# S.D.M COLLEGE OF ENGINEERING AND TECHNOLOGY, DHARWAD DEPARTMENT OF CIVIL ENGINEERING

## **MEETING EXCERPTS**

Date: 10.03.2619 Time: 9.30 0 M Venue: HOD Chamber, Civil Engg. Dept.

Meeting called by

HOD CIVE!

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Agenda of the Meeting: BUS: Frankjakim of Westinston for accordant

400 Boxx 208.

Invitees of Meeting : Bos membes + scht fusully?

Deliberations

SI. No.

Matter

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# SDM COLLEGE OF ENGINEERING AND TECHNOLOGY, DHARWAD DEPARTMENT OF CIVIL ENGINEERING

TEACHING STAFF NAME LIST

Sl.No.	Name	Designation	Signature
l	Prof. I. T.Shirkol	Professor & Head	J.Th
2	Dr. S.G.Joshi	Professor	
3	Dr. V.S.Hegde	Professor	
. 4	Prof. M.S.Patil	Professor	
5	Prof. K.V.Pramod	Professor	Qu
6	Dr. P.M.Munnoli	Professor	
7	Dr. D.K. Kulkarni	Professor	
8	Dr. R.J.Fernandes	Assistant Professor	4
9	Dr.U.D.Hakari	Assistant Professor	7
10	Shri. B.M.Gudadappanavar	Assistant Professor	
11	Mrs.M.B.Mogali	Assistant Professor	MBE
12	Ms. N.M.Madinur	Assistant Professor	andill - Manus
13	Shri. S.A.Kanalli	Assistant Professor	Hlener
14	Shri. M.S.Bhandiwad	Assistant Professor	
15	Shri. P.M. Sakare	Assistant Professor	
16	Ms. P.S.Patil	Assistant Professor	Q = 0
17	Ms. Shruti Kambalimath S	Assistant Professor	o gic mass
18	Ms Soumya Sajjan	Assistant Professor	+AA
19	Mr. Gavisiddesh Majjagi	Assistant Professor	
20 Mr. Prateek Cholappanavar		Assistant Professor	nk

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J. 9h. 10/3/10

Prof. & HOD
Dept. of Civil Engineering
S.D.M. College, of Engg & Tech
Dharwad-580 002

# S.D.M COLLEGE OF ENGINEERING AND TECHNOLOGY, DHARWAD DEPARTMENT OF CIVIL ENGINEERING

Board of Studies Meeting for the year 2017-18 held on 10.03.2017

#### **BOS Members:**

SI. No.	Name	Category	Signature
1	Prof. I.T.Shirkol	Chairman	
2	Dr. Laxman Nandagiri	VTU Nominee	lalman
3	Prof. K. Manjunath	External Member for PG	U
4	Prof. R.V.Raikar	External Member	
5	Prof. V.D.Gundakale	External Member	Bakens
6	Mr. Amogh Mudbhatkal	Alumnus	fughu 1
7	Mr. Prathyakash Shetty	Industry/ Corporate representative	furtiety.
8	Dr. S.G.Joshi	Internal Member	0 , 0
9	Prof. M.S.Patil	Internal Member	mysto hi
10	Prof. U.D.Hakari	Internal Member	hall,
11	Prof. M.S.Bhandiwad	Internal Member	#
12	Prof. S.A.Kanalli	Internal Member	Glani

Date: 10.03.2017

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HOD, Civil Engineering

Date:10.3.2017

### Minutes of BOS Meeting held on 10.03.2017

- 1. Head of the department welcomed the members of BOS.
- 2. BOS felt to change the vision statement and accordingly it is changed. To be a Center of Excellence practice state of art civil engineering education and developing high quality engineering to serve society.
- 3. BOS also felt to change first and fourth mission statements and as follows:
  - a. Development of robust curriculum to meet expectations of industry.
  - b. Networking with industry.
- 4. PSO 3 was changed and is as under: Apply knowledge of different fields of civil engineering, conduct /design experiments, analyze and interpret data, draw inferences and design systems comparisons.
- 5. For few courses, tutorials are not be necessary hence removed.
- 6. Only in courses having self study letter S to be mentioned in teaching scheme.
- 7. In building construction course.

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- a). cost effective construction chapter has been removed and Green building and ratings is included.
- b). Water proofing topic is included.
- 8. It was felt that Fluid Kirematics and Water Hammer topics be removed from fluid mechanics and accordingly the teaching hours to be adjusted.
- 9. In advanced surveying CO-7 is irrelevant and to be removed.
- 10. Intensity frequency duration topics to be removed from hydrology course.

- 11. In building planning and drawing chapters to be renamed and accordingly renamed.
- 12. In the syllabus content of transportation engineering railway to be removed and syllabus to be reframed, course instructors have been advised to change accordingly.
- 13. In advanced surveying topics on Hydrographic survey to be removed and GPS Survey to be included. Changes have been made accordingly.
- 14. It was suggested to include the following elective course as needed.
  - a. Contracts and arbitrations.
  - b. Geo techniques for Infrastructure.
  - c. Airport planning and design.
  - d. Construction project management.
- 15. Solid waste management to be included at VII sem.

16. Extensive survey on design of UGD lines may be undertaken.

J.76 10/3/17

Prof. & HOD
Dept. of Civil Engineering
S.D.M. College, of Engg & Tech
Dharmad-530 002

# S.D.M. COLLEGE OF ENGINEERING AND TECHNOLOGY, DHARWAD DEPARTMENT OF CIVIL ENGG.

#### **CIRCULAR**

Date: 29/05/2018

This is to inform to all the faculty members that the meeting of Board of Studies (BOS) is scheduled on 02/06/2018 at 10.00am in the chamber of undersigned.

The faculty members shall note that it is permitted to change the syllabus of maximum of 10 % up to VIth semester and 100 % of syllabus change is permitted for VIIth & VIIIth semester. Further, new electives can also be added for VII & VIII semester.

Faculty members are informed to peruse the existing syllabus and suggest suitable changes to the same in the meeting.

It is to further inform that faculty members shall avoid going on leave on that day.

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**HOD Civil Engineering** 

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PMM :	DKK: 8K	RJF:	UDH:
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# S.D.M. COLLEGE OF ENGINEERING AND TECHNOLOGY, DHARWAD DEPARTMENT OF CIVIL ENGG.

Date: 29/05/2018

## INVITATION

The meeting of BOS is scheduled on 02/06/2018 at 10.00 am in the chamber of undersigned. All the members are invited to attend the same.

