

ADITYA ENGINEERING COLLEGE

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

Program Name : B.Tech. in Information Technology



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	191BS2T10	Numerical Methods and Complex Variables	40
12	II	191BS2T09	Engineering Chemistry	0
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	0
17	II	191BS2L04	Engineering Chemistry Lab	0
18	II	191ES2L10	Data Structures Through C++ Lab	100
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
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	171IT4T01	Language Processors	0
33	IV	171CS4T07	Java Programming	0
34	IV	171CS4T08	Database Management Systems	0
35	IV	171HS4T05	Management Science	0
36	IV	171CS4T10	Computer Organization	0

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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	171IT5T02	Computer Networks	100
42	V	171CS5T12	Python Programming	0
43	V	171IT5T03	Unix and Shell Programming	0
44	V	171CS5T14	Operating Systems	0
45	V	171IT5E01	Artificial Intelligence	100
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
50	V	171IT5L01	Operating Systems and Computer Networks Lab	60
51	V	171CS5L06	Python Programming Lab	0
52	V	171CS5L07	Software Testing Lab	0
53	V	171IT5L02	Unix and Shell Programming Lab	0
54	V	171IT5S01	MOOCs – I	100
55	VI	171IT6T04	Object Oriented Analysis and Design Using UML	0
56	VI	171CS6T16	Web Technologies	0
57	VI	171CS6T17	Data Warehousing and Data Mining	0
58	VI	171CS6E05	Software Quality Assurance	100
59	VI	171IT6E02	Neural Networks	100
60	VI	171CS6E08	Social Networks and Semantic Web	100
61	VI	171IT6E03	Design and Analysis of Algorithms	100
62	VI	171IT6E04	Advanced Computer Networks	100
63	VI	171CS6E10	Parallel Computing	100
64	VI	171IT6E05	Multimedia Programming	100
65	VI	171CS6E12	E – Commerce	100
66	VI	171HS6T07	Employability Skills – IV	100
67	VI	171IT6L03	Unified Modeling Language Lab	100
68	VI	171CS6L10	Data Warehousing and Data Mining Lab	0
69	VI	171CS6L11	Web Technologies Lab	0
70	VI	171IT6S02	MOOCs – II	100
71	VII	R1641051	Cryptography and Network Security	0
72	VII	R164105C	Mobile Computing	0
73	VII	R1641121	Data Warehousing and Business Intelligence	100
74	VII	R1641054	Managerial Economics and Financial Analysis	0
75	VII	R164105A	Big Data Analytics	100
76	VII	R164105B	Information Retrieval Systems	100
77	VII	R164112A	Internet of Things	100
78	VII	R164112B	Multimedia Programming	100
79	VII	R164105D	Cloud Computing	0
80	VII	R164105E	Software Project Management	0
81	VII	R164112C	Machine Learning	100
82	VII	R164112D	Decision Support System	100
83	VII	R1641127	Mobile Computing Lab	100
84	VII	R1641128	Cryptography and Network Security Lab	100

85	VIII	R1642051	Distributed Systems	0
86	VIII	R1642052	Management Science	0
87	VIII	R1642121	Management Information System	100
88	VIII	R164205A	Concurrent and Parallel Programming	0
89	VIII	R164212A	Cyber Security	100
90	VIII	R164205B	Artificial Neural Networks	100
91	VIII	R164212B	Software Quality Assurance	100
92	VIII	R1642055	Seminar	0
93	VIII	R1642056	Project	0
Total number of courses in the academic year 2019-2020				= 93
Number of courses having revision in syllabus content $\geq 20\%$ in the academic year 2019-2020				38
Percentage of syllabus revision carried out in the academic year 2019-2020 = $(49/135) \times 100$				= 40.86%
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;">  Program Coordinator </div> <div style="text-align: center;">  Head of the Department </div> </div>				

Head of the Department
 Department of IT
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Department of Information Technology

Date: 23-07-2019

IV BOS Minutes of Meeting held on 20/07/2019

The 4th meeting of the BOS for IT was held on 20th July 2019 at 10.00AM, Ajivika Conference Hall, Bill Gates Bhavan. Mr. M. Raja Babu, Chairperson presided over the meeting.

Agenda 4.1: Welcome address by Chairperson-BOS.

Mr. M. Raja Babu, BOS Chairperson 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 on proposed AR19 B.Tech Program structure, AR19 B.Tech(IT) Program – I & II semesters syllabus and ratification of the same.

The members of BOS ratified the AR 19 I&II Semesters B.Tech syllabus after incorporating the following changes:

- 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.
- 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.


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Agenda 4.4: Discussion on proposed AR19 M.Tech Program structure, AR19 M.Tech Program – I & II semesters syllabus and ratification of the same.

