ADITYA ENGINEERING COLLEGE

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

Program Name : M.Tech. in VLSI Design

Syllabus Revision for the Academic Year 2017-18

S.No	Semester	Course Code	Course Name	% of content revised for the existing year
1	I	172EM1T01	Digital System Design	5
2	I	172VD1T01	VLSI Technology & Design	10
3	I	172VD1T02	CMOS Analog IC Design	0
4	I	172VD1T03	CMOS Digital IC Design	0
5	I	172EM1E01	Cyber Security	0
6	I	172VD1E01	Digital Design using HDL	0
7	I	172CO1E02	Advanced Operating Systems	10
8	I	172EM1E03	Soft Computing Techniques	50
9	I	172VD1E02	CPLD / FPGA Architectures & Applications	4
10	I	172VD1E03	Hardware Software Co - Design	0
11	I	172EM1E07	Advanced Computer Architecture	0
12	I	172VD1L01	Front End VLSI Design - Lab	0
13	II	172VD2T04	CMOS Mixed Signal Circuit Design	0
14	II	172VD2T05	Embedded System Design	0
15	II	172VD2T06	Low Power VLSI Design	30
16	II	172VD2T07	Design For Testability	0
17	II	172VD2E04	CAD for VLSI	0
18	II	172EM2T06	DSP Processors & Architectures	0
19	II	172VD2E05	VLSI Signal Processing	0
20	II	172EM2E08	System on Chip Design	0
21	II	172VD2E06	Optimization Techniques in VLSI Design	8
22	II	172VD2E07	Semiconductor Memory Design and Testing	0
23	II	172VD2L02	Back end VLSI Design Laboratory	60
24	III		Comprehensive Viva-Voce	100
25	III		Seminar – I	0

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S.No	Semester	Course Code	Course Name	% of content revised for the existing year
26	III		Project Work Part – I	0
27	IV		Seminar – II	0
28	IV		Project Work Part - II	0

Total number of courses in the academic year 2017-18	28
Number of courses having revision in syllabus content >/= 20% in the academic year 2017-18	4
Percentage of syllabus revision carried out in the academic year 2017-18 = (4/28)*100	14.28

Program Coordinator

Head of the Department

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

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Department of Electronics and Communication Engineering

Date: 30-05-2017

Minutes of the I meeting of BOS scheduled on 29-05-2017

The I meeting of the BOS of Electronics and Communication Engineering Department was held on 29-05-2017 at 09.30 AM.

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

Agenda 1.1: Welcome address by Chairman

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

Agenda 1.2: Discussion and ratification of the Vision and Mission of the department and Program Educational Objectives (PEOs), Program Outcomes (POs) and Program Specific Outcomes (PSOs) of the Programs under the Department.

The BOS members have ratified the Vision and Mission of the department and Program Educational Objectives (PEOs), Program Outcomes (POs) and Program Specific Outcomes (PSOs) of the Programs under the Department.

Agenda 1.3: (a) Discussion on proposed Program Structures of AR17 B.Tech (ECE), AR17 M. Tech (VLSI Design) & AR17 M. Tech (ES) and ratification of the same.

After long discussions with the BOS members on the course structure of AR17 B.Tech (ECE), the following suggestions are made:

- Suggested to merge Engineering Mechanics, Electrical Technology subjects as one subject as Electrical and Mechanical Technology and ratified.
- Suggested to shift IPR & Patents subject to III Year I Semester and ratified.
- Suggested to divide EC & PDC Laboratory into Electronic Circuit analysis laboratory and Pulse & Digital Circuits Laboratory separately and ratified.
- Suggested to consider Computer Architecture & Organization subject as core subject.
- Suggested to consider Electronics Measurements & Instrumentation theory subject as core subject and ratified.

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- Suggested to divide Linear and Digital IC Application Laboratory into Linear IC Applications Laboratory and Digital IC Applications Laboratory Separately and ratified.
- BOS members discussed the elective system, suggested to choose Elective subjects to be level based so as to cover different fields in the program and ratified.
- Suggested to take the approval of the proposed course structure of Third and Fourth year from University officials since there is a difference of about 50% that of University R16 course structure.
- Percentage of new courses introduced in the academic year 2017-2018 for M.Tech (ES) is 6.67 %. The list of new courses is enclosed as Annexure-I.
- The percentage of courses revised in the academic year 2017-2018 for the B.Tech (ECE) is 16% , M.Tech (VLSI Design) is 14.28%, and M.Tech (ES) is 23.3%. The BOS Chairperson listed the courses revised during the academic year 2017-2018 is enclosed as Annexure-II.