- 1. Dr. S.G. Joshi Prof., Dept. of Civil Engg., SDMCET, Dharwad 580 002

- Mr. K.V. Pramod Prof., Dept. of Civil Engg., SDMCET, Dharwad-580 002

  Dr. U.D. Hakari Associate Prof., Dept. of Civil Engg., SDMCET, Dharwad -580 002

  Dr. R.J. Fernandes Asst. Prof., Dept. of Civil Engg., SDMCET, Diagram 580 002

HOD, Civil Engineering

## S.D.M. COLLEGE OF ENGINEERING AND TECHNOLOGY, DHARWAD DEPARTMENT OF CIVIL ENGINEERING

## **MEETING EXCERPTS**

#### **BOS Meeting**

Date: 02.06.2018

Time: 10: 00 am Venue: HoD Chamber, Civil Engg. Dept.

Meeting called by: HOD, Civil Engg.

#### Agenda:

- 1. Revision of Syllabus from III<sup>rd</sup> semester to VIII<sup>th</sup> semester BE program including addition of new electives.
- 2. Revision of syllabus of M.Tech Program.
- 3. Perusal of Engineering Mechanics for I/II semester of 2018 Batch.
- 4. Any other matter

Delibe	rations	:
Sl. No.		Matter
1		.S.Patil, Head of the Civil Engg. Dept. welcomed the BOS members and all other members.
2	1.	Revision of Syllabus from III <sup>rd</sup> semester to VIII <sup>th</sup> semester BE program including addition of new electives:
	i.	A detailed presentation of curriculum from III <sup>rd</sup> to VIII <sup>th</sup> semester was made before the BOS. The BOS members and faculty members reviewed the same. Suitable modifications were suggested.
	ii.	Prof Shivareddy of GNDEC, Bidar opined that provision has to be made two course titled "Hydraulic & Hydraulic Mechanics and Open Channel flow". It was decided to include the same as Electives at VII/VIII semester respectively.
	iii.	Prof.Nagakumar of UVC, Bangalore expressed his views to have 2 courses on Transportation Engineering. It was explained that it was not possible due to shortage of credits.
	iv.	Prof. Vinod Hosur, of GIT Belgavi, suggested that few electives which are in VII & VIII Semester be interchanged. The details are as under:
	c)	EQ Resistant Structures of VII be shifted to VIII semester.  Construction Contract Management of VII semester be shifted to VIII semester.  Quality Management System in Civil Engineering of VII semester be shifted to VIII semester.  Structural Dynamics of VIII semester be shifted to VII semester.
	Fu	orther, the following new electives were suggested.

Dr. Mahesh S. Patil opined that the elective Quality Management System in Civil Engineering be made more relevant to Civil Engg. and hence it requires a complete revision.

All the above suggestions were approved.

New Electives as follows were approved by BOS as below:

- i. Principles and Practice of Construction Project Management" proposed by Dr. U.D. Hakari to be included in VIII semester.
- ii. Introduction to Bridge Engineering proposed by Prof. K. V. Pramod to be included in VII semester.
- iii. Design of Bridges proposed by Prof. K.V. Pramod to be included in VIII semester.

Further, it was discussed that "Pre stressed Concrete", earlier elective at VI semester to be made a core subject at VII semester.

3 Revision of syllabus of M.Tech Program:

The syllabus of M.Tech program was presented. All the courses were reviewed. Dr. Vinod Hosur of GIT, Belagavi and other members deliberated on the same.

The Program Core 1 and Program Core 2 were decided. The details are as under:

#### I SEMESTER

Program Core 1: Computational Structural Mechanics - Classical and FE Approach

Program Core 2: Continuum Mechanics - Classical and FE Approach

#### **Electives:**

- 1. Structural Dynamics -Theory & Computations
- 2. Structural Optimization Theory & Computations
- 3. AI and Expert Systems in Structural Engineering
- 4. Action and Response of Structural Systems
- 5. Geotechnical Aspects of Foundations and Earth Retaining Structures
- 6. Numerical Methods and Programming
- 7. Composite and Smart Materials

#### II SEMESTER

Program Core 1: Structural Stability Analysis - Classical and FE Approach Program Core 2: Advanced Design of Reinforced Concrete Structural Elements

#### **Electives:**

- 1. Analysis of Plates Classical and FE Approach
- 2. Reliability Analysis and Design of Structural Elements
- 3. Advanced Design of Steel Structures
- 4. Design of Stack Tower and Water Storage Structural Systems
- 5. Seismic Resistant Design of Structural Systems
- 6. Advanced Structural Dynamics
- 7. Computer Aided Design of Substructures

#### III semester:

**Program Core 3 :** Analysis and Design of Shell Roof Structures – Classical and FE Approach

Project Phase -I

Internship in Industry/R&D organization: All the students shall carry out the internship after the end of II semester for 6 to 8 weeks. Else, they shall choose one more elective from the group given for the III semester.

#### Electives for III semester

- 1. Design of Precast & Composite Structures
- 2. Advanced Mechanics of Materials

	<ol> <li>Advanced Design of Pre-Stressed Concrete Structures</li> <li>Design of Substructures</li> <li>Design of Structural Systems In Bridges</li> </ol>
	IV semester: Project Phase -II
	Further, it was recommended that Structural Optimization should be dealt as relevant to structures and not mathematics.
	The committee authorized the department to work out the detailed scheme and syllabus.
4	Perusal of Engineering Mechanics for I/II semester of 2018 Batch: The syllabus was presented and some useful recommendations were made. It was decided that all important chapters be retained while reducing the same from 4 credits to 3 credits.
5	Any other matter: NIL
6	The meeting ended with vote of thanks.

HOD, Civil Engg.

Prof. & HOD
Dept. of Civil Engineering
S.D.M. College, of Engg & Tech
Dharwad-580 002

Date: 21/05/2019

From:

Dr. M.S. Patil Head, Dept. of Civil Engg. **SDMCET** Dharwad

Sir,

Subject: BOS Meeting of Department of Civil Engineering reg...

BOS meeting of Department of Civil Engineering is scheduled on 28/05/2019 at 10.00am in the chamber of undersigned at SDMCET, Dharwad. The agenda for the meeting is as under:

- 1. Discussion/Finalization of Vision & Mission of the department.
- 2. Finalization of syllabus of 3<sup>rd</sup> & 4<sup>th</sup> semester in the revised curriculum of 175 credits as per VTU norms.
- 3. Finalization of scheme of teaching for 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup> & 8<sup>th</sup> semester in the revised curriculum of 175 credits as per VTU norms.
- 4. Discussion on CO, PO and PSO.
- 5. Finalization of Program Articulation Matrix.
- 6. Discussion on new electives to be introduced in the curriculum to make the program more relevant.
- 7. Any other matter.

I request you to kindly attend this meeting and give your valuable inputs. Please let us know you travel plans so that we can arrangements for local conveyance.

Thanking you,

Yours faithfully,

HOD, Civil Engg.

