



# 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 Computer Science and Engineering

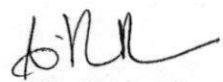
Syllabus Revision for the Academic Year 2017-2018				
S.No	Semester	Course Code	Course Name	% of content revised for the existing year
1	I	172CO1T01	Advanced Data Structures & Algorithm Analysis	0
2	I	172CO1T02	Database Management System	0
3	I	172CO1T03	Computer Organization & Architecture	40
4	I	172CO1T04	Mathematical Foundations of Computer Science	0
5	I	172CO1T05	Computer Networks	50
6	I	172CO1E01	Software Engineering	0
7	I	172CO1E02	Advanced Operating Systems	0
8	I	172CO1E03	Compiler Design	0
9	I	172CO1E04	Human Computer Interaction	100
10	I	172CO1L01	Advanced Data Structures & Database Management Systems Lab	100
11	II	172CO2T06	Cyber Security	0
12	II	172CO2T07	Data Ware Housing & Data Mining	0
13	II	172CO2T08	Big Data Analytics	0
14	II	172CO2T09	Advanced Unix Programming	0
15	II	172CO2E05	Machine Learning	0
16	II	172CO2E06	Digital Image Processing	0
17	II	172CO2E07	Mobile Computing	0
18	II	172CO2E08	Cloud Computing	0
19	II	172CO2E09	Internet of Things	100
20	II	172CO2E10	Bio Informatics	100
21	II	172CO2L02	Advanced Unix Programming and Hadoop & Bigdata Lab	100
22	III	K5801	Comprehensive Viva-Voce	0

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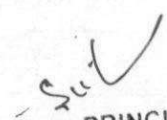
S.No	Semester	Course Code	Course Name	% of content revised for the existing year
23	III	K5802	Seminar – I	0
24	III	K5803	Project Work Part - I	0
25	IV	L5801	Seminar – II	0
26	IV	L5802	Project Work Part - II	0

Total number of courses in the academic year 2017-2018	= 26
Number of courses having revision in syllabus content $\geq 20\%$ in the academic year 2017-2018	= 7
Percentage of syllabus revision carried out in the academic year 2017-2018 = $(8/26)*100$	= 26.92%

  
Program Coordinator

  
Head of the Department

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

Date: 01-06-2017

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

The I meeting of the BOS of CSE was held on 29<sup>th</sup> May 2017 at 09.30 AM, Ajivika Conference Hall, Bill Gates Bhavan. Prof A. Vanathi, Chairperson presided over the meeting.

#### Agenda 1.1: Welcome address by Chairperson

Prof. A. Vanathi, BOS Chairperson invited the distinguished members of BOS to the 1<sup>st</sup> 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.

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

#### Agenda 1.3: Discussion on proposed AR17 Program Structures of B. Tech, (CSE) & M. Tech (CSE) and ratification of the same.

- The BOS members approved the AR 17 M. Tech (CSE) course structure and ratified the same.
- The BOS members approved the AR17 B. Tech (CSE) course structure after making the following changes in the proposed syllabi:
  1. Recommended to see the possibility of including few experiments as virtual labs in Applied Physics Lab in I-I.
  2. Advised to practice the Engineering Drawing using AutoCAD software in I-I.
  3. Recommended to change the DS with C++ to DS with C and insisting the students to write in non- recursive code.
  4. Instructed to see that the Computer Organisation course is studied after Digital Logic Design (II-I) subject.
  5. Discussed regarding the need of R- Programming lab and advised to remove the Lab and suggested to include in the Practice hour of Statistics with R Programming Theory.
  6. Strongly recommended to implement Java Programming in III-I and Python Programming in II-II.

