Minutes of 7th BoS Meeting- 30.12.2020

DEPARTMENT OF CIVIL ENGINEERING – IUST AWANTIPORA

The 7th Board of Studies (BoS) meeting of the Department of Civil Engineering (DoCE), IUST was held on 30th of December 2020. The following members attended the meeting in the capacities mentioned:

1. Prof. A. H. Moon,
Chairman
Dean SoE&T, IUST

2. Prof. Umesh Kumar Sharma
Expert
Professor & Dean Construction IIT Roorkee

3. Prof. M.S.Mir
Expert
Professor, Department of Civil Engineering, NIT Srinagar

4. Prof. Sanjay Kumar
Expert
HOD,NITTTR Chandigarh

5. Er.Ajaz Masood Bhat
Field Expert
A.E.E, R&B (Technical Officer)
Formerly Research Officer- R&B Kashmir

6. Dr. Shujaat Hussain Buch
Convener, I/C Head, Department of Civil Engineering IUST

7. Er. Mohd Iqbal Mirza
Member
Assistant Professor, Department of Civil Engineering IUST

8. Er.Misba Gul
Member - Assistant Professor, Department of Civil Engineering IUST

9. Er. Mehnaza Akhter
Member
Assistant Professor, Department of Civil Engineering IUST

10. Er. Mir Aijaz Ahmad
Member
Assistant Professor, Department of Civil Engineering IUST

11. Er. Vaqas Hussain Sheikh
Technical Support
Assistant Professor, Department of Civil Engineering IUST

At the outset, Dr. Shujaat Hussain Buch, I/C Head, Department of Civil Engineering, welcomed the Experts and the BoS members. After that Prof. A. H. Moon, Dean SoE&T, IUST gave Welcome Address. Later, Dr. Shujaat Hussain Buch briefed the Experts and the members about the agenda of the meeting. The Members were briefed about the mandate for up gradation of the Curriculum as per All India Council for Technical Education (AICTE) model Curriculum and the conduct of BoS meeting. In this regard, it was informed that the revised AICTE syllabus for the 1st Year of B.Tech.

course covering 1st and 2nd Semesters shall be uniformly adopted by all the Engineering Departments of the University and has been already discussed and approved in the BoS meeting of other Departments of the School of Engineering and Technology. Dr. Shujaat Hussain Buch also highlighted the importance of designing the Curriculum as per the present Industry requirements. Dr. Shujaat Hussain discussed the Agenda points of the meeting with the Committee Members through a Power Point Presentation. After threadbare discussions, the following decisions were made:

Agenda Point No. 1a: To approve course outline of B.Tech Civil Engineering for Batches 2020 and onwards as per the requirements of AICTE/CBCS System 2018 Guidelines for Civil Engineering. 1st Year is common for all branches and no change in course structure is done for first Year.

Decisions taken during the BoS meeting:

1. *It was recommended by the Experts that after successful completion of 164 credits, student shall be eligible to get Under Graduate Degree in Civil Engineering. A student will be eligible to get Under Graduate Degree in Civil Engineering with Honours only, if he/she completes additional university recommended courses only (Equivalent to 20 credits) through MOOCs. These MOOCs courses (recommended by the University) may be cleared during the B. Tech degree program. After successful completion of these MOOCs courses the students, shall, provide their successful completion NPTEL status/certificates to the University through the Department. The student shall be awarded Honours. Degree (on successful completion of MOOCS based 20 credit) only if he/she secures 8.0 or above CGPA and passed each subject of B.Tech Civil Engineering Programme in single attempt without any grace marks.*
2. *The Course Outline given below was approved with the changes/recommendations mentioned at end of Table/s:*

Semester-I- First Year

S.No	Course Code	Course Title	Hours Per Week			Credits
			L	T	P	
1.	PHY101C	Physics	3	1	0	4
2.	CHM101C	Chemistry	3	1	0	4
3.	MTH103C	Mathematics-I	2	1	0	3
4.	BIO101F	Environmental Science	3	0	0	3
5.	MEC101C	Engineering Graphics and Design	1	0	6	3
6.	ENG101F	Communication Skills	2	0	2	3
					Total Credits	20