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## SDM College of Engineering & Technology, Dharwad – 580 002 Department of Civil Engineering

## BOS Committee for the period April 2018 to April 2020

Sl. No	Particulars	Name of Expert	Address	Mobile No. & Email-Id
01.	Chairman	Prof. Dr. Mahesh S. Patil, HOD	Prof., & HOD, Dept. of Civil Engg., SDMCET, Dharwad- 580 002	9590007058 maahesh.patil@gmail.com
02.	One Expert from outside the college to be nominated by the Honorable Vice- Chancellor, VTU.	Dr. M.S. Nagakumar	Prof., Dept. of Civil Engg., RV College of Engg., Mysore Road, Bangalore - 560059	nagakumar@rvce.edu.in 9740771475
03.	Two Experts in the subject from outside the college to be nominated by the Academic	1. Dr. Vinod I. Hosur	Prof., Dept. of Civil Engg., GIT, Belgaum- 590008	9448193110 v_hosur@git.edu
		2. Dr. Shiva Reddy M. S.	Director, (Academics), Guru Nanak Dev Engg. College, Mailoor Road, Bidar- 585403	8618517005 ms_shivareddy39@yahoo.co.ir
04.	One representative from industry/ Corporate sector / allied area relating to placement to be nominated by the Academic Council.	Mr. Shivaprasad. G.S.	Manager- Design Review, Bureau Veritas (India) Pvt. Ltd., 1030, 13 <sup>th</sup> Cross, Attimabbe Road, Bangalore- 560070	9886768367 shivaprasad.gs@in .bureauveritas.com
05.	Five Faculty members at different levels covering different specializations	1. Dr. S.G. Joshi	Prof., Dept. of Civil Engg., SDMCET, Dharwad – 580 002	8951426091 sgjoshi99@yahoo.com
	to be nominated by the Academic Council	2. Mr. I.T. Shirkol	Prof., Dept. of Civil Engg., SDMCET, Dharwad-580 002	9448729906 itshirkol@rediffmail.com
		3. Mr. K.V. Pramod	Prof., Dept. of Civil Engg., SDMCET, Dharwad- 580 002	9448966985 pramodkarne126@yahoo.com
		4. Dr. U.D. Hakari	Associate Prof., Dept. of Civil Engg., SDMCET, Dharwad -580 002	9481930359 uday.hakari@gmail.com
		5. Dr. R.J. Fernandes	Asst.Prof., Dept. of Civil Engg., SDMCET, Dharwad- 580 002	9880536130 regi_fernandes@rediffmail.co
06.	One Postgraduate meritorious Alumnus to be nominated by the principal	Mr. Shivanand	Senior Structural Engineer WS Atkins (A group of SNC Lavalin), 10th Floor, Safina Towers, 3, Ali Asker Road, Bangalore-560052 Karnataka.	9742698650 shivumtech@gmail.com

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# S.D.M. COLLEGE OF ENGINEERING AND TECHNOLOGY, DHARWAD DEPARTMENT OF CIVIL ENGINEERING

## MEETING EXCERPTS

Date: 28.05.2019

Time: 9:45 AM Venue: Chamber of HOD, Civil Engg. Dept.

#### Meeting of BOS

#### Agenda:

1. Discussion/ Finalization of Vision & Mission of the department.

Finalization of syllabus of 3<sup>rd</sup> & 4<sup>th</sup> semester in the revised curriculum of 175 credits as per VTU norms.

Finalization of scheme of teaching for 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup> & 8<sup>th</sup> semester in the revised curriculum of 175 credits as per VTU norms.

4. Discussion on CO, PO and PSO.

5. Finalization of Program Articulation Matrix.

6. Discussion on new electives to be introduced in the curriculum to make the program more relevant.

7. Discussion of PG Curriculum, CO/PO/PSO, PAM, new electives/any other.

8. Any other matter.

٥.	Any other matter.
	perations:
Sl. No.	Matter
1	Dr. M.S. Patil, Head of the Civil Engg. Dept. welcomed Prof. Nagakumar, RVC, Bangalore Dr. Vinod I. Hosur, Prof. KLSGIT, Belgaum, Dr. Shiva Reddy M. S. Professor & Dean (Academics), MREC, Hyderabad and Mr. Shivaprasad. G.S. Manager- Design Review, Bureau Veritas (India) Pvt. Ltd., Bangalore. Leave of absence was granted to Mr. Shivanand, Senior Structural Engineer WS Atkins Bangalore as he had expressed inability to attend the meeting due to his prior commitments. HOD welcomed all the internal members of BOS. HOD also welcomed all the other faculty members of the department.
2	Finalization of syllabus of 3 <sup>rd</sup> & 4 <sup>th</sup> semester in the revised curriculum of 175 credits as
	per VTU norms: A presentation was made on the draft syllabus of 3 <sup>rd</sup> & 4 <sup>th</sup> semester. There was discussion and deliberation. The following major decisions were taken. i) Courses like GTE & Environment Engineering will continue to have two courses in the program. ii) Surveying will have only one course instead of two. iii) There shall not be Geology theory course. There shall be only geology lab for 1.5 credits. Further, efforts can be made by the faculty of Civil Engg. to handle geology lab instead by a geology faculty. iv) Hydraulics and Hydraulic machines course introduced as a core subject in 4 <sup>th</sup> semester.
3	Finalization of scheme of teaching for 5th, 6th, 7th & 8th semester in the revised
,	curriculum of 175 credits as per VTU norms: The draft scheme of teaching of higher semester was presented. PSC, advanced RCC II, and Design of steel structures II which were core courses will now be the elective courses. Water Resources Engineering will be a core course.
4	<b>Discussion on PSOs:</b> The BOS opined that there can be only 3 PSOs. Further, The BOS made suitable corrections to the PSOs.
5	Finalization of CO/PO & Program Articulation Matrix: The external members of BOS informed the department to finalize CO/PO & program articulation matrix.

6	Discussion on new electives to be introduced in the curriculum to make the program more relevant: The following electives were proposed to be included. Advanced Concrete Technology, Construction Safety and Quality Control, Alternative Building Materials, Ground Water Hydrology, Finite Element Analysis.
7	Discussion of PG Curriculum, CO/PO/PSO, PAM, new electives/any other: i) Amendments were made to the contents of the course Structural Stability Analysis - Classical and FE Approach, 18PCDSC201, II <sup>nd</sup> semester M.Tech as the title of the course the contents were not matching. ii) Scheme and syllabus for III <sup>rd</sup> and IV <sup>th</sup> semester M.Tech were presented before BOS. The committee approved the scheme and syllabus.
8	The meeting ended with vote of thanks.

HOD, Civil Engg.

