Assoc. Prof.			
10.	Mr. M. Prashanth	Asst. Prof.			
11.	Ms. R. Leelavathi	Asst. Prof.			
12.	Mrs. V. Aruna	Asst. Prof.			
13.	Mrs. S. Aruna Deepthi	Asst. Prof.			
14.	Mr. V. Krishna Mohan	Asst. Prof.		Department of ECE, Vasavi College of Engineering, Hyderabad	
15.	Mrs. Vibha D.K	Asst. Prof.	Faculty member		
16.	Mrs. Ch. Neetu	Asst. Prof.			
17.	Dr. N. Abid Ali Khan	Asst. Prof.			
18.	Mrs. K.R. Deepthi	Asst. Prof.			
19.	Mr. K. Rama Krishna Reddy	Asst. Prof.			
20.	Mr. M. Ramanjaneyulu	Asst. Prof.			
21.	Mr. B. Uma Mahesh Babu	Asst. Prof.			
22.	Dr. Ch. Vijaya Durga	Asst. Prof.			
23.	Mrs. S. Jhansi Naga Laxmi	Asst. Prof.			
24.	Mr. S. Naveen Kumar	Asst. Prof.			
25.	Mr. K. Srikanth	Asst. Prof.			
26.	Mr. H. Shravan Kumar	Asst. Prof.			
27.	Mr. K. Ramakrishna	Asst. Prof.			
28.	Mr. B. Srinivasa Rao	Asst. Prof.			
29.	Mr. Hafizuddin Mahmad	Asst. Prof.			