Semester-II- First Year

S.No	Course Code	Course Title	Hours Per Week			Credits
			L	T	P	
1.	CIV150C	Engineering Mechanics	3	1	0	3
2.	MTH153C	Mathematics-II	3	1	0	4
3.	CSE150C	Programming for Problem Solving	2	1	0	3
4.	MEC150C	Workshop Practices	0	0	4	3
5.	ELE150C	Basic Electrical Engineering	2	1	0	3
6.	CSE151C	Programming Lab	0	0	2	1
7.	PHY150C	Physics Lab	0	0	2	1
8.	CHM150C	Chemistry Lab	0	0	2	1
Total Credits						19

Semester III- Second Year

S.No	Course Code	Course Title		Hours Per Week			Credits	Course Category
				L	T	P		
1.	CIV-311T	Structural Analysis I		2	1	0	3	PCC
2.	CIV-312T	Surveying Measurements & Adjustments		2	1	0	3	PCC
3.	CIV-313T	Fluid Mechanics I		2	1	0	3	PCC
4.	CIV-314T	Building Materials & Construction		2	1	0	3	PCC
5.	MTH-ExxT	Elective*	Probability & Statistics	2	0	0	2	OEC
			Numerical methods					
6.	CIV-315P	SOM Lab		0	0	2	1	PCC
7.	CIV-316P	Surveying Measurements & Adjustments Lab		0	0	2	1	PCC
8.	CIV-317P	Fluid Mechanics Lab I		0	0	2	1	PCC
9.	YYY-yyyT	Open Elective		*	*	*	X=2 to 4	OEC
10.	XXX-xxxTP	Generic Elective (SOT)		*	*	*	Y=2 to 4	PEC
Total Credits							17 +X+Y	

*50% of the class(say Group A) will opt for Probability and statistics and rest 50% (say Group B)for Numerical Methods in 3rd semester

Semester IV- Second Year

S.No	Course Code	Course Title	Hours Per Week			Credits	Course Category
			L	T	P		
1.	CIV-411T	Structural Analysis II	2	1	0	3	PCC
2.	CIV-412T	Advanced Surveying Measurements	2	1	0	3	PCC
3.	CIV-413T	Fluid Mechanics II	2	1	0	3	PCC
4.	CIV-414T	Concrete Technology	2	1	0	3	PCC
5.	CIV-415T	Building Drawing	0	1	4	3	PCC
6	CIV-416P	Concrete Technology Lab	0	0	2	1	PCC
7.	CIV-417P	Fluid Mechanics Lab II	0	0	2	1	PCC
8.	CIV-418P	Advanced Surveying Measurements Lab	0	0	2	1	PCC
9.	YYY-yyyT	Elective I(DC)	2	0	0	2	DCE
10.	CIV-419P	Structure Lab	0	0	2	1	PCC

11.	CIV-410P	Survey Camp	0	0	2	1	PCC
Total Credits						**22**	

Semester V-Third Year

S.No	Course Code	Course Title		Hours Per Week			Credits	Course Category
				L	T	P		
1.	CIV-511T	Design Of Concrete Structures-I		2	1	0	3	PCC
2.	CIV-512T	Geotechnical Engineering-I		2	1	0	3	PCC
3.	CIV-513T	Water Supply Engineering		2	1	0	3	PCC
4.	CIV-514T	Quantity Survey & Cost Estimation		2	1	0	3	PCC
5.	CIV-515T	Structural Analysis III		2	1	0	3	PCC
6	MTH-ExxT	Elective *	Probability & Statistics	2	0	0	2	OEC
			Numerical methods					
7.	CIV-517P	Geotechnical Engineering Lab I		0	0	2	1	PCC
8.	CIV-518P	Water Quality Lab		0	0	2	1	PCC
9.	CIV-519P	Computer based drafting Lsb		0	0	2	1	PCC
10	CV-5110P	Industrial Training I		0	0	*	1	PCC
Total Credits							**21**	

*50% of the class(say **Group A**) will opt for **Numerical Methods** and rest 50% (say **Group B**)for **Probability and statistics** in 5th semester .