# SDM College of Engineering & Technology, Dharwad – 580 002 Department of Civil Engineering

# BOS Committee for the period April 2018 to April 2020

# Meeting of BOS members held on 28/05/2019 at 10.00am.

Sl. No	Particulars	Name of Expert	Address	Mobile No. & Email-Id	Sign
01.	Chairman	Prof. Dr. Mahesh S. Patil, HOD	Prof., & HOD, Dept. of Civil Engg., SDMCET, Dharwad- 580 002	9590007058 maahesh.patil@gmail.com	ms./hi
02.	One Expert from outside the college to be nominated by the Honorable Vice- Chancellor, VTU.	Dr. M.S. Nagakumar	Prof., Dept. of Civil Engg., RV College of Engg., Mysore Road, Bangalore - 560059	nagakumar@rvce.edu.in 9740771475	MMaJan 20.5.19
03.	Two Experts in the subject from outside the college to be nominated by the Academic	1. Dr. Vinod I. Hosur	Prof., Dept. of Civil Engg., GIT, Belgaum- 590008	9448193110 v_hosur@git.edu	Hay
	Council	2. Dr. Shiva Reddy M. S.	Director, (Academics), Guru Nanak Dev Engg. College, Mailoor Road, Bidar- 585403	8618517005 ms_shivareddy39@yahoo.c o.in	8 28/5/19
04.	One representative from industry/ Corporate sector / allied area relating to placement to be nominated by the Academic Council.	Mr. Shivaprasad. G.S.	Manager- Design Review, Bureau Veritas (India) Pvt. Ltd., 1030, 13 <sup>th</sup> Cross, Attimabbe Road, Bangalore- 560070	9886768367 shivaprasad.gs@in .bureauveritas.com	23/5/9
05.	Five Faculty members at different levels covering different specializations to be nominated by the	1. Dr. S.G. Joshi	Prof., Dept. of Civil Engg., SDMCET, Dharwad – 580 002	8951426091 sgjoshi99@yahoo.com	م
	Academic Council	2. Mr. I.T. Shirkol	Prof., Dept. of Civil Engg., SDMCET, Dharwad-580 002	9448729906 itshirkol@rediffmail.com	T. The
		3. Mr. K.V. Pramod	Prof., Dept. of Civil Engg., SDMCET, Dharwad- 580 002	9448966985 pramodkarne126@yahoo.co m	W .
		4. Dr. U.D. Hakari	Associate Prof., Dept. of Civil Engg., SDMCET, Dharwad -580 002	9481930359 uday.hakari@gmail.com	mels
		5. Dr. R.J. Fernandes	Asst.Prof., Dept. of Civil Engg., SDMCET, Dharwad- 580 002	9880536130 regi_fernandes@rediffmail. com	A Company of the Comp
06.	One Postgraduate meritorious Alumnus to be nominated by the principal	Mr. Shivanand	Senior Structural Engineer WS Atkins (A group of SNC Lavalin), 10th Floor, Safina Towers, 3, Ali Asker Road, Bangalore-560052 Karnataka.	9742698650 shivumtech@gmail.com	_

# S.D.M. COLLEGE OF ENGINEERING AND TECHNOLOGY, DHARWAD DEPARTMENT OF CIVIL ENGINEERING

# Meeting of BOS held on 28/05/2019 at 10.00am.

Sl. No.	Name of faculty	Designation	Sign
1	Dr. S.B. Vanakudre	Professor & Principal	_
2	Prof. M.S.Patil	Professor & Head	
3	DrS.G.Joshi	Professor	
4	Prof.I.T.Shirkol	Professor	
5	Prof. K.V. Pramod	Professor	
6	Dr. P.M. Munnoli	Professor	1
7	Dr. D.K. Kulkarni	Professor	2/88_
8	DrU.D.Hakari	Associate Professor	and the
9	Dr. R.J. Fernandes	Assistant Professor	100
10	Shri. B.M. Gudadappanavar	Assistant Professor	
11	Mrs. M.B. Mogali	Assistant Professor	MBR
12	Shri S.A.Kanalli	Assistant Professor	Stande
13	Shri. P.M. Sakare	Assistant Professor	
14	Shri G.S.Majjagi	Assistant Professor	(35~)
15	Shri P.I.Chollappanavar	Assistant Professor	R
16	Shri S.S.Hubballi	Assistant Professor	Sunji
17	Shri S.S.Chitnis	Assistant Professor	(Dans)
18	Smt Kushal Kapali	Assistant Professor	Ale
19	Ms.Akshata Bilgi	Assistant Professor	Mess
20	Dr.V.S.Hegde	Professor Emeritus	
21.	Sri. Ashish Yeligar	Assistant Professor	etsistist

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HOD, Civil Engg.
Prof. & HOD
Dept. of Civil Engineering
S.D.M. College, of Engg & Tech
Dharwad-580 002

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# s.d.m. COLLEGE OF ENGINEERING AND TECHNOLOGY, DHARWAD DEPARTMENT OF CIVIL ENGG.

## **CIRCULAR**

Date: 27.05.2019

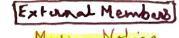
Meeting of internal members of BOS, Department of Civil Engineering is scheduled at on 27.05.2019 at 2.45 m in the Chamber of undersigned. All the members are informed to attend the same.

#### **AGENDA:**

Preparations for the conduct of BOS meeting scheduled on 28/05/2019.

HOD, Civil Engg.

Category	Name	Designation	Contact	Sign
Five Faculty members at	1. Dr. S.G. Joshi	Prof., Dept. of Civil Engg.,	8951426091	0
different levels covering		SDMCET, Dharwad - 580 002	sgjoshi99@yahoo.com	A.
different specializations to				
be nominated by the		Prof., Dept. of Civil Engg.,		,
Academic Council	2. Mr. I.T. Shirkol	SDMCET, Dharwad-580 002	9448729906	7.96
			itshirkol@rediffmail.c	4.70
		Prof., Dept. of Civil Engg.,	<u>om</u>	(ii)
	3. Mr. K.V. Pramod	SDMCET, Dharwad- 580 002		A.
			9448966985	1 1
		Associate Prof., Dept. of Civil	pramodkarne126@yah	THE STATE OF
	4. Dr. U.D. Hakari	Engg., SDMCET,	oo.com	5
		Dharwad -580 002	0.401020250	
			9481930359	
		Asst.Prof., Dept. of Civil Engg.,	uday.hakari@gmail.co	
,	5. Dr. R.J. Fernandes	SDMCET,	<u>m</u>	
		Dharwad- 580 002		
			0000526120	
			9880536130	
			regi_fernandes@rediff	
			mail.com	





# **Board of Studies Meeting (SDMCET, Dharwad)**

1 message

Civil HOD\_<civilhod79@gmail.com> Thu, Jul 16, 2020 at 10:46 AM To: subhasyaragal@yahoo.com, PGRADDI@yahoo.co.in, gsmanjunath@git.edu, galis.manjunath@gmail.com, jagadeeshnandi@gmail.com, jmsdwd@gmail.com, vasantndesai534@gmail.com

Dear Sir,

## Sub: BOS Meeting of Department of Civil Engineering reg...

BOS meeting of the Department of Civil Engineering, SDMCET, Dharwad is scheduled on 20.07.2020 at 10.30 am.

The meeting will be conducted online through Google Meet and the meeting link shall be shared with you through your email and whatsapp.

