



ADITYA ENGINEERING COLLEGE

An Autonomous Institution

Approved by AICTE • Permanently Affiliated to JNTUK • Accredited by NAAC with 'A' Grade
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 Civil Engineering

Syllabus Revision for the Academic Year 2019-2020

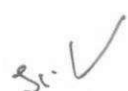
S.No	Semester	Course Code	Course Name	% of content revised for the existing year
1	I	191HS1T01	Communicative English	90
2	I	191BS1T01	Differential Equations and Linear Algebra	20
3	I	191BS1T02	Engineering Physics	60
4	I	191ES1T01	Programming for Problem Solving Using C	10
5	I	191HS1L01	Communicative English Lab-I	5
6	I	191BS1L01	Engineering Physics Lab	60
7	I	191ES1L01	Programming for Problem Solving Using C Lab	10
8	I	191ES1L02	Basic Engineering Workshop	55
9	I	191MC1A01	Environmental Science	25
10	I	191MC1A02	Constitution of India	100
11	II	191BS2T05	Partial Differential Equations and Vector Calculus	40
12	II	191BS2T06	Chemistry of Materials	70
13	II	191ES2T02	Engineering Graphics and Design	55
14	II	191ES2T03	Essential Electrical and Electronics Engineering	10
15	II	191ES2T04	Engineering Mechanics	15
16	II	191HS2L02	Communicative English Lab- II	0
17	II	191BS2L04	Engineering Chemistry Lab	50
18	II	191ES2L03	Essential Electrical and Electronics Engineering Lab	100

PRINCIPAL
Aditya Engineering College
SURAMPALAM

19	II	191ES2L04	Civil Engineering Workshop	100
20	II	191PR2P01	Engineering Exploration Project	100
21	III	171BS3T10	Probability and Statistics	25
22	III	171ES3T05	Basic Electrical and Electronics Engineering	0
23	III	171ES3T09	Strength of Materials - I	0
24	III	171CE3T01	Building Materials and Construction	0
25	III	171CE3T02	Surveying	0
26	III	171CE3T03	Fluid Mechanics	0
27	III	171CE3L01	Surveying Lab	0
28	III	171ES3L03	Strength of Materials Lab	0
29	III	171HS3A09	Professional Ethics and Human Values	0
30	III	171HS3A10	Employability Skills - I	0
31	IV	171CE4T04	Building Planning and Computer Aided Drawing	0
32	IV	171CE4T05	Concrete Technology	0
33	IV	171CE4T06	Engineering Geology	0
34	IV	171CE4T07	Hydraulics and Hydraulic Machinery	0
35	IV	171CE4T08	Strength of Materials – II	0
36	IV	171CE4T09	Structural Analysis - I	0
37	IV	171CE4L02	Fluid Mechanics and Hydraulic Machinery Lab	0
38	IV	171CE4L03	Concrete Technology Lab	10
39	IV	171HS4A08	Intellectual property rights and patents	0
40	IV	171HS4A11	Employability Skills - II	0
41	IV	171HS4A04	Managerial Economics and Financial Analysis	0
42	V	171HS5T05	Management Science	20
43	V	171CE5T10	Design and Drawing of Reinforced Concrete Structures	0

44	V	171CE5T11	Transportation Engineering	32
45	V	171CE5T12	Structural Analysis - II	0
46	V	171CE5T13	Water Resource Engineering - I	17
47	V	171CE5E01	(PE I) Construction Technology and Management	33
48	V	171CE5E02	Urban Hydrology	0
49	V	171CE5E03	Traffic Engineering	17
50	V	171HS5T06	Employability Skills - III	100
51	V	171CE5L04	Engineering Geology Lab	25
52	V	171CE5L05	Transportation Engineering Lab	20
53	V	171CE5S01	MOOCs – I	100
54	V	171CE5P03	Surveying Camp	100
55	VI	171CE6T14	Design and Drawing of Steel Structures	0
56	VI	171CE6T15	Geotechnical Engineering - I	33
57	VI	171CE6T16	Water Resource Engineering - II	0
58	VI	171CE6T17	Prestressed Concrete	0
59	VI	171CE6E04	PE II Ground Water Development	0
60	VI	171CE6E05	Pavement Analysis and Design	17
61	VI	171CE6E06	Repair and Rehabilitation of Structures	0
62	VI	171CE6E07	PE III Ground Improvement Techniques	0
63	VI	171CE6E08	Finite Element Methods	17
64	VI	171CE6E09	Earthquake Resistant Design	0
65	VI	171HS6T07	Employability Skills - IV	100
66	VI	171CE6L06	Geotechnical Engineering Lab	20
67	VI	171CE6L07	Irrigation Design and Drawing	0
68	VI	171CE6S02	MOOCs - II	100

