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Aditya Nagar, ADB Road, Surampalem - 533437, Near Kakinada, E.G.Dt., Ph:99498 76662

Department of Electronics and Communication Engineering

Date: 26-04-2022

Minutes of the VIII meeting of BOS scheduled on 25-04-2022

The VIII meeting of the BOS of Electronics and Communication Engineering Department was held on 25-04-2022 at 09.30 AM.

The Members discussed the agenda items and made the following resolutions.

Agenda 8.1: Welcome address by Chairman

Dr. G. Sridevi, Chairman of BOS, invited all the distinguished members of BOS to the first BOS meeting.

Agenda 8.2: Ratification of minutes of the previous Board of Studies meeting.

The BOS members have ratified the points discussed in the previous Board of Studies meeting held on 07-10-2021.

Agenda 8.3: Discussion on proposed AR20B.Tech (ECE) V, VI, VII and VIII semesters syllabus and ratification of the same.

The BOS members approved the AR20B.Tech (ECE) V, VI, VII and VIII semesters syllabus after incorporating the following changes in the proposed syllabus.

The members of BOS suggested the following changes to the proposed AR19 VI, VII and VIII Semester B.Tech (ECE):

- Suggested to include Industrial IoT concepts in the Internet of Things course of VI semester.
- Suggested to include current advancements as augmented experiments in IoT laboratory course of VI semester.
- Suggested to include some of the Nano Electronics concepts in VLSI course of VI semester.
- Suggested to make "Modern VLSI Design: System-on-Chip Design, Wolf Wayne" as a text book instead of reference book.
- Suggested to include counters / registers based experiments in VLSI laboratory course of VI semester.
- Suggested to include Cryptography concepts like error control coding, RS, DES and AES algorithms in Information Theory and Coding course (Professional Elective –II) of VI semester.

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- Suggested to remove MTI Radar and concentrate more on Range Gated Doppler Radar in UNIT-II of Radar Systems course in VI semester.
- Suggested to reframe the syllabus contents of Embedded C course (Professional Elective –III) in VI semester.
- Suggested to include overview of evolutionary techniques for testing in Design for Testability course (Professional Elective –III) of VI semester.
- Suggested to frame the syllabus of Signal Transform Techniques course of VI semester in an application-oriented approach as it seems to be mathematical course.
- Suggested to include power link budgeting concept and frame the syllabus in a qualitative approach for Microwave and Optical Communication course in VII semester.

Agenda 8.4: Discussion on proposed AR20 Honor and Minor Degree Courses syllabus and ratification of the same.

After long discussions with the BOS members on the proposed list of courses offered to obtain Honor degree in ECE and Minor degree under AR20 B.Tech Regulation and the following suggestions are made:

- Suggested to frame a course with Advanced Modulation techniques and coding techniques instead of Optical Networks in IV semester of Honors Degree program structure.
- Suggested to frame the syllabus of Open Elective courses and Minor Degree courses in a qualitative approach.
- Suggested to give different the course names for Open Elective courses and Minor Degree courses to avoid ambiguity at the time examination conduction.

Agenda 8.5: Discussion on value added courses offered for the students and ratification of the same.

Members of BOS ratified the following value- added courses identified for the students to be offered and suggested to include topics related to thrust areas.

- Signal and Image Processing using MATLAB
- NI_LabVIEW
- PCB Designing
- AWS Cloud Computing
- Arduino based Programming
- Block chain Technology
- Cyber security Essentials
- Machine Learning using Python

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Agenda 8.6: Discussion on the new courses offered in the B.Tech (ECE) program and ratification of the same.

Members of BOS noted the new courses offered in the B.Tech (ECE) program and ratified the same. Percentage of new courses introduced in the academic year 2021-2022 for B.Tech (ECE) is 20.65 %. The list of new courses is enclosed as Annexure-I.

Agenda 8.7: Discussion on the percentage of the syllabus revision has done in the B.Tech(ECE) & M.Tech(VLSI Design) programs and ratification of the same.

The syllabus revisions done in B.Tech(ECE) & M.Tech(VLSI Design) programs based on the Stakeholders feedback on curriculum. The BOS members have approved all the syllabus revisions in B.Tech(ECE) & M.Tech(VLSI Design) programs. The percentage of courses revised in the academic year 2021-2022 for the B.Tech (ECE) is 36.2% and M.Tech (VLSI Design) is 4.54%. The list of courses revised during the academic year 2021-2022 is enclosed as Annexure-II.

