



ADITYA ENGINEERING COLLEGE

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Recognised by UGC under sections 2(f) and 12(B) of UGC Act, 1956

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

Program Name : B.Tech. in Computer Science and Engineering

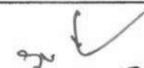
Syllabus Revision for the Academic Year 2019-2020				
S.No	Semester	Course Code	Course Name	% of content revised for the existing year
1	I	191HS1T01	Communicative English	0
2	I	191BS1T01	Differential Equations and Linear Algebra	0
3	I	191BS1T03	Applied Physics	60
4	I	191ES1T01	Programming For Problem Solving Using C	0
5	I	191HS1L01	Communicative English Lab -I	0
6	I	191BS1L03	Applied Physics Lab	0
7	I	191ES1L01	Programming For Problem Solving Using C Lab	0
8	I	191ES1L02	Basic Engineering Workshop	0
9	I	191MC1A01	Environmental Science	0
10	I	191MC1A02	Constitution of India	100
11	II	191BS2T09	Engineering Chemistry	0
12	II	191BS2T10	Numerical Methods and Complex Variables	40
13	II	191ES2T02	Engineering Graphics and Design	0
14	II	191ES2T03	Essential Electrical and Electronics Engineering	100
15	II	191ES2T09	Data Structures through C++	100
16	II	191HS2L02	Communicative English Lab-II	100
17	II	191BS2L04	Engineering Chemistry Lab	0
18	II	191ES2L10	Data Structures Through C++ Lab	0
19	II	191ES2L11	IT Workshop	0
20	II	191PR2P01	Engineering Exploration Project	100
21	III	171BS3T08	Mathematical Foundations of Computer Science	0
22	III	171ES3T23	Digital Logic Design	0

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S.No	Semester	Course Code	Course Name	% of content revised for the existing year
23	III	171CS3T02	Statistics with R Programming	0
24	III	171CS3T03	Object Oriented Programming Through C++	0
25	III	171HS3T04	Managerial Economics & Financial Analysis	0
26	III	171CS3T04	Advanced Data Structures	0
27	III	171CS3L01	Object Oriented Programming Lab	0
28	III	171CS3L02	Advanced Data Structures Lab	0
29	III	171HS3A10	Employability Skills – I	0
30	III	171HS3A09	Professional Ethics & Human Values	0
31	IV	171CS4T05	Software Engineering	0
32	IV	171CS4T06	Formal Languages & Automata Theory	0
33	IV	171CS4T07	Java Programming	0
34	IV	171CS4T08	Database Management Systems	0
35	IV	171CS4T09	Principles of Programming Languages	0
36	IV	171CS4T10	Computer Organization	0
37	IV	171CS4L03	Java Programming Lab	0
38	IV	171CS4L04	Database Management Systems Lab	0
39	IV	171HS4A11	Employability Skills – II	0
40	IV	171HS4A08	IPR & Patents	0
41	V	171CS5T11	Compiler Design	0
42	V	171CS5T12	Python Programming	0
43	V	171CS5T13	Design & Analysis of Algorithms	0
44	V	171CS5T14	Operating Systems	0
45	V	171CS5E01	Unix and Shell Programming	0
46	V	171CS5E02	Advanced Computer Architecture	100
47	V	171CS5E03	Computer Graphics	0
48	V	171CS5E04	Software Testing Methodologies	80
49	V	171HS5T06	Employability Skills – III	100