(b) Discussion on proposed AR17 Program Structures of M. Tech (VLSI Design) & M.Tech (ES) and ratification of the same.

- BOS members approved the proposed course structure and subjects of M.Tech VLSI Design and Embedded Systems and ratified the same.

Agenda 1.4: Discussion on proposed M. Tech (VLSI Design) & M. Tech (ES) Programs – I& II semesters syllabus and ratification of the same.

BOS members approved M.Tech syllabus and ratified the same.

Agenda 1.5: Ratification of the proposed model question paper for sessional and external examinations of B.Tech (ECE), M.Tech (VLSI Design) and M.Tech (ES) programs.

BOS members have approved the model papers for the internal and external examinations for the pattern and ratified the same.

Agenda 1.6: Finalization of names of reputed institution for setting question paper and valuation of answer scripts.

BOS members accepted the list consisting of the names of reputed autonomous institution for setting question paper and valuation of answer scripts and ratified.

Agenda 1.7: Analysis of results.

The BOS Chairperson presented the odd and even semesters pass percentage for theA.Y.2016-2017. The BOS members noted the same.

Agenda 1.8: Analysis of Students feedback and action taken report.

Students feedback and actions taken report is presented by the BOS Chairperson to the BOS members and BOS members approved the same.

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Agenda 1.9: Analysis of Stakeholder's Feedback on Curriculum.

Analysis of Stakeholder's Feedback on Curriculum is presented by the BOS, chairperson to the BOS members and BOS members noted the same and the Action Taken Report is enclosed as Annexure-III.

Agenda 1.10: Any other item/s with the approval of Chairperson.

- The BOS members discussed, suggested to reduce Employability skills credits from 4 to 2 and ratified.
- Suggested to replace Industrial oriented mini project in IV Year I Semester with Internship Program with a period of 2 to 3 weeks with 2 credits and ratified.

Agenda 1.11: Scheduling of next Board of Studies meeting.

The next BOS meeting is tentatively scheduled in the month of November 2017.

Agenda 1.12: Vote of Thanks

Prof. 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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Department of Electronics and Communication Engineering

Annexure-I

List of New Courses in the Academic Year 2017-2018

S. No	Program	Semester	Course Code	Course Name
1	M. Tech (ES)	I	172EM1E05	Device Drivers
2	M. Tech (ES)	II	172VD2T07	Design For Testability

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BOS Chairperson

Head of the Department
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Annexure-II

List of Courses Revised in the Academic Year 2017-2018

S. No	Program	Semester	Course Code	Course Name
1	B. Tech (ECE)	I	171HS1T01	English-I
2	B. Tech (ECE)	I	171BS1T01	Mathematics – I
3	B. Tech (ECE)	I	171BS1T02	Mathematics – II
4	B. Tech (ECE)	I	171BS1T04	Applied Physics
5	B. Tech (ECE)	I	171ES1L01	Computer Programming Lab
6	B. Tech (ECE)	II	171HS2T03	English-II
7	B. Tech (ECE)	II	171BS2T06	Mathematics – III
8	B. Tech (ECE)	II	171HS2T02	Environmental Studies
9	B. Tech (ECE)	II	171BS2T05	Applied Chemistry
10	B. Tech (ECE)	II	171HS2L02	English Communication Skills Lab-II
11	B. Tech (ECE)	II	171BS2L03	Applied Chemistry Lab
12	B. Tech (ECE)	IV	R1622042	Control Systems
13	B. Tech (ECE)	IV	R1622026	Management Science
14	M. Tech (ES)	I	172EM1T01	Embedded System Design
15	M. Tech (ES)	I	172EM1T03	Real Time Operating Systems
16	M. Tech (ES)	I	172EM1T03	Soft Computing Techniques
17	M. Tech (ES)	I	172EM1L01	Embedded systems laboratory
18	M. Tech (VLSID)	I	172EM1E03	Soft Computing Techniques
19	M. Tech (VLSID)	II	172VD2T06	Low Power VLSI Design
20	M. Tech (VLSID)	II	172VD2L02	Back end VLSI Design Laboratory

