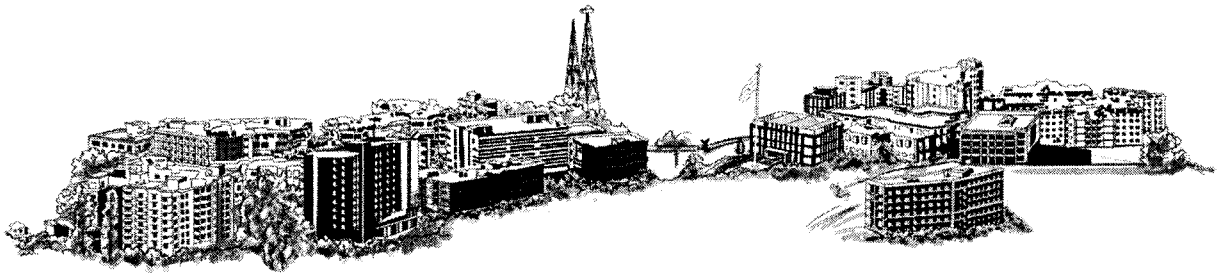


# **ACTION TAKEN REPORT**

## **Department of Civil Engineering**

**Academic Year 2023-24**



**DIT University**

**Mussoorie Diversion Road Dehradun, Uttarakhand-248009**

DIT University, Dehradun  
(Department of Civil Engineering)

Date: 25<sup>th</sup> February, 2023

Report on Action taken

Brief decision of the 8<sup>th</sup> Board of Studies

Action Taken

<u>Agenda Item Number &amp; Minutes of 8<sup>th</sup> BoS</u>	<u>Write up about action taken</u>
<p><b>Item No. 8.2:</b> To confirm the minutes of the 7th Meeting of the Board of Studies (BoS) held on 03.09.2021 at 10 am through MS Teams platform. Minutes of the 7<sup>th</sup> BoS were circulated on 09.09.2021. Suggestion to reduce no. of Quizzes for all types of subjects in FFCBCS was also received from one external expert.</p>	<p><b>Item No 8.2-</b> The minutes of the 7<sup>th</sup> BoS and also the suggestions of the external expert were accepted by the board members.</p>
<p><b>Item No. 8.3:</b> To report the minutes of 18th Meeting of the Academic Council held on 25th September 2021 pertaining to Civil Engineering <i>The board members expressed their satisfaction to see that the updated syllabus in the course: Disaster preparedness planning and management was accepted in last academic council and has been in implementation from Even semester 2021-22.</i></p>	<p><b>Item No 8.3:</b> The course, Disaster Preparedness Planning and Management has been included in the course curriculum of B.Tech programme w.e.f. Even semester 2021-22.</p>
<p><b>Item No. 8.4:</b> Discussion on course structure and syllabi of proposed M.Tech in Construction, Planning and Management. <i>1. In detail discussion, Dr. Akhil Upadhyay suggested that the subjects: Steel Structure, Fibre reinforced concrete, introduction to construction material, Modern construction techniques and handling the modern equipment should be incorporated in the course of M.Tech in Construction, Planning and Management.</i> <i>2. It has been advised by Industrial expert from L&amp;T: Mr. Avinash Mahendrakar that the software, Building Information Modeling (BIM) should be included in the course. He also suggested that more number of electives subjects should be added in the basket. Also the course collaboration should be done with industry and consultants such as L&amp;T, Afcons Infrastructure, Hindustan, Reliance, Adani, Louis Berger and Ramboll for the betterment.</i> <i>3. Dr. Akhil Upadhyay and Dr. Sandeep Maithani advised to replace unit-1, unit-2 &amp; unit-3 with statistical analysis, introduction to Fuzzy, Optimization and Probability theory in Advance</i></p>	<p><b>Item No 8.4:</b> The proposal has not been implemented, as the department decided on focusing on improving the UG (B.Tech) programme first.</p>

  
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Mathematics course. Same was also proposed by Mr. Gaurav Thakur, Alumni.