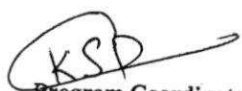
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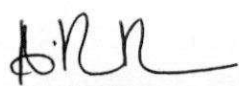
S.No	Semester	Course Code	Course Name	% of content revised for the existing year
50	V	171CS5L05	Operating System and Linux Lab	0
51	V	171CS5L06	Python Programming Lab	0
52	V	171CS5L07	Software Testing Lab	0
53	V	171CS5L08	Compiler Design Lab	0
54	V	171CS5S01	MOOCs – I	100
55	VI	171CS6T15	Computer Networks	0
56	VI	171CS6T16	Web Technologies	0
57	VI	171CS6T17	Data Ware Housing and Data Mining	0
58	VI	171CS6E05	Software Quality Assurance	100
59	VI	171CS6E06	Bio Informatics	100
60	VI	171CS6E07	Human Computer Interaction	100
61	VI	171CS6E08	Social Networks and Semantic Web	100
62	VI	171CS6E09	Pattern Recognition	100
63	VI	171CS6E10	Parallel Computing	100
64	VI	171CS6E11	Storage Area Networks	100
65	VI	171CS6E12	E - Commerce	100
66	VI	171HS6T07	Employability Skills – IV	100
67	VI	171CS6L09	Computer Networks Lab	0
68	VI	171CS6L10	Data Ware Housing and Data Mining Lab	0
69	VI	171CS6L11	Web Technologies Lab	0
70	VI	171CS6S02	MOOCs – II	100
71	VII	R1641051	Cryptography and Network Security	0
72	VII	R1641052	Software Architecture & Design Patterns	100
73	VII	R1641053	Web Technologies	0
74	VII	R1641054	Managerial Economics and Financial Analysis	100
75	VII	R1641057	Software Architectures & Design Patterns Lab	100

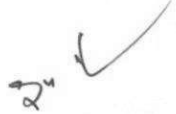

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S.No	Semester	Course Code	Course Name	% of content revised for the existing year
76	VII	R1641058	Web Technologies Lab	0
77	VII	R164105A	Big Data Analysis	100
78	VII	R164105B	Information Retrieval Systems	100
79	VII	R164105C	Mobile Computing	0
80	VII	R164105D	Cloud Computing	0
81	VII	R164105E	Software Project Management	0
82	VII	R164105F	Scripting Languages	100
83	VIII	R1642051	Distributed Systems	0
84	VIII	R1642052	Management Science	0
85	VIII	R1642053	Machine Learning	0
86	VIII	R1642055	Seminar	0
87	VIII	R1642056	Project	0
88	VIII	R164205A	Concurrent and Parallel Programming	100
89	VIII	R164205B	Artificial Neural Network	100
90	VIII	R164205C	Operation Research	100

Total number of courses in the academic year 2019-2020	= 90
Number of courses having revision in syllabus content $\geq 20\%$ in the academic year 2019-2020	= 29
Percentage of syllabus revision carried out in the academic year 2019-2020 = $(29/90) \times 100$	= 32.22%


Program Coordinator


Head of the Department
Head of the Department
Department of CSE
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Department of Computer Science and Engineering

Date: 22-07-2019

Minutes of the IV meeting of BOS scheduled on 20-07-2019

The 4th meeting of the BOS of CSE was held on 20th July 2019 at 10.00 AM, Ajivika Conference Hall, Bill Gates Bhavan. Prof A. Vanathi, Chairperson presided over the meeting.

Agenda 4.1: Welcome address by Chairman

Prof. A. Vanathi, BOS Chairman invited the distinguished members of BOS to the IV BOS Meeting.

Agenda 4.2: 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 17/11/2018.

Agenda 4.3: 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.

Members of BOS ratified the Vision and Mission of the department, PEOs, POs and PSOs of the Programs under the Department.

Agenda 4.4: Discussion on proposed AR19 B. Tech (CSE) program structure, I & II semesters syllabus and ratification of the same.

The BOS members approved the AR19 B. Tech (CSE) course structure after making the following changes in the proposed syllabi:

- Suggested to include syllabus related to CSE&IT branches in Engineering Chemistry course.
- Suggested to add Open-Source Tools and Generic Cloud services (not as Google or Outlook) in IT Workshop Lab
- Suggested to include C++ syllabus in UNIT-I&II and Data structures syllabus in the remaining units for the Course "Data structures through C++".
- Suggested to include same level of questions in augmented experiments.
- Suggested to name language courses like C, C++, Java, etc., as Interactive Programming-I, II etc., (as course names).
- Suggested to include Management Science in open elective courses or to update the syllabus which includes ethics, IPR and so on.