69	VII	R1641011	Environmental Engineering - II	0
70	VII	R1641012	Water Resource Engineering - II	0
71	VII	R1641013	Geotechnical Engineering - II	0
72	VII	R1641014	Remote Sensing & GIS Applications	0
73	VII	R164101A	Finite Element Methods(Elective I)	0
74	VII	R164101B	Ground Improvement Techniques	0
75	VII	R164101C	Air Pollution & Control	0
76	VII	R164101D	Urban Hydrology	0
77	VII	R164101E	Traffic Engineering	0
78	VII	R164101F	Advanced Structural Engineering(Elective II)	0
79	VII	R164101G	Advanced Foundation Engineering	0
80	VII	R164101H	Environmental Impact Assessment & Management	0
81	VII	R164101I	Ground Water Development	0
82	VII	R164101J	Pavement Analysis and Design	0
83	VII	R1641019	IPR & Patents	0
84	VII	R1641017	GIS & CAD Lab	0
85	VII	R1641018	Irrigation Design & Drawing	100
86	VIII	R1642011	Estimation Specification & Contracts	0
87	VIII	R1642012	Construction Technology & Management	0
88	VIII	R1642013	Prestressed Concrete	0
89	VIII	R164201A	Bridge Engineering (Elective III)	0
90	VIII	R164201B	Soil Dynamics and Foundations	100
91	VIII	R164201C	Solid and Hazardous Waste Management	0
92	VIII	R164201D	Water Resources Systems Planning	0
93	VIII	R164201E	Urban Transportation Planning Engineering	0



 PRINCIPAL
 Aditya Engineering College
 SURAMPALAM

94	VIII	R1642015	Seminar on Internship Project	100
95	VIII	R1642016	Project	0
Total number of courses in the academic year 2019-2020				= 95
Number of courses having revision in syllabus content $\geq 20\%$ in the academic year 2019-2020				= 30
Percentage of syllabus revision carried out in the academic year 2019-2020 = $(30/95)*100$				= 31.57 %


Program Coordinator


Head of the Department

Head of the Department
Dept. of Civil Engineering
ADITYA ENGINEERING COLLEGE (A9)


PRINCIPAL
Aditya Engineering College
SURAMPALEM



ADITYA ENGINEERING COLLEGE

An Autonomous Institution

Approved by AICTE • Permanently Affiliated to JNTUK • Accredited by NAAC with 'A' Grade
Recognised by UGC under sections 2(f) and 12(B) of UGC Act, 1956
Aditya Nagar, ADB Road, Surampalem - 533437, Near Kaknada, E.G.Dt., Ph:99498 76662

Department of Civil Engineering

Date: 27-07-2019

Minutes of the 4th meeting of BOS scheduled on 20-07-2019

The 4th meeting of the BOS of Civil Engineering was held on 20th July 2019 at 10.00 AM, Ajivika Conference Hall, Bill Gates Bhavan. Prof P.Ravi Kishore, Chairperson presided over the meeting.

Agenda 4.1: Welcome address by Chairman

Prof.P.Ravi Kishore, BOS Chairman invited the distinguished members of BOS to the IV BOS Meeting.

Agenda 4.2: 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 4.3: Discussion on proposed course structure for AR19 as per the guidelines of APSCHE and AICTE for B.Tech (CE) and ratification of the same.