Semester VI-Third Year

S.No	Course Code	Course Title	Hours Per Week			Credits	Course Category
			L	T	P		
1.	CIV-611T	Design Of Steel Structures	2	1	0	3	PCC
2.	CIV-612T	Geotechnical Engineering-II	2	1	0	3	PCC
	CIV-613T	Transportation Engineering I	2	1	0	3	PCC
3.	CIV-614T	Engineering Hydrology	2	1	0	3	PCC
4.	XXX-xxxT	Elective II(DC)	2	0	0	2	DCE
5.	CIV-616P	Geotechnical Lab II	0	0	2	1	PCC
6.	CIV-617P	Transportation Lab	0	0	2	1	PCC
7.	CIV-618P	Engineering Geology Lab	0	0	2	1	PCC
8.	CIV-619P	Industrial Training II	0	0	2	1	PCC
9.	YYY-yyyT	Open Elective	*	*	*	X=2 to 4	OE C
Total Credits						**18+X**	

Semester VII-Fourth Year

S.No	Course Code	Course Title	Hours Per Week			Credits	Course Category
			L	T	P		
1.	CIV-711T	Design of Concrete Structures- II	2	1	0	3	PCC
2.	CIV-712T	Irrigation & Hydraulic Structures	2	1	0	3	PCC
3.	CIV-713T	Structural Dynamics	2	1	0	3	PCC
4	CIV-714 T	Waste Water Engineering	2	1	0	3	PCC
5	CIV 715T	Transportation Engineering-II	2	1	0	3	PCC
6	XXX-xxxT	Elective III(DC)	2	0	0	2	DCE
7	XXX-xxxT	Elective IV(DC)	2	0	0	2	DCE
8	CIV-716P	Seminar	0	0	2	1	PCC
9	CIV-717P	Dynamics Lab	0	0	2	1	PCC
10	CIV-718P	Pre Project	0	0	4	2	PCC
Total Credits						**23**	

Semester VIII-Fourth Year

S.No	Course Code	Course Title	Hours Per Week			Credits	Course Category
			L	T	P		
1.	CIV-811T	Design Of Bridge Structures	2	1	0	3	PCC
2.	CIV-812T	Earthquake Resistant Design	2	1	0	3	PCC
3.	CIV-813 P	Project	0	0	16	8	PCC
4.	XXX-xxxT	Elective V (DC)	2	0	0	2	DCE
	Total Credits					16	

a. *It was recommended by the experts that the title of the course "Transportation Engineering-I" be changed to "Highway Engineering and Pavement Management System" as the course content included mainly Highway Material and Pavement Design. The content of the course needs to be re structured accordingly.*

b. *It was recommended that in view of Point No.* ***a*** *above, The title of the Course "Transportation Engineering Lab-I" may also be changed to "Highway Material Lab". The content of the course needs to be re-structured accordingly.*

c. *It was recommended by the Experts that the title of the course "Transportation Engineering-II" be changed to "Traffic Engineering and Road facilities" as the course content included mainly traffic design. Also the suggestion was given by Expert member that "Traffic Engineering lab/Field Study" of 1 credit should be included in the syllabus at 7th semester level if it doesn't exceed the credit limit for the Programme.*

d. *It was recommended by the Field Expert that the courses like Irrigation and Hydraulic Structures and other design courses should include design as well as drawing. Knowing the drawing of various structures makes execution easy in the field. Hence course content of the*

design courses should be revised to include both design and drawing.

e. *It was recommended by the Experts that "Computer based Drafting Lab" may be shifted from 5th semester level to 6th or 7th semester level.*

f. There was a discussion regarding the Courses of "Probability & Statistics" and "Numerical Methods" floated as Elective at 3rd/5th semester levels. It was discussed with the Experts that in order to meet the requirement of 10 credits in Open Electives the above courses were floated as elective.

