



ACTION TAKEN REPORT

**Department of Petroleum & Energy Studies
(School of Engineering & Technology)**

Academic Year 2021-2022 to 2017-2018



DIT UNIVERSITY

Mussoorie Diversion Road Dehradun, Uttarakhand-248009

Academic Year 2021-22

(Department of Petroleum & Energy Studies)

Recommendation 1	<p><i>The detailed programme structures and syllabi of the courses to be offered in the upcoming 2021 batch of the B. Tech, Petroleum Engineering programme were discussed at length. After detailed deliberations, the following modifications were suggested:</i></p> <ul style="list-style-type: none"><i>i. Dr. Nitesh advised to introduce a new course “Machine learning in drilling operation”</i><i>ii. Dr. Vij has analyzed the course structure and asked not to leave the core petroleum engineering subjects in lieu of introduction of the new subjects related to oil and gas informatics.</i><i>iii. Dr. Shivanjali, Dr. Mandal and Dr. Yadav has gone through the course structure and satisfied with the new courses introduced.</i>	
<u>Action taken:</u>	Responsibility	Target Date
<p><i>As suggested by Dr. Nitesh, the drilling engineering component has been included in the course “Machine learning in petroleum operations”. The suggestions have been implemented after approval of the Academic Council.</i></p>	Chairman, BOS	April 2021



[Signature]
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Academic Year 2020-21

(Department of Petroleum & Energy Studies)

Recommendation 1

The program structure and course syllabi for B. Tech Petroleum Engineering have been discussed at great length for the 2020 Batch onwards offering. The Board recommended the suggested revisions for approval with the following additional suggestions:

- 1. The fluid rheology and fluid flow through porous media is important for petroleum engineers as it has numerous applications in oil and gas operations and shall be included in the course.*
- 2. The engineering drawing and engineering graphics shall be taught to the students.*
- 3. The electrical and electronics course shall be offered to the students.*
- 4. Keeping in mind the industrial opportunities, IT sector courses with programming and automation shall also be included.*
- 5. Workshop practice shall be made compulsory to all the students.*
- 6. In SEC Basket, drilling related course shall also be included.*
- 7. Course on advanced mathematics from petroleum engineering point of view should be there in the course structure.*
- 8. In DE Basket, Courses on CBM and Gas hydrates shall be included apart from unconventional hydrocarbon.*

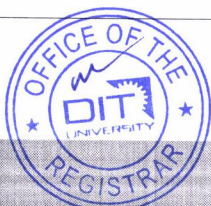
Design based project can be included in the sixth semester where students can make hands – on projects/ working models.

Action Taken	Responsibility	Target Date
<i>The recommendation have been incorporated after the approval of Academic Council.</i>	Chairman, BOS	April 2020

Recommendation 2

The proposal for offering of open elective courses from Department of Petroleum and Energy Studies has been recommended by the BOS experts.

Action Taken	Responsibility	Target Date
<i>The open elective courses were introduced after approval of the Academic Council.</i>	Chairman, BOS	April 2020



Academic Year 2019-20
(Department of Petroleum & Energy Studies)

Recommendation 1	<p><i>The detailed programme structures and syllabi of the courses to be offered in the 3rd and 4th years of the B.Tech, Petroleum Engineering programme were discussed at length. After detailed deliberations, the following changes were suggested:</i></p> <ul style="list-style-type: none"> <i>i. The core course PE 303 – Oil & Gas Transportation to be shifted to the elective basket.</i> <i>ii. Addition of one Unit on Corrosion in the course PE 303 – Oil & Gas Pipeline Engg.</i> <i>iii. Introduction of an elective course on Refinery Utilities & Energy Optimization</i> <i>iv. The elective course Applied Petroleum Reservoir Engg. (PE451) to be shifted as a core course.</i> 	
Action Taken	Responsibility	Target Date
<p><i>The recommendations have been approved by the Academic Council and implemented.</i></p>	Chairman, BOS	April 2019
Recommendation 2	<p><i>The course structures and syllabi of the course works to be assigned to the Ph.D. students of the Department were discussed In detail. The Board also took note of the following suggestions of the external experts:</i></p> <ul style="list-style-type: none"> <i>i. Introduction of an elective course on Catalysis & Separation Process</i> <i>ii. Introduction of an elective course on Advance reservoir Simulation</i> <i>iii. Introduction of pre-requisite courses on Drilling Engineering, Reservoir Engineering and well Testing, Petrophysics/logging and production Engineering for non-petroleum Engineering scholars.</i> 	
Action Taken	Responsibility	Target Date
<p><i>The board took note of the external experts' suggestion and decided to consider the same for the forthcoming academic year 2019-20 after approval of Academic council.</i></p>	Chairman, BOS	April 2019
Recommendation 3	<p><i>The learned members suggested the following to be considered in due course of time:</i></p> <ul style="list-style-type: none"> <i>i. Introduction of a basic course on Petroleum Engg. in the first year of the B.Tech, Petroleum Engg. programme.</i> <i>ii. Introduction of a course on Heat & Mass Transfer (3-0-2)</i> 	