Agenda 8.8: Discussion on the courses having focus on employability/ entrepreneurship/ skill development in the program of B.Tech(ECE) & M.Tech(VLSI Design) programs and ratification of the same.

The members of BOS ratified the courses having focus on employability/entrepreneurship/skill development in the B.Tech (ECE) & M.Tech (VLSI Design) programs.

Agenda 8.9: Discussion on the B.Tech (ECE) & M.Tech (VLSI Design) programs in which Choice Based Credit System (CBCS)/Elective Course system is being implemented and ratification of the same.

Members of BOS ratified the choice based credit systems (CBCS)/Elective Course system that is being implemented in B.Tech(ECE) & M.Tech(VLSI Design) programs.

Agenda 8.10: Analysis of Stakeholder's Feedback on Curriculum

The BOS Chairperson presented the analysis report of Stakeholder's feedback on curriculum. The BOS members noted the sameand the Action Taken Report is enclosed as Annexure-III.

Agenda 8.11: Analysis of Results of the odd semester of the academic year 2021-22.

The BOS Chairperson presented the odd semesters pass percentage for the A. Y. 2021-2022. The BOS members noted the same.

Agenda 8.12: Analysis of students feedback in the odd semester of the academic year 2021-22

BOS Chairperson expressed that the student feedback in academic year 2021-2022for odd semester. The BOS members noted the same

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Agenda 8.13: Any other items with the approval of Chairperson

More emphasis should be given on laboratories with design oriented experiments.

Agenda 8.14: Scheduling of next Board of Studies meeting.

The next BOS meeting is tentatively scheduled in the month of December 2022.

Agenda 8.15: Vote of Thanks

Dr. G.Sridevi, BOS Chairperson presented the Vote of thanks.

G. Sridevi

BOS Chairperson

Head of the Department
Department of E.C.E.
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Annexure-I

List of New Courses in the Academic Year 2021-2022

S. No	Program	Semester	Course Code	Course Name
1	B. Tech (ECE)	V	191PR5P02	Socially Relevant Project
2	B. Tech (ECE)	III	201EC3L02	Signals and Systems Lab
3	B. Tech (ECE)	III	201SO3L04	Skill Oriented Course I: Python Programming
4	B. Tech (ECE)	IV	201SC4L16	Skill Oriented Course-II: a) PCB Designing
5	B. Tech (ECE)	IV	201SC4L17	Skill Oriented Course-II: b) Applications of Python Programming
6	B. Tech (ECE)	V	191EC5E02	Digital System Design-I
7	B. Tech (ECE)	V	191EC5E03	Electromagnetic Interference & Compatibility
8	B. Tech (ECE)	V	191EC5E04	Python Programming
9	B. Tech (ECE)	V	191EC5O01	Signals & Systems
10	B. Tech (ECE)	V	191EC5O02	Digital Electronics and Logic Design
11	B. Tech (ECE)	V	191EC5O03	Semi conductor devices
12	B. Tech (ECE)	VI	191EC6E05	Digital System Design-II
13	B. Tech (ECE)	VI	191EC6E08	Soft Computing Techniques
14	B. Tech (ECE)	VI	191EC6E10	Embedded C
15	B. Tech (ECE)	VI	191EC6E09	Design for Testability
16	B. Tech (ECE)	VI	191EC6E12	Signal Transform Techniques
17	B. Tech (ECE)	VI	191EC6O04	Biomedical Instrumentation
18	B. Tech (ECE)	VI	191EC6O05	ECAD Tools
19	B. Tech (ECE)	VI	191EC6L07	Internet of Things Lab

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BOS Chairperson

Head of the Department
Department of E.C.E.
Aditya Engineering College (A9)

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Annexure-II

List of Courses Revised in the Academic Year 2021-2022

S. No	Program	Semester	Course Code	Course Name
1	B. Tech (ECE)	V	191EC5E01	Computer System Architecture
2	B. Tech (ECE)	V	191EC5L05	Integrated circuits and applications lab
3	B. Tech (ECE)	VI	191EC6T13	VLSI Design
4	B. Tech (ECE)	VI	191EC6E07	Information Theory and Coding
5	B. Tech (ECE)	VI	191EC6L08	VLSI Lab
6	M. Tech (VLSID)	I	192VD1E03	MEMS Technology
7	M. Tech (VLSID)	I	192VD1E06	Photonics
8	M. Tech (VLSID)	II	192VD2E08	IoT & Its Applications