The members of BOS ratified the AR19 M.Tech Program structure, AR19 M.Tech Program – I & II semesters syllabus and ratification of the same.

Agenda 4.5: Discussion on the courses having focus on employability/entrepreneurship/skill development in B.Tech (IT) and M.Tech (Software Engineering) programs and ratification of the same.

The members of BOS ratified the courses having focus on employability/entrepreneurship/skill development in B.Tech (IT) and M.Tech (Software Engineering) programs.

Agenda 4.6: Discussion on the new courses offered in B.Tech (IT) and M.Tech (Software Engineering) programs and ratification of the same.

Members of BOS noted the new courses offered in B.Tech (IT) and M.Tech (Software Engineering) programs and ratified the same. The percentage of courses revised in this academic year 2019-2020 for B.Tech (IT) is 36.55% and M.Tech (Software Engineering) is 53.65%. The list of new courses during the academic year 2019-2020 enclosed as Annexure-I.

Agenda 4.7: Discussion on B. Tech (IT) and M.Tech (Software Engineering) 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 (IT) and M.Tech(Software Engineering) programs.

Agenda 4.8: Discussion on the value-added courses offered for students and ratification of the same.

Members of BOS ratified the value-added courses offered for students.

Agenda 4.9: Discussion on the percentage of syllabus revision done in B.Tech(IT) and M.Tech(Software Engineering) programs and ratification of the same.

The Chairperson presented the syllabus revision done in B.Tech (IT) program based on Stakeholder's Feedback on Curriculum and the BOS members approved the same. The percentage of courses revised in this academic year 2019-2020 for B.Tech (IT) is 40.86% and M.Tech (Software Engineering) is 80.48%. The list of courses revised is enclosed as Annexure-II.


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Agenda 4.10: Analysis of Results

Members of BOS noted the result analysis presented by the Chairperson for the A.Y.2018-19 and ratified the same.

Agenda 4.11: Analysis of Students Feedback & Action Taken Report

The Chairperson expressed the students' feedback and action taken report. Members of BOS noted the students' feedback and action taken report process initiated at the end of each semester. The BOS members noted the same.

Agenda 4.12: Analysis of Stakeholder's Feedback on Curriculum

The BOS Chairperson presented the analysis of Feedback on Curriculum which is taken from the various Stakeholders. 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 4.13: Any other item/s

- Suggested to conduct induction program for 3 weeks before 1st semester.
- 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 4.14: Scheduling of the next BOS meeting.

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

Agenda 4.15: Vote of Thanks

The Chairperson presented the Vote of Thanks.


BOS Chairperson

Head of the Department
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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 (IT)	I	191MC1A02	Constitution of India
2	B. Tech (IT)	II	191PR2P01	Engineering Exploration Project
3	B. Tech (IT)	II	191ES2T03	Essential Electrical and Electronics Engineering
4	B. Tech (IT)	II	191ES2T09	Data Structures Through C++
5	B. Tech (IT)	II	191ES2L10	Data Structures Through C++ Lab
6	B. Tech (IT)	V	171IT5T02	Computer Networks
7	B. Tech (IT)	V	171CS5E02	Advanced Computer Architecture
8	B. Tech (IT)	V	171IT5E01	Artificial Intelligence
9	B. Tech (IT)	V	171IT5S01	MOOCs – I
10	B. Tech (IT)	VI	171IT6E02	Neural Networks
11	B. Tech (IT)	VI	171IT6E03	Design and Analysis of Algorithms
12	B. Tech (IT)	VI	171IT6E04	Advanced Computer Networks
13	B. Tech (IT)	VI	171IT6E05	Multimedia Programming
14	B. Tech (IT)	VI	171IT6L03	Unified Modeling Language Lab
15	B. Tech (IT)	VI	171IT6S02	Moocs – II