Agenda Point No. 1b: To approve the Introduction of New Courses as per the requirements of NAAC accreditation.

Following new Courses given in Table below were proposed before the Committee for ratification.

The decision taken is given in Last column of the Table.

S.No.	Course Title	Course Type	Ratified/Not Ratified with Comments
1.	Repair & maintenance of structures	Departmental Centric Elective	***Approved.*** *It was suggested by the experts that course namely "Repair and Maintenance of structures" should be taken as elective at final year level and the name should be changed either to "Assessment and Repair of Structures" or " Investigation/Evaluation & Repair of Structures".*
2.	Industrial Training I	Professional Core Course	***Approved.*** *"Industrial training" was kept in two parts as "Industrial training-I" and "Industrial training-II" of 1 credit each at 6th and 7th semester level as suggested by the Experts. It was recommended by the Experts that there should be proper monitoring of Industrial Training by the Institute. The students should be evaluated at the end of Industrial Training.*
3.	Industrial Training II	Professional Core Course	
4.	Construction Technology	Departmental Centric Elective	***Approved.*** *Experts suggested that the course of "Construction Technology" should be renamed as "Advanced Construction Technology". The contents should be revised and should include topics like construction techniques for high rise buildings, special types of frameworks, prefabricated structures, and modern ground improvement techniques. It should include modern construction techniques of all the specializations of Civil Engineering.*
5.	Construction Management	Departmental Centric Elective	***Approved.*** *The above recommendations were made for the course "Construction Management" and hence the name was changed to "Advanced Construction Management".*
6.	Project Planning and Control	Departmental Centric Elective	***Approved.*** *The title of the course "Project Planning and quality control" should be changed to "Quality Control" only. Its course content should include*

			Quality Control involved in various fields of Civil Engineering.
7.	Computer based drafting Lab	Professional Core Course	***Approved.***
8.	Design Software	Departmental Centric Elective	***Approved.*** *It was also recommended that in the course of "Design Software" the students should learn Basics of all the softwares at 6th semester level and should learn the specific software in 7th semester level in detail. The contents of the course should be formulated accordingly.*
9.	Design of Masonry Structures	Departmental Centric Elective	***Approved.*** *Regarding the Course of "Design of Masonry Structures" all the experts agreed to importance of floating the course as Department Centric Elective at UG level.*
10.	Environmental Engineering	Departmental Centric Elective	***Approved.*** *It was recommended by the experts that the title of the elective course "Environmental Engineering" be changed to "Environmental Impact Assessment and Audit". The contents of the course should include Auditing portion.*
11.	Ground Improvement techniques	Departmental Centric Elective	***Approved.*** *Regarding the Courses of "Ground improvement Techniques", "Solid Waste Management" and "Waste Water Engineering" all the experts agreed to importance of floating the courses as Department Centric Elective at UG level.*
12.	Solid Waste Management	Departmental Centric Elective	***Approved.***
13.	Waste Water Engineering	Professional Core Course	***Approved.***
14.	Transportation Engineering-II	Professional Core Course	***Approved.*** *It was recommended by the Experts that the title of the course "Transportation Engineering-II" be changed to "Traffic Engineering and Road facilities" as the course content included mainly traffic design. Also the suggestion was given by Expert member that "Traffic Engineering lab/Field Study" of 1 credit should be included in the syllabus at 7th semester level if it doesn't exceed the credit limit for the Programme.*
15.	Sustainable Materials and Green Buildings;	Departmental Centric Elective	***Approved.*** *It was recommended by the experts that the title of the elective course "Sustainable Materials and Green Buildings" be changed to "Green Buildings". The course content should involve Green Buildings as well as Sustainable Materials.*
16.	Advanced Solid Mechanics	Departmental Centric Elective	***Not Approved.*** *It was also suggested that the Elective Course "Advanced Solid Mechanics" may not be kept in the Undergraduate Programme and should be suggested for PG Programme in the future.*

Agenda Point No. 2: To approve Course Contents of all Courses as per proposed syllabus. The agenda Item will be reviewed post this meeting by further suggestions received by the expert committee within a period of One Month.

