

**PANDIT DEEND DAYAL PETROLEUM UNIVERSITY**

**SCHOOL OF TECHNOLOGY**

**DEPARTMENT OF CIVIL ENGINEERING**

**Board of Studies (BoS) Meeting-2020**

**Minutes of the Meeting (MoM)**

Date: 09/06/2020

Time: 11:00 hrs

Venue: Webinar

**Attendees:**

Dr. Tejaskumar Thaker- BOS Chairman

Dr. Rajesh Gujar – Member (Internal)

Dr. Niragi Dave - Member (Internal)

Dr. Dhruvesh Patel – Member (Internal)

Dr. Debasis Sarkar – Member Invitee (Internal)

Mr. Namish Bhatt – Member Invitee (Internal)

Prof. D.M. Parikh – Dean FOET, PDPU – Special Invitee

Prof. Devanshu Pandit, CEPT University – Member Academia

Prof. Shrinivas Arkatkar, SVNIT, Surat – Member Academia

Mr. Viswas Kelkar, Infinite Civil Solution Pvt. Ltd. – Member Industry

Mr. Maulik Shah, L&T Technology Services – Member Industry

Ms. Shefali Gahrana, L&T Hydrocarbon – Alumni Member

Mr. Raj Modi, Modi Constructions – Alumni Member

Mr. Dharmil Joshi, Wipro Consumer Care and Lightning – Alumni Member

Kunjan Shukla – Existing PG Student

Ms. Himani Contractor – Existing PG Student

Ms. Brinda Vyas – Existing PG Student

**Meeting Agendas:**

1. Approval of course structure and detailed syllabus for B.Tech Civil Engineering (2020-24), Semester I to VIII
2. Approval of course structure and detailed syllabus for B.Tech Civil Engineering (2019-23), Semester III to IV
3. Approval of course structure and detailed syllabus for B.Tech Civil Engineering (2018-22), Semester V to VI

4. Approval of course structure and detailed syllabus for B.Tech Civil Engineering (2017-22), Semester VII to VIII
5. Approval of course structure and detailed syllabus for M.Tech Civil (Transportation Engineering) (2020-22), Semester I to IV
6. Approval of course structure and detailed syllabus for M.Tech Civil (Infrastructure Engineering and Management) (2020-22), Semester I to IV
7. Any other matter with permissions of Chairman BOS

**Valuable Suggestions/feedback received from BoS members for UG courses are listed as follow:**

<b>Sr.No.</b>	<b>Suggestions</b>	<b>Action Taken</b>
<b>1.</b>	It is important to improve the practical skill and knowledge of UG students from the 1 <sup>st</sup> year. Hence, basic civil engineering particle aspects like formwork, different types of cement, and its utilization, understanding the different types of materials for civil work construction will be included in the workshop curriculum. Workshop course should be oriented towards civil engineering (currently it is mechanical oriented) that would lead to better understanding of structural steel fabrication; material lifting including knots; splicing, threading and extension of members etc. as required in construction.	The First year Syllabus Centrally designed, with the credit structure limitations this will be taken care by organizing special workshop for the students.
<b>2.</b>	Building planning and drawing is the fundamental subject of civil engineering, so that every student should know how to calculate the building area. Hence, it was suggested to include drawing practical and software tools in the subject curriculum to improve the practical skill.	Included in the curriculum of Building planning drawing. Also software tools are also added such as Autocad etc.
<b>3.</b>	It was suggested to include the field visit in Hydrology and Irrigation subject so that students can visualize and understand the scale of a large structure i.e. Dam, canal, Power station, etc. by experience.	Civil Engineering Students are already under going number of such visits every year as a part of Industrial Orientation and subject specific visits are also organized by the Subject Faculty Member.
<b>4.</b>	It was suggested to include the study of a research article in the UG curriculum, it will help the students to understand the scientific approach and utilization of theory-particle advances in the civil engineering field.	Suggestions is well taken, circulated amongs the Faculty to implement in higher semester subjects and Seminar/Projects. Also it can be implemented in Internal Assessment of the students.
<b>5.</b>	Students usually use the PPTs circulated by faculties to refer course curriculum or subject, it is observed that it narrows their thinking and	PDPU, is already adopted the practice. Even open book examinations system is also