- After detailed discussions with the BOS members on the course structure of B.Tech the following suggestions are made.
 1. Suggested to merge M-III and M-IV by considering the relevant topics.
 2. Suggested to bifurcate Structural Analysis into two parts in consecutive semesters.
 3. Suggested to replace Design of Tall Buildings with Advanced Concrete Technology in structural stream in Open Electives the same is implemented.
 4. Suggested to replace River Basin Management with Irrigation Structures in Water Resources stream on Open Electives the same is implemented.
 5. Suggested to replace Traffic Analysis with Urban Transportation in transportation stream on Open Electives the same is implemented.
 6. Suggested to replace Environmental Pollution and Control with Municipal and Hazardous Solid Waste Management in Environmental stream on Open Electives the same is implemented.
 7. Suggested some guidelines regarding the syllabus framing in advanced structural Design the guidelines are carefully recorded.
 8. Suggested to include Industrial by product Waste Management in Industrial Waste and Waste Water engineering the guidelines are carefully recorded.
 9. Suggested to include ISO specifications and safety engineering in one of the Open Electives the same is implemented.

S. J.
PRINCIPAL
Aditya Engineering College
SURAMPALAM

10. Suggested to revise lectures and credits allocation for Environmental Engineering course.
 11. Suggested to familiarise the students with latest technologies and advanced materials like Pre-casting, Pre-fabrication and white topping through industrial exposure.
- BOS members approved B.Tech First Year II semester syllabus of branch specific workshop-II for Civil Engineering.

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

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

Agenda 4.5: Discussion on the courses having focus on employability/ entrepreneurship/ skill development in the programs of AR19 B.Tech (CE) and M.Tech, (Structural Engineering) 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 (CE) , and M.Tech (Structural Engineering) program.

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

- Members of BOS noted the new courses offered in the AR19 B.Tech (CE) and M.Tech (Structural Engineering) programs and ratified the same. The percentage of new courses introduced in the academic year 2019-20 for B. Tech (CE) is 10.53% and M. Tech (Structural Engineering) is 50%. The list of new courses during the academic year 2019-2020 enclosed as Annexure-I.

Agenda 4.7: Discussion on the B.Tech (CE) and M.Tech (Structural Engineering) Programmes 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 (CE) and M.Tech (Structural Engineering) programs.

Agenda 4.8: Discussion on the percentage of syllabus revision done in the B.Tech(CE) & M.Tech (Structural Engineering) programs and ratification of the same.

- The syllabus revisions were done in B. Tech (CE) and M. Tech (Structural Engineering) based on the stake holder's feedback on Curriculum. The BOS members have approved all the syllabus revisions in both B. Tech (CE) and M. Tech (Structural Engineering). The percentage of courses revised in this academic year 2019-20 for B. Tech (CE) is 31.57 % and M. Tech (Structural Engineering) is 55.55 %. The list of courses revised is enclosed as Annexure-II.

Agenda 4.9: 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 4.10: 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 4.11: Analysis of Students Feedback & Action Taken Report

- BOS Chairperson expressed that the student feedback & action taken report process initiated at the end of each semester. The BOS members have noted the results in academic year 2018-2019.

Agenda 4.12: Analysis of the feedback on curriculum from stakeholders

- The BOS Chairperson presented the analysis report of stakeholders' 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 4.13: Any other items


- Suggested that the department can approve the & then course offered by the MOOCS course provided in that current semester.
- Suggested to add new technologies in elective courses to fill the gap between industry and academics
- Suggested to make MOUs with industries and premier institutes.

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

- Prof. P.Ravi Kishore, BOS Chairperson presented the vote of thanks.


BOS Chairperson
Head of the Department
Dept. of Civil Engineering
ADITYA ENGINEERING COLLEGE (AO)