BOS Chairperson

Head of the Department
Department of E.C.E.
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Annexure III

Action Taken Report on Stakeholders Feedback

S. No	Agenda Item No.	Stakeholders Recommended	Action Taken
1	8.10	Institution and Industry interaction is needed for the students.	Institute has signed MOUs with renowned industries to cater the students to aware of real time applications and recent trends in Industries. Internship is made mandatory. Regular Visit to Industry.
2	8.10	Include cutting technologies in the syllabus	In the revised Syllabus, Open Elective I, II, III & IV are introduced and all the emerging technologies are included in these courses.
3	8.10	Include a greater number of courses related to IT.	Web Technologies, Cyber Security, Operating Systems are in electives, can be opted by students who are interested in IT sector as their career.
4	8.10	Differential equations and linear algebra, Applied Physics courses are included in I^{ST} semester. It will be a difficult task for fresh engineering graduate to handle two mathematical background courses in the very first semester. This may be taken care of to reduce the burden over an average performing students.	Applied Physics course in the first semester is substituted with the course Engineering chemistry and Applied Physics is included in the second semester.
5	8.10	Environmental Science and Constitution of India are included in the same semester which is non- technical courses. Please substitute one of the courses with a technical course.	The course Engineering Graphics and Design is included in the first semester and Constitution of India is included in the second semester.

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6	8.10	A course should be included in the curriculum which provides a proper guideline for project work.	Engineering exploration project appears in the II semester to provide an insight to how to carry out an effective project work by students.
7	8.10	Increase industrial training practically	Internship is made mandatory and thereby the students should take the industry training and to implement a project as part of Internship.
8	8.10	workshops and FDPs which focuses on outcome-based education should be organized.	Recommendation will be taken forward to the concerned body.
9	8.10	It was observed that quiet number of students are showing interest towards animation and VFX technologies. Proper guidance may be suggestable.	3D PRINTING course is included in the syllabus offering as elective. Students who are interested can opt for the course.
10	8.12	It will be helpful to the students if the students come across department related courses in the early semester itself. This helps the students in having an insight on GATE and other competitive exams.	Integrated circuits and applications course is included in the curriculum in the IV semester which is one of the core subjects of electronics and communication engineering course.
11	8.12	Students get benefitted if coding or programming related course is introduced in the early semesters so that by the end of the graduation the student will be industry ready.	Skill oriented courses, Python programming, PCB design, Applications of Python Programming are introduced in the III and IV semesters to have an exposure on cutting edge technologies.
12	8.12	In Network Analysis course, filters topic which cannot be handled by a student in the early semesters. It should be excluded from the course.	Filters topic is excluded from Network Analysis as it appears in the other courses in the up-coming semesters.
13	8.10	Students will benefit from Industry institute interaction if facilitated.	Institute has signed MOUs with renowned industries to cater the students to aware of real time applications and recent trends in Industries.
14		ASIC & FPGA design methodologies, HVL: System Verilog, SVA, Verification Planning and Management, Code and Functional Coverage, Perl	This suggestion will be taken forward to the concerned desk for necessary action to be taken.

	8.10	scripting language and VIP coding style are advanced courses. One can easily enter into the VLSI industry with the skill sets that are gained through these courses.	
15	8.10	Encourage students to be a part of real time and live projects.	This suggestion will be taken forward to the concerned desk for necessary action to be taken.
16	8.10	Physical Design courses emphasizes on issues faced in industry level and how to resolve those issues. courses also focus on other aspects of VLSI back-end flow including Synthesis, IR drop analysis and Physical verification. Courses also will provide students with entire back-end flow, making sure that students fit in to various job requirements. Facilitate courses related to this.	This suggestion will be taken forward to the concerned desk for necessary action to be taken.
17	8.10	Students should be encouraged in taking active part in research and development.	This suggestion will be taken forward to the concerned desk for necessary action to be taken in such a way that the students can be involved in research activities.
18	8.12	Job oriented and skill-oriented courses related to the domain, if included in the curriculum will help students to a great extent.	This suggestion will be discussed in the BOS meeting and changes will be brought in the curriculum with proper approval.
19	8.12	The dynamic curriculum of Advance VLSI Design and Verification course fits perfectly with the career aim of fresh engineering graduates and helps them to 'future-proof' themselves and remain relevant for the rapidly evolving Semiconductor technology space. Include such courses in the curriculum.	This suggestion will be discussed in the BOS meeting and changes will be brought in the curriculum with proper approval.

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