4. Dr. Akhil Upadhyay further commented that in the subject: Advance Engineering Materials, Micro label theory of materials should be avoided and retrofitting, texture analysis, durability and tools should be added.

5. Mr. Avinash Mahendrakar suggested that equipment for bridge and equipment cost should be included in the subject: Construction Practice and Equipment. Same was also suggested by Mr. Gaurav Thakur and he further added that the software, BIM and planning software should be introduced in the subject: Construction Planning and Controlling

6. Dr. Sandeep Maithani advised that in the subject, Quality and Safety in Construction: More lecture hours to be given to unit 1. Also site visit should be added in the subject so that student must get the knowledge of quality at site. Same was supported by other members.

7. Members further suggested that

- IS codes to be introduced in Advance Concrete Technology.
- In Financial and Business Management, TQM should be omitted from the Unit-3.
- solar energy should be incorporated in Energy conservation and environment
- It has been advised by external experts that in the subject, modern equipment and SPSS software should be introduced in Infrastructure development and management.
- Focus must be given on presentation skill of students in Research Methodology and IPR course

8. Dr. Akhil Upadhyay specifically pointed out that in the subject Structural health monitoring, location, equipment, purpose and durability of equipment should be added. Topic Shear Lag theory should be removed from the Unit-4.

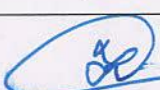

9. Members also advised to include non-classical method like GA, statistical methods such as six Sigma and Taguchi in the subject: Optimization in Construction Design. Fibre reinforcement and green building material to be included sustainable materials and green buildings. Steel Structure to be added in Maintenance and Rehabilitation of Structures

Chairperson appraised the board that the M.Tech course is planned to be made operational from academic year 2023-24.





<p><i>The members suggested to make the program industry collaborated and hire faculty members having knowledge in the particular domain. Also, it was suggested that final year can be completely dedicated in industry.</i></p>	
<p><b>Item No. 8.5: Proposed Changes in Fully Flexible Choice Based Credit System (FFCBCS) course curriculum</b></p> <p><i>The Chairperson appraised the board about ongoing FFCBCS and some problems being faced by the students. Also, he presented before the board about detailed plan of study for B.Tech Civil Engineering as shared in annexure 8.5.2. The board members expressed their satisfaction and recommended the plan. Also it was suggested to rename Transportation Engineering I as the course as core is the only one in plan of study. Transportation Engineering II has been shifted to elective so all the students will not read part II hence appropriate name can be decided by department. The chairperson assured to have a decision on that.</i></p> <p><i>Industry expert from Prism Concrete Mr. Amit Mishra has suggested following changes to be considered in FFCBCS syllabus which are extremely relevant from current industry demands.</i></p> <p><i>LAF- 382 – Engineering Economics</i> <i>Students can be taught regarding estimation, prediction of variability of raw material prices and industry shares in the time of sudden crisis or downtime of share market.</i></p> <p><i>LAF- 284 – Principal of management.</i> <i>Advertisement and Branding to be taught if not included in Marketing management. Focus to be given on 7 C's of Marketing</i></p> <p><i>LAF- 486 – Innovation and entrepreneurship.</i> <i>04 P's of leadership/startup (Purpose, process, payoff, patience) to be included</i></p> <p><i>CEF-345 – Green Building and Energy Conservation</i> <i>Unit -2 - Rainwater harvesting and ground water recharge with calculation in case of confined and unconfined aquifers to be included while dealing with water efficiency estimation.</i></p>	<p><b>Item No. 8.5:</b> The plan of study for B.Tech Civil Engineering was accepted by the members and implemented from the subsequent academic year. The course Transportation Engineering I was renamed as Transportation Engineering.</p> <p>The topics suggested for the course CEF345: Green Building and Energy Conservation, are already included and discussed in principle in the topic “water efficiency” in Unit 2 of the course.</p>
<p><b>Item No. 8.6: Discussion on offering of courses for minor and certification in FFCBCS .</b></p> <p><i>Chairperson introduced two minor courses to be offered by Department: Geomatics Engineering and</i></p>	<p><b>Item No. 8.6:</b> It was decided that the proposal would be discussed in detail with updated syllabus in the next BoS</p>