	understanding of the subject in-depth. Instead, it is suggested to motivate the students to refer books and videos for the course curriculum.	adopted. Suggestions is well taken and circulated amongs the Faculty members for implementation in the respective course.
6.	It is suggested to include a Design Lab in a structure curriculum. In that, include the industry report, drawing and field details in practical assignments where, the task will be provided to the student/ student groups to validate the field reports through the theoretical concepts and correlate it with field details.	The design lab is already added in semester VII of the curriculum 2020-24. The scope of the lab should include the observations also in case of Building Planning Drawing Lab. Circulated for inclusion of scope of laboratory of design of structures.
7.	It was suggested to include the Video of experiments before the test execution so that each student can understand the proper techniques to perform the test. It also helps to improve the understanding of the utilization of different equipment for testing. It also improves the basics of civil engineering and its importance. Besides, it is also suggested to make aware the students about the recent civil engineering products and utilization in construction work.	Suggestions is well taken, demonstation is done physically. Also supporting video material can be given.
8.	There is need to shift from 'everybody standard performs same experiment and writes it in journal' to small groups given some challenging problem say 'find out what happens in permeability or strength when you use crushed sand in place of natural sand'	It is very good suggestions, it is already in practice in laboratory such as
9.	Excel and Macro are the basic tools for the preparation of any kind of structure designs or calculation for civil engineering work, hence, it should be included in their curriculum and laboratory assignments.	Difficult to accommodate as part of curriculum, however it is very important suggestions to be implemented. PDPU has organized two workshop basic and advance level Excel last year, this practice to be continued.
10.	In future, the utilization of Airport engineering will highly increase in India. Hence, it will become a highly demandable branch in Civil engineering. It is suggested to offer Airport engineering as a separate subject in civil engineering instead offer with the combination of Airport-Dock-Harbor subject.	It is to be implemented in M.Tech Civil (Transportation Engineering), One more additional subject added as a part of elective.  Saperate Elective will be introduced " Contracts and Valuation" the syllabus will be prepared and will be taken as proposal for approval in next BOS.

<b>11.</b>	To strengthen the students' presentation skills and improve the understanding of the content, it is recommended to assign the subject topic in a group. The topic will be presented by the students' group in the next lecture in the form of PPT presentation as a recap of the subject content of the previous lecture.	Practice is already adopted.
<b>12.</b>	Geographic Information System (GIS) is the basic subject for understanding the advanced mapping techniques, hence it should introduce in UG and PG curriculum.	Included in PG and UG Syllabus
<b>13.</b>	It was strongly recommended to introduce all the civil engineering software in UG curriculum to improve the awareness of the utilization of software techniques in civil engineering field. At present, it is observed that students are aware of i.e. AutoCAD, STAAD Pro, Revit etc. drawing and structure software, however, many more software like Arc GIS, ENVI, ERDAS, ETAB, BIM, Storm CAD, MODFLOW etc. are extensively used in water resources, transportation, Environmental, Geotechnical, and other civil engineering branches.	<p>It is included at various level in curriculum 2017-21, 2018-22 and 2019-23 in CADD lab all the structural Engineering Software introduced. The Lab of Civil Computation is added to take care of software like Primavera, Revit, BIM related software. Apart from this GIS is taught as Elective subject. Also Software based seminar/minor project also undertaken.</p> <p>Same way, most of the software tools mentioned included in Building Planning Lab, Design of Structure lab, Project management lab. Also software based minor project also included in the curriculum.</p>
<b>14.</b>	It is suggested to assign the summer activities to 1 <sup>st</sup> and 2 <sup>nd</sup> year civil engineering students in a way that the students will visit the construction field, understand and experience the different materials available for construction work, and prepare a detailed report.	It is usual Practice, there are already summer internship in all years are included in the curriculum.
<b>15.</b>	There has to be common approach to M. Tech in Infrastructure Engineering and Transportation Engineering courses, which is not seen. In terms of courses related to planning, engineering and project management, their weight. • Suggestion: Both the course can have one project appraisal, construction technology, project management, research methodology course and remaining Design Engineering related course. Course names can also be fine-tuned. • Infrastructure financing can be part of Infrastructure planning.	Modalities is discussed in the BOS meeting according implemented in curriculum.