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16	B. Tech (IT)	VI	171CS6E05	Software Quality Assurance
17	B. Tech (IT)	VI	171CS6E08	Social Networks And Semantic Web
18	B. Tech (IT)	VI	171CS6E10	Parallel Computing
19	B. Tech (IT)	VI	171CS6E12	E-Commerce
20	B. Tech (IT)	VII	R1641121	Data Ware Housing and Business Intelligence
21	B. Tech (IT)	VII	R164105A	Big Data Analytics
22	B. Tech (IT)	VII	R164105B	Information Retrieval Systems
23	B. Tech (IT)	VII	R164112A	Internet of Things
24	B. Tech (IT)	VII	R164112B	Multimedia Programming
25	B. Tech (IT)	VII	R164112C	Machine Learning
26	B. Tech (IT)	VII	R164112D	Decision Support System
27	B. Tech (IT)	VII	R1641126	Mobile Computing Lab
28	B. Tech (IT)	VII	R1641128	Cryptography and Network Security Lab
29	B. Tech (IT)	VIII	R1642121	Management Information System
30	B. Tech (IT)	VIII	R164212A	Cyber Security
31	B. Tech (IT)	VIII	R164212B	Software Quality Assurance
32	B. Tech (IT)	VIII	R164205B	Artificial Neural Networks
33	B. Tech (IT)	V	171HS5T06	Employability Skills-III
34	B. Tech (IT)	VI	171HS6T07	Employability Skills-IV
35	M. Tech (SE)	I	192SO1T01	Software Engineering
36	M. Tech (SE)	I	192SO1T02	Advanced-Data Structures
37	M. Tech (SE)	I	192SO1E02	Machine Learning


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38	M. Tech (SE)	I	192CO1E06	Internet of Things
39	M. Tech (SE)	I	192HS1T01	Research Methodology and IPR
40	M. Tech (SE)	I	192SO1L01	Advanced-Data Structures Lab
41	M. Tech (SE)	I	192SO1L02	Software Engineering Lab – I
42	M. Tech (SE)	II	192SO2T04	Mathematical Foundations of Computer Science
43	M. Tech (SE)	II	192SO2E06	Software Testing Methodologies
44	M. Tech (SE)	II	192SO2E07	Agile Software Development
45	M. Tech (SE)	II	192SO2E11	Design Patterns
46	M. Tech (SE)	II	192SE2L03	Software Testing Lab
47	M. Tech (SE)	II	192SE2L04	Software Engineering Lab – II
48	M. Tech (SE)	II	192SE2P01	Mini Project with Seminar
49	M. Tech (SE)	II	192MC1A01	English for research paper writing
50	M. Tech (SE)	II	192MC1A02	Disaster Management
51	M. Tech (SE)	II	192MC1A03	Sanskrit for Technical Knowledge
52	M. Tech (SE)	II	192MC1A04	Value Education
53	M. Tech (SE)	II	192MC1A05	Constitution of India
54	M. Tech (SE)	II	192MC1A06	Pedagogy Studies
55	M. Tech (SE)	II	192MC1A07	Stress Management by Yoga
56	M. Tech (SE)	II	192MC1A08	Personality Development through Life Enlightenment Skills
57	M. Tech (SE)	II	192MC1A09	Soft Skills


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BOS Chairperson
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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 (IT)	I	191BS1T03	Applied Physics
2	B. Tech (IT)	II	191BS2T10	Numerical Methods and Complex Variables
3	B. Tech (IT)	V	171CS5E04	Software Testing Methodologies
4	B. Tech (IT)	V	171IT5L01	Operating Systems and Computer Networks Lab
5	M. Tech (SE)	I	192SO1E05	Cloud Computing


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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	4.3	Suggested to include courses related to Industrial programming knowledge	Programming for Problem Solving using C and Programming for Problem Solving using C courses will be introduced.
2	4.3	Include courses that should focus on data structures	Data Structures Through C++, Data Structures Through C++ Lab, Advanced Data Structures, and Advanced Data Structures Lab courses will be introduced.
3	4.11	Include a seminar course that will make students industry-ready presentations.	As per the suggestion, Seminar course will be added in the coming semesters.
4	4.11	Some courses can be mentioned as Audit Courses.	Environmental Science, Constitution of India, and Essence of Indian Traditional Knowledge courses will be introduced.
5	4.3	Suggested to include some management courses for industrial purpose.	Management Information System and Managerial Economics and Financial Analysis courses will be included.
6	4.11	Suggested to include courses related to trending technologies	Machine Learning, Big Data Analytics and Neural Networks courses will be included.

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7	4.13	Include some courses that will make the students able to work on new technologies and innovations	The Engineering Exploration Project course has been introduced.
8	4.11	Suggested to include few general courses from different domains	As per suggestion, Engineering Graphics and Design and Constitution of India will be introduced in the coming semesters.
9	4.11	Include courses that will make the students get the domain knowledge of other disciplines	Basic Engineering Workshop, Engineering Graphics, and Design, and Essential Electrical and Electronics Engineering courses have been introduced
10	4.11	Some Courses should focus on providing the basic knowledge of the domain	IT Workshop course has been introduced.
11	4.3	Introduce more elective courses to provide a choice of subjects to be chosen to support the Choice Based Credit System.	Suggestions will be considered and more elective courses will be introduced
12	4.11	Suggested to prescribe textbooks that have global acceptance	As per the suggestion given all the prescribed textbooks for all courses were in accordance with global acceptance.


BOS Chairperson

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