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- Suggested to include Digital Marketing as one of the course in open electives.
- Suggested to reduce the number of tracks for Professional Elective courses from 5 to 4 and include the courses in the tracks order.
- Suggested to revise the Elective tracks and the courses in it.
- Suggested to include Middleware Technologies course in Elective courses.
- Suggested to extend the Agile methodologies course to Agile methodologies and Devops in Software Engineering Elective track.

Agenda 4.5: Discussion on proposed AR19 M. Tech (CSE) program structure, I & II semesters syllabus and ratification of the same.

BOS members approved AR 19 M. Tech (CSE) program structure, I & II semesters syllabus and ratified the same.

Agenda 4.6 : Discussion on the courses having focus on employability / entrepreneurship /skill development in the programs of B. Tech (CSE) and M. Tech, (CSE) and ratification of the same.

The members of BOS ratified the courses having focus on employability/entrepreneurship/skill development in the AR 19 B. Tech (CSE) and M. Tech (CSE) program.

Agenda 4.7: Discussion on the new courses offered in the B. Tech (CSE) and M. Tech (CSE) programs and ratification of the same

Members of BOS noted the new courses offered in the B. Tech (CSE) and M. Tech (CSE) program and ratified the same. The percentage of new courses introduced during the academic year 2019-20 for B. Tech (CSE) is 28.89 % and M. Tech (CSE) is 62.86 %. The list of new courses is enclosed as Annexure-I.

Agenda 4.8: Discussion on the B. Tech (CSE) and M. Tech (CSE) 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 System (CBCS)/elective course system that is being implemented in B. Tech (CSE) and M. Tech (CSE) program.

Agenda 4.9: Discussion on the percentage of syllabus revision done in the B. Tech (CSE) and M. Tech (CSE) program and ratification of the same.

The syllabus revisions were done in B. Tech (CSE) and M. Tech (CSE) based on the stakeholders feedback on Curriculum. The BOS members have approved all the syllabus revisions in both B. Tech (CSE) and M. Tech (CSE). The percentage of courses revised in this academic year 2019-20 for B. Tech (CSE) is 32.22 % and M. Tech (CSE) is 74.29 %. The list of courses revised is enclosed as Annexure-II.

Agenda 4.10: Discussion on the value-added courses offered for students and ratification of the same.

Members of BOS ratified the various value-added courses identified for the students to be offered.

Agenda 4.11: Analysis of Results

The BOS Chairperson presented the odd and even semesters pass percentage for the A.Y.2018-2019. The BOS members noted the same.

Agenda 4.12: Analysis of Students Feedback & Action Taken Report

BOS Chairperson presented the student feedback percentage and action taken report. The BOS members noted the same.

Agenda 4.13: 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 same and advised to incorporate the suggestions as per the feasibility. The Action Taken Report is enclosed as Annexure-III.

Agenda 4.14: Any other item/s

- Suggested that every faculty should train on "Design and Thinking", which is useful for handling subjects.
- Suggested to add new technologies in elective courses to fill the gap between industry and academics
- Suggested to provide more industrial training to students.

Agenda 4.15: Scheduling of the next BOS meeting.

The next BOS meeting is tentatively scheduled in the month of December, 2019.

Agenda 4.16: Vote of Thanks

- Prof. A. Vanathi, BOS Chairperson presented the vote of thanks.