PRINCIPAL
Aditya Engineering College
D. No. 100/1, 100/2, 100/3, 100/4, 100/5, 100/6, 100/7, 100/8, 100/9, 100/10, 100/11, 100/12, 100/13, 100/14, 100/15, 100/16, 100/17, 100/18, 100/19, 100/20, 100/21, 100/22, 100/23, 100/24, 100/25, 100/26, 100/27, 100/28, 100/29, 100/30, 100/31, 100/32, 100/33, 100/34, 100/35, 100/36, 100/37, 100/38, 100/39, 100/40, 100/41, 100/42, 100/43, 100/44, 100/45, 100/46, 100/47, 100/48, 100/49, 100/50, 100/51, 100/52, 100/53, 100/54, 100/55, 100/56, 100/57, 100/58, 100/59, 100/60, 100/61, 100/62, 100/63, 100/64, 100/65, 100/66, 100/67, 100/68, 100/69, 100/70, 100/71, 100/72, 100/73, 100/74, 100/75, 100/76, 100/77, 100/78, 100/79, 100/80, 100/81, 100/82, 100/83, 100/84, 100/85, 100/86, 100/87, 100/88, 100/89, 100/90, 100/91, 100/92, 100/93, 100/94, 100/95, 100/96, 100/97, 100/98, 100/99, 100/100



ADITYA ENGINEERING COLLEGE

An Autonomous Institution

Approved by AICTE • Permanently Affiliated to JNTUK • Accredited by NAAC with 'A' Grade
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

Department of Civil Engineering


Annexure I

List of New Courses in the Academic Year 2019-2020

S. No	Program	Semester	Course Code	Course Name
1.	B. Tech (CE)	I	191MC1A02	Constitution of India
2.	B. Tech (CE)	II	191PR2P01	Engineering Exploration Project
3.	B. Tech (CE)	II	191ES2L03	Essential Electrical and Electronics Engineering Lab
4.	B. Tech (CE)	II	191ES2L04	Civil Engineering Workshop
5.	B. Tech (CE)	V	171HS5T06	Employability Skills - III
6.	B. Tech (CE)	VI	171HS6T07	Employability Skills - IV
7.	B. Tech (CE)	V	171CE5S01	MOOCs - I
8.	B. Tech (CE)	V	171CE5P03	Surveying Camp
9.	B. Tech (CE)	VI	171CE6S02	MOOCs - II
10.	B. Tech (CE)	VII	R1641018	Irrigation Design & Drawing
11.	M. Tech (Structural Engineering)	I	192MC1A01	English for Research Paper Writing
12.	M. Tech (Structural Engineering)	I	192MC1A02	Disaster Management
13.	M. Tech (Structural Engineering)	I	192MC1A03	Sanskrit for Technical Knowledge
14.	M. Tech (Structural Engineering)	I	192MC1A04	Value Education
15.	M. Tech (Structural Engineering)	I	192MC1A05	Constitution of India
16.	M. Tech (Structural Engineering)	I	192MC1A06	Pedagogy Studies

PRINCIPAL
Aditya Engineering College
SURAMPALAM

17.	M. Tech (Structural Engineering)	I	192MC1A07	Stress Management by Yoga
18.	M. Tech (Structural Engineering)	I	192MC1A08	Personality Development through Life Enlightenment Skills
19.	M. Tech (Structural Engineering)	I	192MC1A09	Soft Skills
20.	M. Tech (Structural Engineering)	I	192ST1T03	Advanced Concrete Technology
21.	M. Tech (Structural Engineering))	I	1925T1E03	Design of RCC Foundations
22.	M. Tech (Structural Engineering)	I	1925T1E02	Analytical & Numerical Method for Structural Engineering
23.	M. Tech (Structural Engineering)	I	1925T1E06	Advanced Reinforced Concrete Design
24.	M. Tech (Structural Engineering)	II	1925T2E08	Advanced Steel Design
25.	M. Tech (Structural Engineering)	II	1925T2E09	Analysis of offshore Structures
26.	M. Tech (Structural Engineering)	II	1925T2E11	Precast and Prefabricated Structures
27.	M. Tech (Structural Engineering)	II	1925T2E12	Earth Retaining Structures
28.	M. Tech (Structural Engineering)	II	192ST2L04	Structural Design Laboratory


BOS Chairperson
Head of the Department
Dept. of Civil Engineering
ADITYA ENGINEERING COLLEGE (A9)


PRINCIPAL
Aditya Engineering College
SURAMPalem



ADITYA ENGINEERING COLLEGE

An Autonomous Institution

Approved by AICTE • Permanently Affiliated to JNTUK • Accredited by NAAC with 'A' Grade