The agenda for the meeting is as under:

- Discussion / Finalisation of Vision & Mission statements of the department. 1.
- Finalisation of syllabus of all the semesters of UG Program in the revised curriculum of 175 credits as per VTU norms.
- Finalisation of syllabus of all the semesters of PG Program.
- Finalisation of VII and VIII sem syllabus as per 200 credit scheme.
- 5. Any other matter.

The files containing the above details are attached herewith for your reference and needful. I request you to kindly participate in the meeting and offer your valuable inputs.

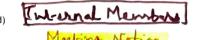
You are also requested to kindly forward us your bank details such as Account no./Bank and Branch/ IFSC code etc. for the payment of honorarium.

Thanking you Yours faithfully

(Dr. Udayashankar D. Hakari) Head, Department of Civil Engineering, SDM College of Engineering and Technology, **DHARWAD - 580 002** (Cell: 7019284887, 9481930359)

#### 5 attachments

- UG 3rd Year 2018 Scheme Syllabus.pdf
- UG 2nd Year 2018 Scheme Syllabus.pdf 762K
- UG 4th Year 2018 Scheme Syllabus.pdf
- PG 1st Year Syllabus (2020-2022).pdf
- PG 2nd Year Syllabus (2020-2022).pdf





#### **Board of Studies Meeting (SDMCET, Dharwad)**

Civil HOD <civilhod79@gmail.com>

Thu, Jul 16, 2020 at 11:44 AM

To: itshirkol@rediffmail.com, Mahesh Patil <maahesh.patil@gmail.com>, prakashsunanda@rediffmail.com, dilipkkulkarni@rediffmail.com, Prateek Cholappanavar <prateek.sdm@gmail.com>

Dear BOS Internal members. Kindly go through the attachments.

------ Forwarded message ------From: Civil HOD <civilhod79@gmail.com>
Date: Thu, Jul 16, 2020 at 10:46 AM

Subject: Board of Studies Meeting (SDMCET, Dharwad)

To: <subhasyaragal@yahoo.com>, <PGRADDI@yahoo.co.in>, <gsmanjunath@git.edu>,

<galis.manjunath@gmail.com>, <jagadeeshnandi@gmail.com>, <jmsdwd@gmail.com>,

<vasantndesai534@gmail.com>

Dear Sir,

#### Sub: BOS Meeting of Department of Civil Engineering reg...

BOS meeting of the Department of Civil Engineering, SDMCET, Dharwad is scheduled on 20.07.2020 at 10.30 am.

The meeting will be conducted online through Google Meet and the meeting link shall be shared with you through your email and whatsapp.

The agenda for the meeting is as under:

- 1. Discussion / Finalisation of Vision & Mission statements of the department.
- 2. Finalisation of syllabus of all the semesters of UG Program in the revised curriculum of 175 credits as per VTU norms.
- 3. Finalisation of syllabus of all the semesters of PG Program.
- 4. Finalisation of VII and VIII sem syllabus as per 200 credit scheme.
- 5. Any other matter.

The files containing the above details are attached herewith for your reference and needful. I request you to kindly participate in the meeting and offer your valuable inputs.

You are also requested to kindly forward us your bank details such as Account no./Bank and Branch/ IFSC code etc. for the payment of honorarium.

Thanking you Yours faithfully

(Dr.Udayashankar D.Hakari)
Head, Department of Civil Engineering,
SDM College of Engineering and Technology,
DHARWAD – 580 002
(Cell: 7019284887, 9481930359)

#### 5 attachments

UG 3rd Year 2018 Scheme Syllabus.pdf 842K

UG 2nd Year 2018 Scheme Syllabus.pdf 762K

- UG 4th Year 2018 Scheme Syllabus.pdf 727K
- PG 1st Year Syllabus (2020-2022).pdf 577K
- PG 2nd Year Syllabus (2020-2022).pdf 360K



## **Board of Studies Meeting (SDMCET, Dharwad)**

Civil HOD <civilhod79@gmail.com>
Thu, Jul 16, 2020 at 11:44 AM
To: itshirkol@rediffmail.com, Mahesh Patil <maahesh.patil@gmail.com>, prakashsunanda@rediffmail.com,
dilipkkulkarni@rediffmail.com, Prateek Cholappanavar prateek.sdm@gmail.com>

Dear BOS Internal members. Kindly go through the attachments. [Quoted text hidden]

#### 5 attachments



UG 2nd Year 2018 Scheme Syllabus.pdf 762K



PG 1st Year Syllabus (2020-2022).pdf 577K

PG 2nd Year Syllabus (2020-2022).pdf 360K





#### BOS meeting - Meeting link Reg..

1 message

Civil HOD < civilhod79@gmail.com>

Sat, Jul 18, 2020 at 10:56 AM

To: subhashyaragal@yahoo.com, pgraddi@yahoo.co.in, "Manjunath G.S." <gsmanjunath@git.edu>, galis.manjunath@gmail.com, Jagadeesh Nandi <jagadeeshnandi@gmail.com>, jmsdwd@gmail.com, "Dr.Udayashankar Hakari" <uday.hakari@gmail.com>, vasantndesai534@gmail.com, itshirkol@rediffmail.com, prakashsunanda@rediffmail.com, dilipkkulkarni@rediffmail.com, Prateek Cholappanavar <prareek.sdm@gmail.com>, Mahesh Patil <maahesh.patil@gmail.com>

Sir.

Following is the meeting link for the BOS meeting scheduled on 20/07/2020 (Monday) at 10:30AM. You may click on the link to join the meeting. You can join the meeting from your PC/mobile phone.

Meeting link: https://meet.google.com/qkm-kngi-ndr

In case of any difficulty, you may please contact Prof. Prateek Cholappanavar (9483491230)

Thanking You,

Yours faithfully, Dr. Udayshankar Hakari, HOD, Department of Civil Engineering, SDMCET Dharwad.



#### **BOS Meeting ..reg**

8 messages

Civil HOD < civilhod79@gmail.com>

Mon, Jul 20, 2020 at 12:34 PM

To: subhashyaragal@yahoo.com, pgraddi@yahoo.co.in, "Manjunath G.S." <gsmanjunath@git.edu>, galis.manjunath@gmail.com, Jagadeesh Nandi <jagadeeshnandi@gmail.com>, jmsdwd@gmail.com, vasantndesai534@gmail.com, itshirkol@rediffmail.com, prakashsunanda@rediffmail.com, dilipkkulkarni@rediffmail.com, Prateek Cholappanavar com>, Mahesh Patil <maahesh.patil@gmail.com>

Dear sir,

This is to thank you for your active participation in the BOS meeting and for giving your valuable suggestions. Your involvement in the BOS of our department and inputs have enriched the content of our curriculum.

The proceedings of the BOS meeting shall be sent to you shortly for your approval.

Kindly send your bank details as informed in the earlier mail.