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7. Highly recommended to remove Digital forensics and Open Source Software.
8. Recommended to shift Artificial intelligence and Machine Learning to IV-I in Professional Elective.
9. Advised to include Soft Computing in IV-II Elective.
10. Suggested to remove Advances in Computing from Professional Elective-II, as Mobile, Cloud and parallel computing is already included in various Professional Electives.
11. Suggested to remove Advanced Databases from Elective-II.
12. Highly recommended to include Distributed Systems as compulsory subject in IV-I.
13. Suggested to remove Robotics from Professional Elective and include it in Open Elective.
14. Discussed regarding Open Elective and recommended to include two core subjects along with other disciplinary Subjects.
15. Recommended to include the text book "The Algorithm Design Manual, Steven S. Skiena, Springer, 2008" for M. Tech Advanced Data Structures and Algorithm Analysis as a reference book.
16. The percentage of new courses introduced during the academic year 2017-18 for B. Tech (CSE) is 1.20 % and M. Tech (CSE) is 19.23 %. The list of new courses is enclosed as Annexure-I.
17. The percentage of courses revised in the academic year 2017-18 for B. Tech (CSE) is 14.46 % and M. Tech (CSE) is 26.92 %. The courses revised are listed in Annexure-II.
18. Suggested to include more courses which enhances the employability skills of students.

**Agenda 1.4: Discussion on proposed AR17 B. Tech (CSE) & M. Tech (CSE) programs I & II semesters syllabus and ratification of the same.**

BOS members approved AR 17 B. Tech (CSE) First Year course syllabus of Computer Programming, Computer Programming Lab, IT Workshop and Data structures through C and AR17 M. Tech (CSE).

**Agenda 1.5: Ratification of the proposed model question papers for sessional and external examinations of AR17 B. Tech (CSE) & M. Tech (CSE) programs.**

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

**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.

#### **Agenda 1.7: Analysis of Results**

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

#### **Agenda 1.8: Analysis of student feedback and action taken report**

BOS Chairperson expressed that the student feedback & action taken report process initiated at the end of each semester. BOS Chairperson presented the student feedback percentage and action taken report and the members noted the same.

#### **Agenda 1.9: 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 1.10: Any other item/s**

- Recommended to reduce Employability skills credits from 4 to 2.
- Highly recommended to increase credits for Main Project.
- Advised to reduce the no of units to 5 from 6.
- Suggested to include more activities to improve the Communication skills of students.
- Recommended to include the "How to solve it by Computer" by Dromey in Design and Analysis of Algorithm.
- Bos members noted the syllabus revision done in AR 17 B.Tech(CSE).
- Suggested to encourage the students to develop the project from their second year onwards.
- Discussed the need for the practical and technical skills for the students and advised to form a club, where each and every student should work on a program and the logic of the same should be explained to his fellow classmates. And also, to develop innovative applications.
- Advised the faculty members to share their research work with the students.

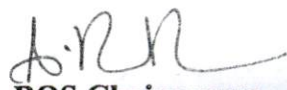
#### **Agenda 1.11: Scheduling of next BOS meeting**

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

#### **Agenda 1.12: Vote of Thanks**

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

  
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**BOS Chairperson**  
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## Department of Computer Science and Engineering

### Annexure-I

#### List of New Courses in the Academic Year 2017-18

S. No	Program	Semester	Course Code	Course Name
1	B. Tech (CSE)	II	171CS2T01	Data Structures through C
2	M. Tech (CSE)	I	172CO1E04	Human Computer Interaction
3	M. Tech (CSE)	I	172CO1L01	Advanced Data Structures & Database Management Systems Lab
4	M. Tech (CSE)	II	172CO2E09	Internet of Things
5	M. Tech (CSE)	II	172CO2E10	Bio Informatics
6	M. Tech (CSE)	II	172CO2L02	Advanced Unix Programming and Hadoop & Bigdata Lab

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## Department of Computer Science and Engineering

### Annexure-II

#### List of Courses Revised in the Academic Year 2017-18

S. No	Program	Semester	Course Code	Course Name
1	B. Tech (CSE)	I	171BS1T01	Mathematics – I
2	B. Tech (CSE)	I	171BS1T02	Mathematics – II
3	B. Tech (CSE)	I	171BS1T04	Applied Physics
4	B. Tech (CSE)	I	171HS1L01	English Communication Skills Lab – I
5	B. Tech (CSE)	I	171ES1L01	Computer Programming Lab
6	B. Tech (CSE)	II	171BS2T06	Mathematics – III
7	B. Tech (CSE)	II	171HS2T02	Environmental Studies
8	B. Tech (CSE)	II	171BS2T05	Applied Chemistry
9	B. Tech (CSE)	IV	R1622051	Software Engineering
10	B. Tech (CSE)	IV	R1622054	Computer Organization
11	B. Tech (CSE)	IV	R1622057	Advanced Data Structures Lab
12	M. Tech (CSE)	I	172CO1T03	Computer Organization and Architecture
13	M. Tech (CSE)	I	172CO1T05	Computer Networks