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BOS Chairperson
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Annexure-I

List of New Courses in the Academic Year 2019-20

S. No	Program	Semester	Course Code	Course Name
1	B. Tech (CSE)	I	191MC1A02	Constitution of India
2	B. Tech (CSE)	II	191PR2P01	Engineering Exploration Project
3	B. Tech (CSE)	II	191ES2T03	Essential Electrical and Electronics Engineering
4	B. Tech (CSE)	II	191ES2T09	Data Structures through C++
5	B. Tech (CSE)	II	191ES2L10	Data Structures Through C++ Lab
6	B. Tech (CSE)	V	171HS5T06	Employability Skills – III
7	B. Tech (CSE)	V	171CS5E02	Advanced Computer Architecture
8	B. Tech (CSE)	V	171CS5S01	MOOCs – I
9	B. Tech (CSE)	VI	171HS6T07	Employability Skills – IV
10	B. Tech (CSE)	VI	171CS6E05	Software Quality Assurance
11	B. Tech (CSE)	VI	171CS6E06	Bio Informatics
12	B. Tech (CSE)	VI	171CS6E07	Human Computer Interaction
13	B. Tech (CSE)	VI	171CS6E08	Social Networks and Semantic Web
14	B. Tech (CSE)	VI	171CS6E09	Pattern Recognition
15	B. Tech (CSE)	VI	171CS6E10	Parallel Computing
16	B. Tech (CSE)	VI	171CS6E11	Storage Area Networks
17	B. Tech (CSE)	VI	171CS6E12	E – Commerce
18	B. Tech (CSE)	VI	171CS6S02	MOOCs – II
19	B. Tech (CSE)	VII	R1641052	Software Architecture & Design Patterns

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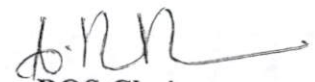
20	B. Tech (CSE)	VII	R164105A	Big Data Analysis
21	B. Tech (CSE)	VII	R164105B	Information Retrieval Systems
22	B. Tech (CSE)	VII	R164105F	Scripting Languages
23	B. Tech (CSE)	VII	R1641057	Software Architectures & Design Patterns Lab
24	B. Tech (CSE)	VIII	R164205A	Concurrent and Parallel Programming
25	B. Tech (CSE)	VIII	R164205B	Artificial Neural Network
26	B. Tech (CSE)	VIII	R164205C	Operation Research
27	M. Tech (CSE)	I	192CS1E04	Advanced Computer Networks
28	M. Tech (CSE)	I	192CS1E06	Object Oriented Software Engineering
29	M. Tech (CSE)	I	192HS1T01	Research Methodology and IPR
30	M. Tech (CSE)	I	192CS1L02	Advanced Computing Lab
31	M. Tech (CSE)	II	192CS2T04	MEAN Stack Technologies
32	M. Tech (CSE)	II	192CS2E07	Advanced Databases and Mining
33	M. Tech (CSE)	II	192CS2E08	Ad Hoc & Sensor Networks
34	M. Tech (CSE)	II	192CS2E09	Soft Computing
35	M. Tech (CSE)	II	192CS2E11	Principles of computer security
36	M. Tech (CSE)	II	192CS2E12	High Performance Computing
37	M. Tech (CSE)	II	192CS2L03	Machine Learning with Python lab
38	M. Tech (CSE)	II	192CS2L04	MEAN Stack Technologies Lab
39	M. Tech (CSE)	II	192CS2P01	Mini Project with Seminar
40	M. Tech (CSE)	I	192MC1A01	English for Research Paper Writing
41	M. Tech (CSE)	I	192MC1A02	Disaster Management
42	M. Tech (CSE)	I	192MC1A03	Sanskrit for Technical Knowledge
43	M. Tech (CSE)	I	192MC1A04	Value Education
44	M. Tech (CSE)	I	192MC1A05	Constitution of India

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45	M. Tech (CSE)	I	192MC1A06	Pedagogy Studies
46	M. Tech (CSE)	I	192MC1A07	Stress Management by Yoga
47	M. Tech (CSE)	I	192MC1A08	Personality Development through Life Enlightenment Skills
48	M. Tech (CSE)	I	192MC1A09	Soft Skills


BOS Chairperson

Head of the Department
Department of CSE
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Annexure-II