Thanking you, Yours sincerely

Dr.U.D.Hakari

H.O.D. Civil Engg.

SDMCET, Dharwad

prabhu rakaraddi <pgraddi@yahoo.co.in> To: Civil HOD < civilhod79@gmail.com>

Mon, Jul 20, 2020 at 2:05 PM

Dear sir

I am also thankful to you for appointing me as the BOS member of your department and congratulating to all the members who have worked for the smooth conduct of the BOS meeting.. Thanking you

Yours faithfully

Dr P G Rakaraddi

BEC.

**BGK** 

[Quoted text hidden]

Manjunath G.S. <gsmanjunath@git.edu> To: Civil HOD < civilhod79@gmail.com>

Mon, Jul 20, 2020 at 2:06 PM

Sir.

It is my privilege to be a member of BOS of your esteemed institute. Thank you for the recognition.

Bank Details:

G. S. Manjunatha

Karnataka Bank Ltd., GIT Campus, Udyambag, Belagavi - 590 008

SB A/c No. 1162500100021601 IFSC Code: KARB 0000 116

PAN: ACAPM 6780 F

Thanks and regards G S Manjunatha

[Quoted text hidden]

Vasant Desai <vasantndesai534@gmail.com> To: Civil HOD <civilhod79@gmail.com>

Mon, Jul 20, 2020 at 6:40 PM

Thank u sir

As per your note my bank particulars are as follows

A/C no.-64049939516

IFSCNO.SBIN0040352 With regards

Vasant Desai

[Quoted text hidden]

Civil HOD < civilhod79@gmail.com>

To: prabhu rakaraddi <pgraddi@yahoo.co.in>

Wed, Jul 22, 2020 at 10:06 AM

Pl. send your SB ac details sir.

Hakari [Quoted text hidden]

Civil HOD < civilhod79@gmail.com> Wed, Jul 22, 2020 at 10:07 AM

To: "Manjunath G.S." <gsmanjunath@git.edu>

Thank you sir.

-U.D.Hakari [Quoted text hidden]

Civil HOD <civilhod79@gmail.com>

To: prabhu rakaraddi <pgraddi@yahoo.co.in>

Wed, Jul 22, 2020 at 10:08 AM

Thank you sir.

Pl. send us your bank details -Hakari

On Mon, Jul 20, 2020 at 2:05 PM prabhu rakaraddi <pgraddi@yahoo.co.in> wrote:

[Quoted text hidden]

Civil HOD < civilhod79@gmail.com> Wed, Jul 22, 2020 at 10:12 AM To: Vasant Desai <vasantndesai534@gmail.com>

Thank you sir.

-U.D.Hakari [Quoted text hidden]



#### **BOS Meeting Excerpts**

1 message

Civil HOD <civilhod79@gmail.com>

Thu, Jul 23, 2020 at 10:04 AM

To: subhashyaragal@yahoo.com, prabhu rakaraddi <pgraddi@yahoo.co.in>, "Manjunath G.S." <gsmanjunath@git.edu>, galis.manjunath@gmail.com, Jagadeesh Nandi <jagadeeshnandi@gmail.com>, jmsdwd@gmail.com, "Dr.Udayashankar Hakari" <uday.hakari@gmail.com>, Vasant Desai <vasantndesai534@gmail.com>, itshirkol@rediffmail.com, prakashsunanda@rediffmail.com, dilipkkulkarni@rediffmail.com, Prateek Cholappanavar prakashsunanda@rediffmail.com, dilipkkulkarni@rediffmail.com, prateek.sdm@gmail.com, prateek.sdm@gmail.com Mahesh Patil <maahesh.patil@gmail.com>

Dear sir,

Please find herewith attached the file containing the BOS Meeting Excerpts (Proceedings). You are requested to kindly go through the same and offer your comments (if any). You may kindly send us your approval for the BOS Meeting Excerpts by a return mail. I thank you for your cooperation and support for the successful conduction of the Meeting of BOS of our department. With best regards

Dr.U.D.Hakari

Head, Department of Civil Engineering, SDM College of Engineering and Technology. **DHARWAD - 580 002** 



**BOS** meeting Proceedings.docx 18K

# S.D.M. COLLEGE OF ENGINEERING AND TECHNOLOGY, DHARWAD DEPARTMENT OF CIVIL ENGINEERING

Meeting of Board of Studies (BOS) (Online through Google Meet)

# **MEETING EXCERPTS**

Date: 20.07.2020 Time: 10:30 AM

Venue: Chamber of HOD, Civil Engg. Dept.

#### Agenda:

- Discussion / Finalization of Vision & Mission statements of the department. 1.
- Finalization of syllabus of all the semesters of UG Program in the revised curriculum of 2. 175 credits as per VTU norms.
- 3.
- Finalization of syllabus of all the semesters of PG Program.
  Finalization of VII<sup>th</sup> and VIII<sup>th</sup> sem syllabus as per 200 credit scheme. 4.
- Deliberations:

	berations.					
Sl. No.	VIOTTOM					
1	Dr. U.D.Hakari, Head of Civil Engineering Department welcomed Dr. Subhash Yaragal, NITK, Suratkal, Dr. P.G.Rakaraddy, BEC, Bagalkot, Dr.G.S.Manjunath, GIT, Belagavi, Sri.Jagadish Nandi, Director, GMSPL, Prof. Vasanth Desai, KHK IET. Dharwad. He also welcomed the internal members of BOS and also the faculty members of the department.					
2	Discussion / Finalization of Vision & Mission statements of the department:  The members of BOS went through the vision and mission statements of the department and approved the same with slight modification. The modified vision and mission statement has been enclosed.					
3	Finalization of syllabus of all the semesters of UG Program in the revised curriculum					
	of 175 credits as per VTU norms:					
	Presentation was made on the draft syllabus of all the semesters of UG Program in the revised curriculum of 175 credits as per VTU norms. After discussion and deliberations, following suggestions were made:  i) In respect of the elective subjects balanced weightage be given to have representation of all the specializations of civil engineering subjects.  ii) Teaching hours be distributed uniformly across all the units.  iii) Scope for incorporating subjects pertaining to latest developments in the field of civil engineering is considered.  iv) To have balance in the number of elective subjects offered.					
	v) Minor modifications/ corrections are incorporated as pointed out during the review.					
4	With the above suggestions, the syllabus was approved.					
4	Finalization of syllabus of all the semesters of PG Program; Presentation was made on the draft syllabus of all the semesters of PG Program. After discussion and deliberations, the syllabus was approved. Further, the BOS members noted that a new course i.e. 'Research Methodology and IPR' has been introduced for the Ist semester of M.Tech and the same was approved.					
5	Finalization of VII <sup>th</sup> and VIII <sup>th</sup> sem syllabus as per 200 credit scheme:					
	The members went through the syllabus of VII and VIII semester as per 200 credit scheme					
	of 2015 and the same was approved.					
6	Any other matter: NIL					
7	The meeting was concluded with vote of thanks.					
TERMA	L MEMBERS: 5 7 / 20/07/2020 MW					

Drof. I.T. bhirkol - 7.7. Li 20/07/2020 1) Dr. M.S. Patil 48/hi 20/07/2020 3) Dr. P.M. Munnoli -4 Dr. D.K. Kulkarni 5) bui Pratack. C.