Decision: The course content of all the courses will be reviewed by the respective Subject Experts. The draft syllabus will be gazette after incorporation of recommendations from experts.

Agenda Point No. 3: To approve introduction of Objective & Outcome based Curriculum

Decision: Objective and Outcome based Curriculum was approved.

This is introduced for the first time in the B.Tech Civil Engineering Curriculum and it will also serve the purpose of NBA accreditation process. The course Objectives and Outcomes were framed for each course separately. Also 12 Programme Outcomes were framed for B.Tech Civil Engineering Programme.

The meeting ended with Vote of Thanks by Er.Mohammad Iqbal Mirza to all the Experts and members of the BoS Committee.

Signatures:

Er. Mir Aijaz Ahmad Member	Er. Mehnaza Akhter Member	Er. Misba Gul Member	Er. M.I.Mirza Member
Dr. Shujaat Hussain Convenor	Er. Aijaz Masood Bhat Expert Member (Field)	Prof. Sanjay Sharma Expert Member	
Prof. M.S. Mir Expert Member	Prof. Umesh Kumar Sharma Expert Member	Prof. A.H.Moon Chairman	

Action Plan for finalising the Syllabus as per the Decisions taken in BOS 2020 held on 30th Dec 2020

S.No	Course Code	Course Title	Credits	Action needed	Action to be taken by
1.	CIV-613T	Highway Engineering and Pavement Management System	3	The content of the course needs to be re structured	Er. Mir Ajaz Ahmad & Er Vaqas Hussain
2.	CIV-617P	Highway Material Lab	1		
3.	CIV 715T	Traffic Engineering and Road facilities	3		
4.	CIV-718P	Traffic Engineering lab/Field Study	1		
5.	CIV-712T	Irrigation & Hydraulic Structures	3	Course content should include design as well as drawing.	Er. Mehnaza Akhter & Er Suhail Ahmad Ahanger
6.	CIV-E02T	Advanced Construction Management	2	Syllabus to be re structured. Course content should include advanced topics of construction Management.	Er. Mir Ajaz Ahmad & Er Suhail Ahmad
7.	CIV-E04P	Design Software (Basic)	2	The course content should include Basics of the softwares available in the Department	Dr. Shujaat Hussain & Dr Asif Hussain
8.	CIV-E06T	Green Buildings	2	The course content should involve Green Buildings as well as Sustainable Materials	Er Riyaz Ahmad & Dr. Aasif Hussain
9.	CIV-E07T	Assessment and Repair of Structures	2	As the Course title was changed , the course contents should be framed accordingly	Dr. Shujaat Hussain Buch Dr. Aasif Hussain Shah
10.	CIV-E09T	Advanced Construction Technology	2	Contents to be revised and should include topics like construction techniques for high rise buildings, special types of frameworks, prefabricated structures, and modern ground improvement techniques. It should include modern construction techniques of all the specializations of Civil Engineering.	Er. Mir Ajaz Ahmad & Dr Aasif Hussain Shah
11.	CIV-E12P	Design Software (Advanced)	2	The course content should include learning specific software in detail.	Dr. Shujaat Hussain Buch Dr Aasif Hussain Shah
12.	CIV-E13T	Quality Control	2	The course content should include Quality Control involved in various fields of Civil Engineering.	Dr. Shujaat Hussain Buch Dr Aasif Hussain Shah
13.	CIV-E18T	Environmental Impact Assessment and Audit	2	As the name was changed the course content needs to be changed accordingly. The contents of the course should include Auditing portion.	Er. Mehnaza Akhter & Er. Suhail Ahmad Ahanger

Dr. Shujaat Hussain Buch
I/C Head Department of Civil Engineering