List of Courses Revised in the Academic Year 2019-20

S. No	Program	Semester	Course Code	Course Name
1	B. Tech (CSE)	I	191BS1T03	Applied Physics
2	B. Tech (CSE)	II	191BS2T10	Numerical Methods and Complex Variables
3	B. Tech (CSE)	V	171CS5E04	Software Testing Methodologies
4	M. Tech (CSE)	I	192CS1T01	Mathematical Foundations of Computer Science
5	M. Tech (CSE)	I	192CS1E01	Big Data Analytics
6	M. Tech (CSE)	I	192CS1E05	Internet of Things
7	M. Tech (CSE)	II	192CS2T03	Machine Learning

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Annexure-III

Action Taken Report on Stakeholders Feedback in the Academic Year 2019-20

S. No	Agenda Item No.	Stakeholders Recommended	Action Taken
1	4.13	Bridge the Gap between Industry Standards and Curriculum	Courses like Engineering Exploration Project, Internship and Socially relevant Project are included in the AR 19 which facilitates the students as industry ready.
		Suggested that every students should have github and linkedIn profile to get connected to Professional Network.	All the students are instructed to create Github account and to push all the source codes developed by them. LinkedIn profile is also created.
		Conduct courses to improve technical skills of students	New courses has been included in the syllabus which are boom in industry now like Artificial Neural Network is included
2	4.13	Motivate the students to participate in various coding contest which helps them to crack higher packages.	The students were given specific training on problem solving, motivated to practice problems in various coding platforms and making them to participate in coding contest like TCS codevita, Infyq, Google kickstart, Virtusa NeuralHack etc.,
		The Students must improve the communication skills.	A corporate trainer is appointed for the Soft skill training. The students are engaged in Group Discussion.

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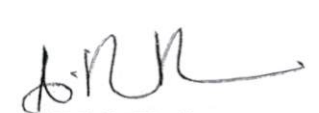
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			Debates etc. The mock interviews are conducted for the students to make them ready for placement drives.
		Women studies Courses Should be started at UG Level.	-
3	4.13	The orientation of syllabus should be enriched with more case studies.	The case studies are incorporated for the courses like Software Engineering, Object Oriented Analysis Design and Software Testing methodologies in the AR 19 curriculum.
		Syllabus should be more competitive	Revised syllabus for every three years
		Research related course should be developed	R&D centre is available.
4	4.12	Need training to crack the competitive exams	It is decided to provide training for GATE/CAT/ GRE etc.
		Choice based credit courses / audit courses should be included	Audit courses are included in the syllabus.
		Syllabus satisfying the course objectives	BOS team is completely involved in it.
5	4.13	Add-on skill-based certification courses to be started.	Training and placement cell (to develop a fresher and alumni student database for easy talent identification facilitate telephonic/ online interviews are made regular..
		Students and teaching faculties should be technosavvy	Formal instructions were dispersed to competent authority for appropriate actions on the issues of effective use of ICT by teachers.
		Suggested to the BOS to define POs in consultation with a greater number of industries for future syllabi revisions.	Program Objectives be designed in consultation with industries.


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6	4.13	Evidence based practical demonstration Should be incorporated.	All the teachers were notified about the issue and they were encouraged to have and give more Evidence based training as a part of their curriculum.
		Suggested to university's knowledge Development cell and Central Library to increase number of digitized reference books, share open resource weblinks and subscription links with students, and provide login access to the digital library facilities for digitized learning.	Online access to digital resources(open and subscription) be provided by Library for referencing was made available
7	4.13	E- Waste recycling must be encouraged among students.	Students spread awareness about e waste among student community education program and extension activities.
		Suggested to the higher authorities to develop and extend facility of an independent low bandwidth LMS platform for teaching and evaluation.	Facilities an independent LMS platform for teaching activities and evaluation is made.
8	4.12	Online Library with articles, SCI Papers, Journals need to incorporate.	Planning to develop our own E-Library by the college management.
		Need to provide awareness on plagiarism tools	Awareness program on Research rejuvenation is organized.


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