<b>16.</b>	All other courses such as mathematics, physics, chemistry should be part of civil engineering subjects and students should be able to relate these subjects to civil engg subjects and application (structures, fluid mechanics, materials, concrete, insulation and acoustics etc.)	Focus is already considered applications based in Science based Courses.
<b>17.</b>	Contracts may not be part of estimating and costing subjects.	Saperate Elective will be introduced “ Contracts and Valuation” the syllabus will be prepared and will be taken as proposal for approval in next BOS.
<b>18.</b>	Add course on construction technology and an advanced construction technology to include Metro construction as Gujarat and India is seeing growth of Metro rail network.	This part is already cover in the subject of Construction Technology and Equipments.
<b>19.</b>	In semester 1 and semester 2, there must be good practice for engineering drawings. i.e. knowledge of plan, sections, elevation, size of full scale drawings like (A0, A1 etc).	It is covered in Engineering Graphics and later on in Building Planning and Drawing Laboratory.
<b>20.</b>	Applied Mechanics and Strength of Material should be there is semester 2 and semester 3. Structural analysis should be shifted from semester 3 to semester 4.	Since it is first year syllabus, centrally implemented however, considering 12 <sup>th</sup> Science upgration of courses and removing repetitions, strength of material and applied mechanics concepts covered in the subject of Elements of Civil Engineering and Solid Mechanics.
<b>21.</b>	Design of RCC structure should be divided into 2 parts. (semester 5 and semester 6). If the student selects any branch of civil engineering, RCC design would be there.	Advance RCC design subject is added as elective due to credit structure limitations and concepts like Pre Engineered Buildings also to be added. Revised Syllbus will be taken for approval in next BOS As it is 2020-24 curriculum.
<b>22.</b>	In fluid mechanics, basis knowledge of piping, valve, pump, elbows etc.. should be included	Included in the curriculum. Dr. Niragi Dave to take into the considerations for 2020-24 curriculum.
<b>23.</b>	General observation: There should be separate subject for knowledge of software (i.e. STAAD, AutoCad, Revit etc...). Knowledge PEB buildings, NDT testing, repair and strengthening technology of existing structure. Exposure of foreign codes and standards. Design of silos and bunkers is too much to teach	TO be included in RCC, Steel structure curriculum by the concerned Faculty members of structural engineering. a

	under advance design of RCC structure. You may include chimney design.	
<b>24</b>	Since most of the students aim for higher education and the gateway to it is through examinations like CAT, GATE, GRE, GMAT etc.; there can be separate sessions that can be attended by the students voluntarily. The sessions can constitute of the assignments, doubt solving, previous year papers, concept teaching etc. This will help in holistic development of the students and they will not require any outside coaching classes which are of usually 10-12 hrs on weekends. Also, there can be a career counselling session where the students are acquainted of the different profiles that are available in the industry so that they can make a well informed decision regarding their electives and other things.	Taken for consideration and under circulation. Career counselling session by the experts from industry, Alumni, Faculty members are already arranged and practice will be continue and strengthen with new inputs.
<b>25</b>	There are specific suggestions related to M.Tech Civil (Transportation Engineering) made by Prof. Srinivas Arkatkar.	Program coordinator taken by contacting Prof. Srinivas and considered in the curriculum revision.

All the Agenda for BOS-2020 are approved by the BOS members on 9<sup>th</sup> June, 2020, online meeting.



(Dr. Tejaskumar Thaker)

BOS Chairman