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	<i>in the 4th semester of the B.Tech, Petroleum Engg. programme</i> <i>Addition of at least one Downstream course in the B.Tech, Petroleum Engg. programme as presently few such courses are being offered.</i>	
Action Taken	Responsibility	Target Date
<i>The Board took note of the above suggestions and resolved to discuss the same in its next meeting.</i>	Chairman, BOS	April 2019



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Academic Year 2018-19

(Department of Petroleum & Energy Studies)

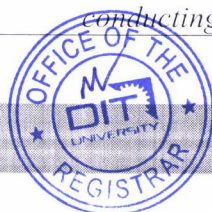
Recommendation 1	<i>The chairman discussed with the Board on the course structures and syllabi of the courses for PhD coursework. The Board was satisfied with the relevance of the course structure and syllabi and recommended the the same.</i>		
Action Taken	Responsibility	Target Date	
<i>The course structure was recommended and approved by the Academic Council for implementation.</i>	Chairman, BOS	Jan 2019	



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Academic Year 2017-18
(Department of Petroleum & Energy Studies)

Recommendation 1	<i>The external expert suggested the modification of the syllabus of various courses.</i> i. <i>In the course of Carbon Capture & Sequestration, some content on lifecycle analysis of carbon sequestration should be included.</i> ii. <i>In the course of Bio fuel and waste management, some contents on Torification in Biofuel should be included.</i>		
Action Taken		Responsibility	Target Date
<i>The modifications were included after the approval from Academic Council.</i>		Course co-ordinator	Jan, 2017
Recommendation 2	<i>In the course of HSE for petroleum operation, some contents on Environment Health Safety & Occupational Hygiene Elements, Operational Risk & Mechanical injuries, appropriate certification should be included.</i>		
Action Taken		Responsibility	Target Date
<i>The Chairman, BOS instructed the Departmental members to carry a certificate course on Safety Engineering in the month August, 2018.</i>		Department I/C for Guest Lecture	August, 2018
Recommendation 3	<i>The external expert kindly agreed to share his expertise and experience as well as the lab resources available in his organization for conducting following lab and Dissertation work of the program.</i> i. <i>Analytical tools in Oil and Gas Product Testing</i> ii. <i>Tribology Lab should be given to the students at IIP for the course of Tribology & Combustion Technology.</i> iii. <i>4th semester students can do project/ Dissertation at IIP Labs</i>		
Action Taken		Responsibility	Target Date
i. <i>As per the suggestion of the board members, Dr. Raj Kumar Singh was given the charge for conducting the lab in the ONGC, Dehradun.</i> ii. <i>As per the suggestion of the board members, Mr. Gopal Kumar was given the charge for conducting the lab at IIP, Dehradun.</i> iii. <i>Mr. Deepak Vanjari was given charge to communicate with the IIP, Dehradun labs for conducting the 4th semester student project.</i>		Course co-ordinator and Project co-ordinator	March, 2017



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Recommendation 4	<p><i>The board proposed modification and up-gradation of the following courses of the B. Tech, Petroleum Engineering program with effect of forthcoming academic session 2018-19.</i></p> <ul style="list-style-type: none"> <i>i. Unit Operations</i> <i>ii. Reservoir Simulation</i> <i>iii. Elements of Reservoir Engineering</i> <i>iv. Petroleum Engineering and System Design</i> <i>v. Applied Petroleum Reservoir Engineering</i> <i>vi. Petroleum Refining and Petrochemicals</i> <i>vii. Well Stimulation</i> <i>viii. Petroleum Exploration Methods</i> <i>ix. Formation Evaluation</i> <i>x. Directional Drilling</i> <i>xi. Oil & Gas Transportation System</i> <i>xii. Health, Safety & Environmental Management in Petroleum Operations</i> <i>xiii. Offshore Drilling & Production Practices</i>
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Action Taken	Responsibility	Target Date
<p><i>The Board had taken valuable inputs from the various external members and internal members and the respective course coordinators were given charge for modification and up-gradation of the syllabus as per the suggestions given by the external members. Some of the suggested changes in syllabus were included in the courses oil & gas well drilling technology and well completion, petroleum production operation – I, oil & gas well testing, petroleum production operation – II, heat transfer process, Polymer Science, and Unconventional Hydrocarbon Resources. The revised syllabus was taken to the Academic Council for the approval and included into the program structure after the approval.</i></p>	<p>Chairman, BOS</p>	<p>Jan 2017</p>



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