S.D.M. College of Engg. & Tech Dharwad-580 002

# DEPARTMENT OF CIVIL ENGINEERING <u>VISION AND MISSION</u>

#### Vision:

To be the center of excellence providing the state of art civil engineering education developing competent engineers responsible for serving the society.

#### Mission:

The stated vision shall be achieved through:

- The development of robust curricula to meet the industrial expectations.
- Interactive teaching-learning process with modern educational tools & soft skills.
- Establishing synergy between teaching and research with ethical values.
- Industry-Institute interaction.

M Gmail

Civil HOD <civilhod79@gmail.com>

# **BOS Meeting Excerpts**

6 messages

Thu, Jul 23, 2020 at 10:04 AM

Civil HOD <civilhod79@gmail.com> Thu, Jul 23, 2020 at 10:04 Ar Thu, Jul 24, 2020 at 10:04 Ar Thu, J To: submashydiaedil.com, Jagadeesh Nandi <jagadeeshnandi@gmail.com>, "Manjunath G.S." <gsmanjunath@git.edu>, galis.manjunath@gmail.com>, Jmsdwd@gmail.com, "Dr.Udayashankar | Jagadeeshnandi@gmail.com>, Jmsdwd@gmail.com, "Dr.Udayashankar | Jagadeeshnandi@gmail.com>, Jmsdwd@gmail.com, "Dr.Udayashankar | Jagadeeshnandi@gmail.com>, Jmsdwd@gmail.com, "Dr.Udayashankar | Jagadeeshnandi@gmail.com>, Jmsdwd@gmail.com, "Dr.Udayashankar | Jmsdwd@gmail.com, "Dr.Uda galis.mangan.com>, jagadeesimandi@gmail.com>, jmsdwd@gmail.com, "Dr.Ud Hakari" <uday.hakari@gmail.com>, Vasant Desai <vasantndesai534@gmail.com>, itshirkol@rediffmail.com, dilipkkulkori@rediffmail.com, Hakaii Nasahashail.com, dilipkkulkarni@rediffmail.com, Prateek Cholappanavar 
prakashsunanda@rediffmail.com, dilipkkulkarni@rediffmail.com, Prateek Cholappanavar 
prateek.sdm@gmail.com>,
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prateek.sdm.gmail.com<,
prateek.sdm.gmail.com</pre> Mahesh Patil <maahesh.patil@gmail.com>

Please find herewith attached the file containing the BOS Meeting Excerpts (Proceedings). You are requested to kindly go through the same and offer your comments (if any).

You may kindly send us your approval for the BOS Meeting Excerpts by a return mail. I thank you for your cooperation and support for the successful conduction of the Meeting of BOS of our department. With best regards

Dr.U.D.Hakari

Head, Department of Civil Engineering,

SDM College of Engineering and Technology,

DHARWAD - 580 002

BOS meeting Proceedings.docx

Manjunath G.S. <gsmanjunath@git.edu>

Thu, Jul 23, 2020 at 3:06 PM

Cc: subhashyaragal@yahoo.com, prabhu rakaraddi <pgraddi@yahoo.co.in>, galis.manjunath@gmail.com, Jagadeesh Nandi <jagadeeshnandi@gmail.com>, jmsdwd@gmail.com, "Dr.Udayashankar Hakari" <uday.hakari@gmail.com>,

/asant Desai <vasantndesai534@gmail.com>, itshirkol@rediffmail.com, prakashsunanda@rediffmail.com,

ilipkkulkarni@rediffmail.com, Prateek Cholappanavar <prateek.sdm@gmail.com>, Mahesh Patil

<maahesh.patil@gmail.com>

Approved.

Thanks and regards

Df G S Manjunath [Quoted text hidden]

Thu, Jul 23, 2020 at 5:14 PM

<sup>orabhu</sup> rakaraddi <pgraddi@yahoo.co.in> Reply-To: "pgraddi@yahoo.co.in" <pgraddi@yahoo.co.in>

0: "gsmanjunath@git.edu" <gsmanjunath@git.edu>, Civil HOD <civilhod79@gmail.com> C: "subbast

c: "subhashyaragal@yahoo.com" <subhashyaragal@yahoo.com>, "galis.manjunath@gmail.com" galis manimum di diagrama d galis.manjunath@gmail.com>, Jagadeesh Nandi <jagadeeshnandi@gmail.com>, "jmsdwd@gmail.com"

imsdwd@gmail.com>, Jagadeesh Nandi \jagadeoshiilandiil.com>, Vasant Desai Vasantiidaa | Som | "Dr.Udayashankar Hakari" \land | (com | \land | shirkol@rediffmail.com>)

<sup>(vasant</sup>ndesai534@gmail.com>, "Dr.Udayashankar Hakari \udayanana (itshirkol@rediffmail.com>, <sup>prakashsusa</sup> prakashsunanda@rediffmail.com" prakashsunanda@rediffmail.com>, "dilipkkulkarni@rediffmail.com"
dilipkkulkarni@rediffmail.com" com

dlipkkulkarni@rediffmail.com" <prakashsunanua@redimail.com>, Mahesh Patil

<sup>maahesh.</sup>patil@gmail.com> Agreed, from my side it is approved. Thanking you Dr P G Rakaraddi

Sent from Yahoo Mail on Android [Quoled text hidden]

ที่ใช้<sup>บระ</sup> Jag<mark>adeesh Nandi</mark> <jagadeeshnandi@gmail.com> Jagaddi@vahoo.co.in To pgraddi@yahoo.co.in

Thu, Jul 23, 2020 at 5:36 PM

propraddi@yano.com/, sar 25, 2525 de se propra "Manjunatir Color "Manjunatir Color "Manjunatir Color "Manjunath@gmail.com" (subhashyaragal@yahoo.com", "galis.manjunath@gmail.com" (subhashyaragal@yahoo.com", "pr.Udayashankar Hakari" (suday bakari Color "manjunath@gmail.com", "jmsdwd@gmail.com" subhashyaragan, "Dr.Udayashankar Hakari" <uday.hakari@gmail.com", "Dr.Udayashankar Hakari" <uday.hakari@gmail.com>, Vasant Desai <a href="mailto:square">square</a>
<a href="mailto:square</a>
<a href="mailto:square</a></p \*prakashsullalil@rediffmail.com>, Prateek Cholappanavar <prateek.sdm@gmail.com>, Mahesh Patil@rediffmail.com>, Mahesh Patil@gmail.com>, Mahesh Patil@gmail.com>, Mahesh Patil@gmail.com>, Mahesh Patil@gmail.com>, Mahesh Patil maahesh.patil@gmail.com>