  
  
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*Disaster Management. The detailed course L-T-P plan and syllabus were presented before the board. Chairperson appraised the board if any student does extra 18 credits for any of the two courses he/she will get minor degree or certificate if the students completes 9 credits. The department or student will have the flexibility to offer or to choose combination of subjects as certificate in the two disciplines. The student may choose such subjects in consultation with course advisor.*

*External members agreed to the proposal and further suggested that the minor courses to be properly informed to students at first year only through course advisors and to be displayed at university website.*

*Regarding the syllabus following suggestions came out from discussion as provided below:*

*1. It has advised by Dr. Sandeep Maithani, external expert that LIDAR, RADAR & SAR should be incorporated with brief introduction. He further suggested that in the course of GPS, Practical should be added.*

*2. It was proposed to change the name of the subject: 'Application of GIS in Disaster Management' to the 'Application of Geoinformatics in Disaster Management'.*

*3. Dr. Akhil Upadhyay strongly advised to add major/minor courses of Geoinformatics, remote sensing, and GIS for the Civil Engineering students.*

**Item No. 8.7: Discussion on prerequisites and evaluation of FFCBCS scheme**

*The chairperson appraised the board that some students are facing problems to opt progressive subjects due to failing in course specific pre-requisites. The external members strongly suggested to minimize the pre-requisites at its best possibilities. Also chairperson informed that in future, bucket specific pre-requisites may be thought of. The members informed to abide by the university decision in such cases but minimizing the pre-requisites.*

*After discussing in detail about the existing pre-requisites, the board members strongly agreed and advised following: keeping Strength of Materials (CEF202) only as pre requisite for Design of Reinforced Concrete Structures(CEF302) and Design of Steel Structures(CEF303) rest all existing*

**Item No. 8.7:** The department has decided to keep Strength of Materials (CEF202) as pre requisite for Design of Reinforced Concrete Structures (CEF302). Rests were removed.





<p><i>pre-requisites to be removed immediately from ongoing curriculum onwards and accordingly to be implemented.</i></p>	
<p><b>Item No. 8.8: Deliberation on applicability of National Education Policy (NEP) in the curriculum of B.Tech Civil Engineering</b></p> <p><i>Chairperson presented detailed NEP documents and the questionnaires to be asked to University by NAAC team for NEP implementation. Also he appealed to external members for relevant suggestions.</i></p> <p><i>The learned external members suggested that already special committees have been formed in their parent institutes to see the existing teaching-learning framework and in what way or how modifications can be implemented according to NEP. The work is still in progress and decisions are yet to come. Moreover, more clear understandings are required. They further suggested that DIT university should not take decision in hurry rather observe their existing processes aligned with NEP and take suggestions from premier institutes when they apply the same. They also suggested that there must be some kind of filtering strategies to ensure quality in multiple entry and exit process.</i></p> <p><i>The chairperson further appraised the external members that already DIT University is doing or in planning stage for many academic and co-curricular activities aligned with NEP such as minor programs, major programs (yet to be decided), outcome based education, multiple skill development programs, several courses related to language, human value and ethics, environment, capstone projects, project based learning, multidisciplinary-interdisciplinary research through Centers of excellences etc.</i></p> <p><i>The members suggested to properly document it for NAAC purpose and wait till premier institutes implement the NEP. Also they suggested to explore infrastructure and manpower capabilities suitable for NEP implementation.</i></p>	<p><b>Item No. 8.8:</b> The department has decided to discuss the detailed course curriculum as per NEP in the next BoS.</p>



*[Signature]*

HOD, CE

BOS CHAIRPERSON

*[Signature]*

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