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

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

Department of Civil Engineering

Annexure II

List of Courses revised in the Academic Year 2019-2020

S. No	Program	Semester	Course Code	Course Name
1	B. Tech (CE)	I	191HS1T01	Communicative English-I
2	B. Tech (CE)	I	191BS1T01	Differential Equations and Linear Algebra
3	B. Tech (CE)	I	191BS1T02	Engineering Physics
4	B. Tech (CE)	I	191BS1L01	Engineering Physics lab
5	B. Tech (CE)	I	191ES1L02	Basic Engineering Workshop
6	B. Tech (CE)	II	191BS2T06	Chemistry of Materials
7	B. Tech (CE)	II	191BS2L04	Engineering Chemistry Lab
8	B. Tech (CE)	II	191ES2T02	Engineering Graphics and Design
9	B. Tech (CE)	I	191MC1A01	Environmental Science
10	B. Tech (CE)	III	171BS3T10	Probability and Statistics
11	B. Tech (CE)	V	171HS5T05	Management Science
12	B. Tech (CE)	V	171CE5T11	Transportation Engineering
13	B. Tech (CE)	VIII	171CE5E01	Construction Technology and Management
14	B. Tech (CE)	V	171CE5L04	Engineering Geology Lab
15	B. Tech (CE)	V	171CE5L05	Transportation Engineering Lab
16	B. Tech (CE)	VI	171CE6T15	Geotechnical Engineering - I
17	B. Tech (CE)	VI	171CE6L06	Geotechnical Engineering Lab
18	M. Tech (Structural Engineering)	I	192ST1T02	Structural dynamics
19	M. Tech (Structural Engineering)	I	1925T1E04	Bridge Engineering

PRINCIPAL
Aditya Engineering College
SURAMPALAM

BOS Chairperson
Dept. of Civil Engineering
ADITYA ENGINEERING COLLEGE (A9)



ADITYA ENGINEERING COLLEGE

An Autonomous Institution

Approved by AICTE • Permanently Affiliated to JNTUK • Accredited by NAAC with 'A' Grade

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

DEPARTMENT OF CIVIL ENGINEERING


Annexure III

Action taken report on Stakeholders Feedback in the Academic Year 2019-2020

S. No	Agenda Item No.	Stakeholders Recommended	Action Taken
1	4.7	It is better to provide more choice-based subjects.	Inclusion of various open electives from different disciplines like Electrical Safety, 3D Printing, Digital Electronics and logic Design, Java Programming etc. will be included.
	4.13	Improve extracurricular activities by planning industrial trips.	Introduction of surveying camp in V Semester.
	4.5	Train students and raise awareness among them to pass the GATE and IES exams.	Civil Department organizing the GATE training for the interested and fast learning students.
2	4.5	Focus on courses related to entrepreneurship.	Inclusion of courses like Entrepreneurship Development and Incubation in V semester
		Student exposure towards socially relevant activities.	Incorporation of socially Relevant Project in V Semester
		To prepare students for interviews, conduct programming skills training for them.	For the training program, we have already introduced


PRINCIPAL
Aditya Engineering College
SURAMPALEM

3		The curriculum should be adjusted to reflect the IES and GATE exams	Project work is undertaken as project part-I in VII semester and project part-II in VIII semester, instead of Major Project in VIII semester of AR17 regulation
	4.5	Time frame for Project work can be increased to enhance practical exposure to various day to day life activities.	We will setup workshop schedules based on suggestions.
	4.3	Organize a workshop to discuss improvements in the teaching and Learning Process.	Step by step, we are upgrading the syllabus
4	4.5	It is better to add additional skill oriented programs	As per suggestions value added courses are initiated in both even and odd semesters.
	4.3	Plan your curriculum so that theory and lab are parallel for better understanding.	We will improve the syllabus based on the suggestions.
	4.3	Increase the number of laboratory classes.	We will try to offer more lab classes based on feedback


 BOS Chairperson
 Head of the Department
 Dept. of Civil Engineering
 ADITYA ENGINEERING COLLEGE (A9)


 PRINCIPAL
 Aditya Engineering College
 SURAMPALEM