  
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## Department of Computer Science and Engineering

### Annexure-III

### Action Taken Report on Stakeholders Feedback in the Academic Year 2017-18

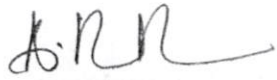
S. No	Agenda Item No.	Stakeholders Recommended	Action Taken
1	1.9	Employer suggested to improve the logical and reasoning skills.	As per the suggestion the Employability Skills courses are introduced in AR 17 from the second year as audit course and in the third year as Credit courses, enabling them to enhance their logical and reasoning skills.
		Industrial training should be made as mandatory for the students.	Industry oriented Internship is made mandatory for the AR 17 curriculum with 1 credit.
		Suggestion to facilitate telephonic / online interview for students	Conducted Interviews a by the CRT trainers regularly.
2	1.9	Suggested to include the IT workshop course and to impart knowledge on real time applications like system trouble shooting, LATEX, or introduction to any Open source Software.	Based on the Alumni opinion course named Engineering Workshop & IT workshop in included in the AR 17 Curriculum.
		Suggested to include courses which are in Latest trends.	The Elective Courses are designed in such a way covering the Courses which are in trends in the current software industries.
		Strengthen Alumni network through alumni association	Suggestions are forwarded to higher authority to organize alumni meet



			and it was conducted.
3	1.9	It is better to give orientation about outcome based education to faculty members and students.	FDP on "Outcome Based Education(OBE)" is arranged and all the faculty members are attended and gain the knowledge on OBE. The students are given the orientation on OBE.
		Concentrate on topics which is focused in the GATE syllabus or any other competitive syllabus.	It is instructed all the course coordinator to compare the syllabus with all competitive syllabi.
		For online teaching various platforms such as Zoom, Google Meet, Microsoft 365, webex meet etc. shall be used	All faculty members with students are using online platforms like Microsoft teams and google
4	1.8	Students requested to conduct Project Expo regularly	The Final year students project is displayed as Project expo and the other students are invited as spectators.
		Need Company specific training	It is decided to conduct technical training in specific with the company. The Latest placement papers and pattern related to that company are made available for the students to get practised.
		Platform for performing other activities like sports in the form of competitions.	Very spacious ground, required number of PD's are present in the campus and State level competitions are conducted regularly in the campus.
5	1.9	Suggestion to include Emerging subjects and technologies in the syllabus	In the revised Syllabus, Advanced Unix Programming and Hadoop & Bigdata Lab has been introduces as new course and training on emerging technologies like cloud technologies is planned.
		Suggestion to enhance general communication skills	Seminar presentation on recent technologies are made mandatory for the students to improve communication and presentation

			skills. The course Comprehensive Viva-Voce is also enhances the communication skill and technical knowledge on various courses.
6	1.9	Suggested to include the ways to write SCI papers and checking Plagiarism to get published in reputed journals.	Based on the Alumni opinion training has been given to the M.Tech students to get more experience in research and publishing paper.
		Add more programming skills courses in curriculum.	Programming subjects like Python and R programming are included.
7	1.9	Apart from regular teaching, social awareness, and human values to be imparted to students.	The centres like Dr. Ambedkar Studies centres all over the world offered co-curricular courses which can be opted by any student during his/her period of study.
		Future career orientation and Trending concepts in technical field	More innovative and recent technologies in software were introduced.
8	1.8	Students requested to conduct Latex training regularly.	To write a better document using Latex, Bibliography, an instructor has been invited to conduct online coaching classes and conducted.
		Provide more internship programmes for career development.	As part of curriculum, Internships are also made available to students.

  
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