



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 Petroleum Technology

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	171BS2T06	Mathematics - III	40
12	II	171BS2T02	Mathematics - II	10
13	II	171BS2T07	Engineering Physics	25
14	II	171ES2T03	Engineering Drawing	0
15	II	171ES2T07	Elements Of Mechanical Engineering	0
16	II	171HS2L02	English Communication Skills Lab - II	40
17	II	171BS2L02	Engineering Physics Lab	10
18	II	171ES2L02	Engineering Workshop And IT Workshop	0
19	III	R1621081	Complex Variables	0
20	III	R1621012	Basic Electrical And Electronics Engineering	0
21	III	R1621272	General Geology	0
22	III	R1621273	Surveying And Offshore Structures	0
23	III	R1621084	Chemical Process Calculations	0
24	III	R1621271	Materials Science And Engineering	0
25	III	R1621085	Basic Engineering (Mech. + Elec.) Lab	0
26	III	R1621274	Geology And Surveying Lab	0
27	III	R1621075	Managerial Economics And Financial Analysis	0
28	IV	R1622271	Probability And Statistics	30
29	IV	R1622272	Momentum Transfer	0
30	IV	R1622273	Petroleum Geology	0
31	IV	R1622274	Thermodynamics For Petroleum Engineers	0
32	IV	R1622275	Process Heat Transfer	10
33	IV	R1622276	Petroleum Exploration	0
34	IV	R1622277	Momentum Transfer Lab	0
35	IV	R1622278	Process Heat Transfer Lab	0
36	IV	R1621019	Professional Ethics And Human Values	0
37	V	RT31086	Process Instrumentation	0

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S.No	Semester	Course Code	Course Name	% of content revised for the existing year
41	V	RT31274	Well Engineering	0
42	V	RT31275	Process Dynamics And Control	0
43	V	RT31277	Instrumentation And Process Control Lab	0
44	V	RT31278	Drilling Fluids Lab	0
45	VI	RT32271	Well Completions	0
46	VI	RT32272	Petroleum Reservoir Engineering-I	0
47	VI	RT32273	Petroleum Production Engineering And Design	0
48	VI	RT32274	Petroleum Refinery And Petrochemical Engineering	0
49	VI	RT32275	Surface Production Operations	0
50	VI	RT32277	Petroleum Analysis Lab	0
51	VI	RT32278	Drilling Simulation Lab	0
52	VI	RT32056	IPR Patents	0
53	VII	RT41271	Integrated Asset Management	0
54	VII	RT41272	Enhanced Oil Recovery Techniques	0
55	VII	RT41273	HSE And FE In Petroleum Industry	0
56	VII	RT41274	Petroleum Reservoir Engineering - II	0
57	VII	RT41016F	Green Fuel Technologies	0
58	VII	RT41016A	Energy Management	0
59	VII	RT41016B	Fundamentals Of Petroleum Industry	0
60	VII	RT41016C	Offshore Engineering	0
61	VII	RT41016D	Pipeline Engineering	0
62	VII	RT41279	Coal Bed Methane Engineering	0
63	VII	RT4127L	Petroleum Equipment Design And Simulation Lab	0
64	VII	RT4127M	Petroleum Reservoir Engineering Lab	0
65	VII	RT4127N	Presentation Of Sip Report	0
66	VIII	RT42275	Project	0
67	VIII	RT42271	Petroleum Economics And Regulations And Policies	0
68	VIII	RT42272A	Reservoir Modeling And Simulation	0
69	VIII	RT42272B	Horizontal Well Technology	0
70	VIII	RT42272C	Lng-Processes And Transportation And Storage	0
71	VIII	RT42273A	Reservoir Stimulation	0
72	VIII	RT42273B	Subsea Engineering	0
73	VIII	RT42273C	Fundamentals Of Multiphase Flow	0
74	VIII	RT42274A	Natural Gas Hydrates	0
75	VIII	RT42274B	Advanced Natural Gas Engineering	0
76	VIII	RT42274C	Petroleum Biotechnology	0

Total number of courses in the academic year 2017-2018	= 76
Number of courses having revision in syllabus content $\geq 20\%$ in the academic year 2017-2018	= 11
Percentage of syllabus revision carried out in the academic year 2017-2018 = $(11/76) \times 100$	= 14.47%

Program Coordinator

Head of the Department

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Department of Petroleum Technology

Date: 01-06-2017

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

The I meeting of the BOS of PT was held virtually on 29-05-2017 at 9.30 AM through Microsoft Teams. Prof. R. Giri Prasad, Chairperson presided over the meeting.

Agenda 1.1: Welcome address by Chair Person.

Dr. R. Giri Prasad, BOS Chairperson invited the distinguished members of BOS to the I 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.

The BOS members have ratified 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.

Agenda 1.3: Discussion on proposed AR17 Program Structures of B. Tech (PT), M. Tech (PE) ratification of the same

The BOS members have ratified the AR17 Program Structures of B. Tech (PT), M. Tech (PE).

