



ADITYA ENGINEERING COLLEGE

An Autonomous Institution

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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 Agricultural 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	171HS1T01	English – I	65
2	I	171BS1T01	Mathematics – I	40
3	I	171HS1T02	Environmental Studies	20
4	I	171BS1T03	Engineering Chemistry	25
5	I	171ES1T02	Engineering Mechanics	0
6	I	171ES1T01	Computer Programming	0
7	I	171HS1L01	English Communication Skills Lab – I	10
8	I	171BS1L01	Engineering Chemistry Lab	20
9	I	171ES1L01	Computer Programming Lab	40
10	II	171HS2T03	English – II	55
11	II	171BS2T02	Mathematics - II	10
12	II	171BS2T06	Mathematics - III	40
13	II	171BS2T07	Engineering Physics	10
14	II	171ES2T03	Engineering Drawing	0
15	II	171ES2T08	Theory of Machines	20

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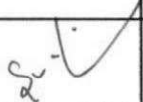
16	II	171HS2L02	English Communication Skills Lab – II	40
17	II	171BS2L02	Engineering Physics Lab	10
18	II	171ES2L02	Engineering Workshop & IT Workshop	0
19	III	R1621351	Fluid Mechanics and Open Channel Hydraulics	0
20	III	R1621352	Renewable Energy Sources	0
21	III	R1621353	Ground Water Hydrology, Well and Pumps	0
22	III	R1621354	Properties and Strength of Materials	0
23	III	R1621355	Electrical Systems	0
24	III	R1621356	Surveying	0
25	III	R1621357	Fluid Mechanics and Open Channel Hydraulics Lab	0
26	III	R1621358	Surveying Lab	0
27	IV	R1622351	Theory of Structures	0
28	IV	R1622352	Heat and Mass Transfer	0
29	IV	R1622353	Theory of Machines	0
30	IV	R1622354	Soil Mechanics	0
31	IV	R1622355	Surface Water Hydrology	0
32	IV	R1622356	Farm Power and Tractor Systems	0
33	IV	R1622357	Soil Science and Agronomy Field Lab	0
34	IV	R1622358	Machine Drawing and Computer Graphics Lab	0
35	V	RT31016	IPR & Patents	0
36	V	RT31267	Advanced English Communications Skills Lab	0

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37	V	RT31351	Thermodynamics and Refrigeration systems	0
38	V	RT31352	Soil and water Conservation Engineering	0
39	V	RT31353	Agricultural Process Engineering	0
40	V	RT31354	Engineering Properties of Biological Materials and Food Quality	0
41	V	RT31355	Agricultural Extension Techniques and Business Management	0
42	V	RT31358	Farm Machinery Lab	0
43	V	RT31359	Seminar	0
44	VI	RT32351	Irrigation And Drainage Engineering	0
45	VI	RT32352	Farm Machinery And Equipment I	0
46	VI	RT32353	Design Of Soil & Water Conservation And Farm Structures	0
47	VI	RT32354	Dairy And Food Engineering	0
48	VI	RT32355	Theory Of Structures	0
49	VI	RT32356A	Operations Research	0
50	VI	RT32356B	Digital Control systems	0
51	VI	RT32356C	Robotics & Automation	0
52	VI	RT32356D	Industrial Pollution Control Engineering	0
53	VI	RT32356E	Advanced Separation Technology	0
54	VI	RT32356F	Mechatronics	0
55	VI	RT32356G	Finite Element Method	0
56	VI	RT32356H	Soil Dynamics and Machine Foundations	0
57	VI	RT32356I	Water Resources System Planning and Management	0

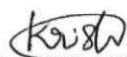
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58	VI	RT32356J	Green Technologies	0
59	VI	RT32357	Agricultural Process Engineering Lab	0
60	VI	RT32358	Soil And Water Engineering Lab	0
61	VII	RT41351	Micro irrigation engineering	100
62	VII	RT41352	Farm machinery and equipments II	100
63	VII	RT41353	Post harvest engineering for horticulture produce	100
64	VII	RT41354	Mechanical measurements and instrumentation	100
65	VII	RT41355	Seed processing and storage engineering	100
66	VII	RT41356	Managerial economics & financial Analysis	100
67	VII	RT41357	Food processing plant design and layout	100
68	VII	RT41358	Watershed management	100
69	VII	RT41359	Food packaging technology	100
70	VII	RT41310	Computational Fluid Dynamics	100
71	VII	RT4135L	Field operation and maintenance of tractors and farm machinery lab	100
72	VII	RT4135M	Dairy and food engineering lab	100
73	VIII	RT42351	Design of agricultural machinery	100
74	VIII	RT42352	Agro industries and bi-product utilization	100
75	VIII	RT42353A	GIS and remote sensing	100
76	VIII	RT42353B	Human engineering and safety	100
77	VIII	RT42353C	Production Technology of Agricultural Machinery	100
78	VIII	RT42354C	Principles of entrepreneurship	100

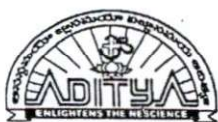

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79	VIII	RT42354A	Minor Irrigation and Command area development	100
80	VIII	RT42354B	Hydraulic Devices and Control	100
81	VIII	RT42355	Project work	100
Total number of courses in the academic year 2017-2018				81
Number of courses having revision in syllabus content $\geq 20\%$ in the academic year 2017-2018				31
Percentage of syllabus revision carried out in the academic year 2017-2018 = $(31/81)*100$				38.27