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BOS Chairperson

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Department of Electronics and Communication Engineering

Annexure III

Action Taken Report on Stakeholders Feedback

S. No	Agenda Item No.	Stakeholders Recommended	Action Taken
1	1.3	Facilitate the students with more online courses as a part of curriculum which will help the students in self learning.	Included MOOCS -I in V Semester and MOOCS – II in VI Semester
2	1.3	More number of students are showing interest in choosing their career in IT industry. It is recommended to include a greater number of coding related courses to help the students.	Computer Architecture and Organization, OOPS through JAVA, Operating Systems, Computer Networks, Internet of Things.
3	1.3	Students need domain specific courses to drive them towards core sector for employment and also towards higher students.	Professional electives and open electives include well designed courses which are very much domain specific and will drive thestudents towards core sector and also, they are guided for competitive exams in the classroom itself.
4	1.9	Introduce employability skills as a part of curriculum so that students can be industry ready.	Employability skills i, ii, iii, iv is included in iii, iv, v and vi semesters respectively
5	1.10	Make internships and live projects a compulsion and encourage students to take active part in live projects and internships.	Industry Oriented (Internship) Minor Project in VII semester is made compulsion and also credits given to the program to create seriousness among students.
6	1.3	Wide opportunities are waiting for the students in the IT industries in the fourth coming years ahead. Include as many coding related courses as possible so that students can meet the global requirements.	As suggested, courses such as Computer Programming, Data Structures through C, are included in the early semesters and also few coding related courses are made a part of electives leaving it to the student's choice.

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7	1.3	It would be helpful for the students to great extent if they have more choices in electives where they can opt their own choices.	Professional electives and open electives are included in the curriculum to facilitate this suggestion.
8	1.3	Industry institute interaction helps a student in understanding the current trends and emerging technologies to shape themselves according to the industry needs.	This aspect will be discussed with the concerned body and changes can be incorporated with proper approval.
9	1.9	It would be helpful enough to the students if the electives have equal weightage for core subjects and IT related courses.	The electives include department related courses and IT related courses in well balanced structure.
10	1.8	lessen the number of courses to be completed by student in the last semester so that one can focus more on project work and employment and placement related courses	Syllabus is restricted to only two courses in the IV-II semester, one being PROFESSIONAL ELECTIVE-VI and the other being OPEN ELECTIVE, taking care that the students have proper number of credits.
11	1.8	Need real-time applications which are related to domain as a part of projects and laboratories which should be included in the curriculum.	This suggestion will be taken forward to the concerned body and the necessary changes will be incorporated accordingly.
12	1.8	Introduce few more laboratories in the curriculum.	Curriculum is designed well enough so as to facilitate a student to learn right from the basics to the requirements which meets the industry. Any changes and inclusions will be done with proper approval.
13	1.3	Include internships and industrial visits as a part of curriculum	The suggestion will be taken forward in the BOS meeting.
14	1.14	RTL Design, ASIC & FPGA design related courses will help the students to get ready as per industry requirements. Facilitate these.	The suggestion will be taken forward in the BOS meeting and incorporated after proper approval.
15	1.14	Include course which provides more insight in domain specific coding.	Will be discussed in the BOS meeting.
16	1.13	chip design and verification skills i.e. SOC, CMOS, RTL Design, Verilog HDL, FPGA, System Verilog & UVM courses should	Will be taken forward for the suggestions to be given by BOS members

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		be made a part of curriculum.	
17	1.14	Include internships and industrial visits as a part of curriculum	The suggestion will be taken forward in the BOS meeting.
18	1.14	Include more domain specific course in the curriculum	Device Drivers,Design for Testability are introduced in the curriculum to make the students technically sound in embedded systems domain.
19	1.14	Include course which provides more insight in domain specific coding.	Will be discussed in the BOS meeting.
20	1.13	Industrial visits should be a part of curriculum. Please look into it.	Will be taken forward for the suggestions to be given by BOS members

BOS Chairperson

Head of the Department
Department of E.C.E.
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