The percentage of courses revised in this academic year 2017-2018 for B. Tech (PT) is 14.47% and M. Tech (PE) is 8.69 %. The list of courses revised is enclosed as annexure-I

The BOS members have discussed and ratified the all elective courses in the program structure.

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

The BOS members have ratified the AR17 B. Tech, M. Tech, programs I, II & III semesters syllabus.

Agenda 1.5: Ratification of the proposed model question papers for sessional and external examinations of AR17 B. Tech (PT), M. Tech (PE) programs.

The BOS members have ratified the proposed model question papers for sessional and external examinations of AR17 B. Tech (PT), M. Tech (PE) programs.

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Agenda 1.6: Finalization of Experts from reputed institutions for setting question paper and valuation of answer scripts.

The BOS members have expressed regarding finalization of experts from reputed institutions for setting question paper and valuation of answer scripts.

Agenda 1.7: Analysis of Results

The BOS members have discussed regarding analysis of results of every semester.

Agenda 1.8: Analysis of Students Feedback & Action Taken Report.

The BOS members have discussed regarding analysis of Students Feedback & Action Taken Report.

Agenda 1.9: Analysis of Stakeholder's Feedback on Curriculum

The BOS chairperson presented the feedback on curriculum from stake holders. The BOS members noted the same and approved the feedback on curriculum. The Action Taken Report on Stakeholders Feedback is enclosed as Annexure-II.

Agenda 1.10: Any other item/s.

The BOS members have discussed and suggested to reduce Employability skills credits from 4 to 2 and to increase credits for main project.

The BOS members have discussed and suggested the courses which increases the opportunities of the students to get place in the core companies.

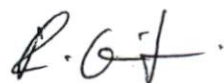
Agenda 1.11: Scheduling of the next BOS meeting.

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

Agenda 1.12: Vote of Thanks

Dr. R. Giri Prasad, BOS Chairperson presented the Vote of thanks.


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BOS Chairperson
Head of the Department
Department of Petroleum Technology
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Annexure-I

List of Courses Revised in the Academic Year 2017-2018

S. No	Program	Semester	Course Code	Course Name
1.	B. Tech (PT)	I	171HS1T01	English - I
2.	B. Tech (PT)	I	171BS1T01	Mathematics - I
3.	B. Tech (PT)	I	171HS1T02	Environmental Studies
4.	B. Tech (PT)	I	171BS1T03	Engineering Chemistry
5.	B. Tech (PT)	II	171HS1L01	English Communication Skills Lab - I
6.	B. Tech (PT)	II	171BS1L01	Engineering Chemistry Lab
7.	B. Tech (PT)	II	171ES1L01	Computer Programming Lab
8.	B. Tech (PT)	II	171HS2T03	English - II
9.	B. Tech (PT)	II	171BS2T06	Mathematics - III
10.	B. Tech (PT)	II	171BS2T02	Mathematics - II
11.	B. Tech (PT)	II	171BS2T07	Engineering Physics
12.	B. Tech (PT)	II	171HS2L02	English Communication Skills Lab - II
13.	B. Tech (PT)	II	171BS2L02	Engineering Physics Lab
14.	B. Tech (PT)	IV	R1622271	Probability and Statistics
15.	B. Tech (PT)	IV	R1622275	Process Heat Transfer
16.	M. Tech (PE)	II	172PE2E02	Optimization of Oil and Gas Production
17.	M. Tech (PE)	II	172PE2E05	Deep Water Technologies

BOS Chairperson

Head of the Department

Department of Petroleum Technology

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Annexure II

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

S. No	Agenda Item No.	Stakeholders Recommended	Action Taken
1.	1.10	Employer suggested employability skill courses	As per discussions employability skills will be introduced
2.	1.1.3	Suggested to introduce Student practical based learning	Students are encouraged to do internships and also been determined to schedule several industrial visits for students.
3.	1.9	It is better to have electives in relation with the technological advancements	According to suggestions technical courses will be introduced in the curriculum.
4.	1.3	Suggested to offer more elective courses	As per discussions elective courses are offered in course structure
5.	1.8	Faculty- student interaction may be enhanced.	There is currently a faculty interaction hour when students can have their questions answered. Mentoring ideas also strengthen the faculty interaction period.
6.	1.10	Provide campus trainings on aptitude and reasoning	As per suggestions and discussions made, placement training sessions will be conducted in association with APITA and APSSDC.
7.	1.10	Requested to have many training in technical areas.	It was decided to place more emphasis on developing technical expertise and communication abilities.
8.	1.9	Revision of curriculum & syllabi of B. Tech. programmes	The revised syllabi of Professional Elective courses offered to B.Tech. Petroleum Technology are given
9.	1.6	Change in question paper pattern of semester end examinations	To overcome the deficiency, new question paper patterns were formulated for continuous assessments and semester end examinations.
10.	1.8	Suggested to conduct orientation on faculty and students on outcome based education	It was decided to organise outcome-based education on its significance for professors and students.