Program Coordinator


Head of the Department
Head of the Department
Department of Agricultural Engineering
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Department of Agricultural Engineering

Annexure-I

List of New Courses in the Academic Year 2017-2018

S. No	Program	Semester	Course Code	Course Name
1	B. Tech (Ag.E)	VII	RT41351	Micro irrigation engineering
2	B. Tech (Ag.E)	VII	RT41352	Farm machinery and equipments II
3	B. Tech (Ag.E)	VII	RT41353	Post- harvest engineering for horticulture produce
4	B. Tech (Ag.E)	VII	RT41354	Mechanical measurements and instrumentation
5	B. Tech (Ag.E)	VII	RT41355	Seed processing and storage engineering
6	B. Tech (Ag.E)	VII	RT41356	Managerial economics & financial Analysis
7	B. Tech (Ag.E)	VII	RT41357	Food Processing Plant Design and Layout
8	B. Tech (Ag.E)	VII	RT41358	Watershed management
9	B. Tech (Ag.E)	VII	RT41359	Food packaging technology
10	B. Tech (Ag.E)	VII	RT4135L	Field operation and maintenance of tractors and farm machinery lab
11	B. Tech (Ag.E)	VII	RT4135M	Dairy and food engineering lab
12	B. Tech (Ag.E)	VII	RT41357	Food processing plant design and layout
13	B. Tech (Ag.E)	VIII	RT42351	Design of agricultural machinery
14	B. Tech (Ag.E)	VIII	RT42352	Agro industries and bi-product utilization
15	B. Tech (Ag.E)	VIII	RT42353A	GIS and remote sensing
16	B. Tech (Ag.E)	VIII	RT42353B	Human engineering and safety
17	B. Tech (Ag.E)	VIII	RT42354C	Principles of entrepreneurship
18	B. Tech (Ag.E)	VIII	RT42354D	Production Technology of Agricultural Machinery
19	B. Tech (Ag.E)	VIII	RT42354E	Minor Irrigation and Command area development
20	B. Tech (Ag.E)	VIII	RT42354F	Hydraulic Devices and Control
21	B. Tech (Ag.E)	VIII	RT42355	Project work

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BoS Chairperson
Head of the Department
Department of Agricultural Engineering
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Annexure-II

List of Revised Courses in the Academic Year 2017-2018

S.No	Program	Semester	Course Code	Course Name
1	B. Tech (Ag.E)	I	171HS1T01	English- I
2	B. Tech (Ag.E)	I	171BS1T01	Mathematics - I
3	B. Tech (Ag.E)	I	171HS1T02	Environmental Studies
4	B. Tech (Ag.E)	I	171BS1T03	Engineering Chemistry
5	B. Tech (Ag.E)	I	171BS1L01	Engineering Chemistry Lab
6	B. Tech (Ag.E)	II	171ES1L01	Computer Programming Lab
7	B. Tech (Ag.E)	II	171HS2T03	English_II
8	B. Tech (Ag.E)	II	171BS2T06	Mathematics - III
9	B. Tech (Ag.E)	II	171HS2L02	English Communication Skills Lab - II
10	B. Tech (Ag.E)	V	171AG5T11	Theory of Machines

BoS Chairperson

Head of the Department

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Annexure-III

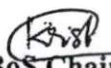
Action Taken Report on Stakeholders Feedback in the Academic Year 2017-2018

S. No	Agenda Item No.	Stakeholders Recommended	Action Taken
1	1.9	Suggested to provide skill advancement courses to improve technical skills.	As per suggestions, Value added courses will be included in the course curriculum.
2		Suggested to include SCS-CN method for computing peak run-off in surface water hydrology	As per suggestions, modifications will be included in surface water hydrology.
3		Suggested to arrange more industrial visits	As per suggestions, necessary action will be taken in coming semesters.
4		Suggested to include some small-scale project works to improve technical skills.	As per suggestions, Engineering Exploration Project will be included in course curriculum.
5		It would helpful for the students if they have more choices in electives.	As per suggestions, More Open and Professional electives will be included to facilitate this suggestion.
6		Suggested to bring more core companies for placements	As per suggestions, necessary action will be taken.
7		Suggested to include Fellow, P. Food Process Technology, CRC Press in Agricultural Process Engineering Course reference books.	As per suggestions and discussions made, Fellow, P. Food Process Technology, CRC Press will be included in Agricultural Process Engineering Course reference books.
8	1.3	Suggested to change the surveying and surveying lab subjects as surveying and levelling & surveying and levelling lab	As per suggestions and discussions made, modifications will be included in course curriculum.
9		Suggested to shift Soil and Water Conservation Engineering subject from III-I to III-II.	As per suggestions, Soil and Water Conservation Engineering interchanged with Irrigation and Drainage Engineering.
10	1.9	Suggested to reduce the no. of courses to be completed by student in last semester so they can focus more on project and placements.	As per suggestions and discussions made, Syllabus will be restricted to only 2 courses i.e., Professional Elective-VI & Open Elective.

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11	1.8	Suggested to arrange more field visits.	As per suggestions, necessary steps will be taken in coming semesters.
12		Students are suggested to change the pattern of the question paper.	Taking students feed back into consideration, essential modifications will be made in the question paper pattern.


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