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11.	1.3	Suggested to revise drilling technology area for employability	As per suggestions and discussions made subject revision will be implemented
12.	1.10	Student participation is required for the project to be completed successfully.	Projects are encouraged for students, and various industry visits will be planned .
13.	1.6	Change in question paper pattern of semester end examinations	As per suggestions and discussions with experts to overcome the deficiency, new question paper patterns were formulated for continuous assessments and semester end examinations.
14.	1.3	Suggested to offer more elective courses	As per suggestions and discussions with experts, elective courses will be introduced .
15.	1.10	Many technical training sessions were requested	As per suggestions and discussions with experts It was decided to prioritise the development of technical expertise and communication skills.



BOS Chairperson

Head of the Department
Department of Petroleum Technology
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Department of Agricultural Engineering

Date: 01-06-2017

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

The following points are discussed and recommended by the BOS members of Agricultural Engineering Department.

Agenda 1.1: Welcome address by chairperson BOS

Mr. Y. V. Krishna Reddy, Chairperson of BOS invited all the distinguished members of BOS to the first 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 and ratification of the same

The BOS members approved the AR 17 B.Tech (Ag.E) course structure and ratified the same.

The BOS members approved the AR17 B.Tech (Ag.E) course structure after making the following changes in the proposed syllabus:

1. Suggested to add MATLAB programming in C programming subject, as MATLAB is already offered in Mathematics it is not required again in C programming subject. With a clear discussion, no change was made.
2. Suggested to interchange the subject Principles of Soil Science & Agronomy for I-II to II-I and this subject was interchanged by Theory of Machines in I-II.
3. Suggested to include Probability and Statistics subject in course structure, since it is a new subject to be added, no decision was taken and kept it for next level meeting.
4. Suggested to change the course title and laboratory title of Surveying and Surveying Lab as Surveying and Leveling and Surveying and Leveling Lab because Leveling is also the part of syllabus.
5. Suggested to add Entrepreneurship Development Course in the structure and yet to be finalized after having discussion in Academic Council.
6. Suggested to change the course title of Electrical Systems as Electrical & Electronics Engineering. Suggestions were given to remove some part of Electrical Systems and add some portion about Electronics Engineering.

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7. Suggested to interchange the subject and lab of Fluid Mechanics and Open Channel Hydraulics from II-I to II-II.
8. Suggested to interchange Thermodynamics and Refrigeration Systems, Engineering Properties of Biological Materials and Food Quality from III-I to II-II. Since these are basic courses, suggestions were made to interchange. Theory of Structures and Farm Power and Tractor Systems were interchange in place of the above subjects. In order to match up with the laboratory subjects, the changes were made.
9. Suggested to interchange the subject Soil and Water Conservation Engineering from for III-I to III-II and it is interchanged by Irrigation and Drainage Engineering.
10. Suggested to interchange the subject Dairy & Food Engineering from III-II to IV-I and it is interchanged by Post Harvest Engineering for Horticultural Produce in III-II.
11. Suggested to add some topics on numerical methods in Computational Fluid Dynamics course.
12. Suggestions were made to shift the Elective course Food Packaging Technology from III-I to IV-I. It is interchanged by Agro-Industries and Bi-Product Utilization, also discussed the elective courses.
13. The BOS members noted the courses which are focusing on development of skill set of students.
 - The BOS members have discussed and approved the new courses introduced in all the B.Tech. (Ag.E), programme. The percentage of new courses introduced in the academic year 2017-2018 for B. Tech (Ag.E) is 25.93%. The list of new courses is enclosed as Annexure I.
 - BoS members discussed and ratified the percentage revision in the courses. The percentage of courses revised in the academic year 2017-2018 for B. Tech (Ag.E) is 38.27%. The percentage of the courses revised is enclosed as Annexure II.

Agenda 1.4: Discussion on proposed AR17 B. Tech program of I & II semesters syllabus and ratification of the same

BOS members approved B. Tech first year course syllabus of Theory of Machines.

Agenda 1.5: Ratification of the proposed model question papers for sessional and external examinations of AR17 B. Tech programme

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

Agenda 1.6: Finalization of Experts from reputed institutions for setting question paper and valuation of answer scripts

BOS members accepted the list consisting of the names of reputed autonomous institutions/ Universities for setting question papers and valuation of answer scripts.

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Agenda 1.7: Analysis of Results

The BOS Chairperson presented the odd semester pass percentage for the A.Y.2016-2017. The BOS members noted the same and advised to adopt the practical sessions for the faculty to achieve better percentage.

Agenda 1.8: Analysis of Students Feedback & Action Taken Report

Student feedback and action report is presented by BOS Chairperson to the BOS members and BOS members approved 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

Suggested to arrange a field or industrial visits for necessary courses from V semester onwards.

Agenda 1.11: Scheduling of the next BOS meeting

After discussions with BOS members, the next BOS meeting will be planned in the month of November 2017.

Agenda 1.12: Vote of Thanks

Mr. Y. V. Krishna Reddy, BOS chairperson presented the Vote of thanks.

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BoS Chairperson
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