Approved from my side, sir [Quoted text hidden]

Subhash Yaragal <subhashyaragal@yahoo.com>

Thu, Jul 23, 2020 at 9:02 PM

Subnash "subhashyaragal@yahoo.com" <subhashyaragal@yahoo.com> To: "Jagadeunath G.S." <gsmanjunath@git.edu>, Civil HOD <civilhod79@gmail.com>, "galis.manjunath@gmail.com" cc: Manjunath@gmail.com>, "jmsdwd@gmail.com" <jmsdwd@gmail.com>, "Dr.Udayashankar Hakari" رماهر،hakari@gmail.com>, Vasant Desai <vasantndesai534@gmail.com>, "itshirkol@rediffmail.com" ⟨iday/flakanegs/mail.com>, пракаshsunanda@rediffmail.com /ishirkol@rediffmail.com>, пракаshsunanda@rediffmail.com ্রোরামিডাভিবের বিশ্বরাজনার ব Mahesh Patil <maahesh.patil@gmail.com>

hereby approve the proceedings. With best regards,

Subhash C. Yaragal, NITK Surathkal

Sent from Yahoo Mail on Android

[Quoted text hidden]

Vasant Desai <vasantndesai534@gmail.com> To: Civil HOD < civilhod79@gmail.com>

Mon, Jul 27, 2020 at 11:58 AM

--- Forwarded message ------From: Vasant Desai <vasantndesai534@gmail.com> Date: Fri, 24 Jul 2020, 16:06

Subject: Re: BOS Meeting Excerpts To: <subhashyaragal@yahoo.com>

Modification as suggested is approved Thanking you

With regards Vasant Desai

[Quoted text hidden]

# Photos of Mooting











## SHRI DHARMASTHALA MANJUNATHESHWARA COLLEGE OF ENGINEERING & TECHNOLOGY, DHARWAD – 580 002

(An Autonomous Institution recognized by AICTE & Affiliated to VTU, Belagavi) Ph: 0836-2447465 Fax: 0838-2464638 Web:

www.sdmcet.ac.in





# **BOARD OF STUDIES (BOS) MEETING - 2021**

26.06.2021

**Department of Civil Engineering** 

# SDM College of Engineering & Technology, Dharwad – 580 002 Department of Civil Engineering

# Board of Studies Committee From 23.03.2020 to 23.03.2022

Sl.	Particulars	Name of Expert	Address	Mobile No. & Email-Id	Sign
<b>No</b> 01.	Chairman	Dr.U.D.Hakari,	Associate Prof., & HOD, Dept. of Civil Engg., SDMCET, Dharwad- 580 002	7019284887 civilhod@sdmcet.ac.in	mah
02.	One Expert from outside the college to be nominated by the Honorable Vice-Chancellor, VTU.	Dr. Subhash Yaragal,	Professor in Civil Engineering, NITK, Suratkal.	9448952072 subhashyaragal@yahoo.com	online Abbry Recyd e-moiil
03.	Two Experts in the subject from outside the college to be nominated by the Academic Council	1. Dr.P.G.Rakaraddi,	Associate Professor in Civil Engineering, Basaveshwar Engineering College, Bagalkot.	9448085007 pgraddi@yahoo.co.in	
		2.Dr.G.S.Manjunath,	Professor in Civil Engineering, Gogte Institute of Technology, Belgaum.	9449200885 gsmanjunath@git.edu, galis.manjunath@gmail.com	11
04.	One representative from industry/ Corporate sector / allied area relating to placement to be nominated by the Academic Council.	Shri. Jagadeesh Nandi,	Director, JMSPL, Dharwad	9845335373 jagadeeshnandi@gmail.com jmsdwd@gmail.com	17
05.	One Postgraduate meritorious Alumnus to be nominated by the principal	Sri.Anoop Shirkol	Assistant Professor, Dept. of Civil Engineering, Malaviya National Institute of Technology, Jaipur- 302017	9549658329, 9538462532 anoopshirkol@gmail.com	11
06.	Five Faculty members at different levels covering different specializations to be nominated by the Academic Council	1. Mr. I.T. Shirkol	Prof., Dept. of Civil Engg., SDMCET, Dharwad – 580 002	9448729906 itshirkol@rediffmail.com	5. K
		2. Dr.M.S.Patil	Prof., Dept. of Civil Engg., SDMCET, Dharwad-580 002	95900-07058 maahesh.pail@gmail.com	ysp
		3. Prof. K. V.Pramod	Prof., Dept. of Civil Engg., SDMCET, Dharwad- 580 002	9448966985 pramodkarne626@rediffmail.com	(e)
		4. Dr. D.K.Kulkarni	Prof., Dept. of Civil Engg., SDMCET, Dharwad -580 002	9449062826 dilipkkulkarni@rediffmail.com	DES
		5. Shri.Prateek Cholappanavar	Asst.Prof., Dept. of Civil Engg., SDMCET, Dharwad- 580 002	9483491230 pic@sdmcet.ac.in	B

# <sub>UG and</sub> PG Syllabus for 2021-22

# HOD Civil < hodcivil@sdmcet.ac.in>

Tue 6/22/2021 4:32 PM

To: subhashyaragal@yahoo.com <subhashyaragal@yahoo.com>; pgraddi@yahoo.co.in <pgraddi@yahoo.co.in>; To: such a such as a such galisanse)
gmail.com < jmsdwd@gmail.com >; anoopshirkol@gmail.com < anoopshirkol@gmail.com >
jmsdwd@gmail.com < anoopshirkol@gmail.com > Cc: Prateek Cholappanavar < pic@sdmcet.ac.in>; itshirkol@rediffmail.com <itshirkol@rediffmail.com>; pramodkarne126 cc. road (fragil come); Dr.Dilip K Kulkarni <dkkulkarni@sdmcet.ac.in>; dilipkkulkarni@rediffmail.com <dilipkkulkarni@rediffmail.com>

6 attachments (3 MB)

2nd Year 2018 Scheme 21-22.pdf; 3rd Year 2018 Scheme 21-22.pdf; 4th Year 2018 Scheme 21-22.pdf; I Sem 18UCVC100 Engg Mechanics.pdf; PG CADS Civil I Year 2021-2022.pdf; PG CADS Civil II Year 2021-2022.pdf;

Dear Sir,

#### Sub: BOS Meeting of Department of Civil Engineering reg...

BOS meeting of the Department of Civil Engineering, SDMCET, Dharwad is scheduled on 26.06.2021 at 10.30

The meeting will be conducted online through Google Meet and the meeting link shall be shared with you through your email and WhatsApp.

The agenda for the meeting is as under:

- Finalization of Vision & Mission statements of the department.
- Finalisation of syllabus of all the semesters of UG Program in the revised curriculum of 175 credits as per VTU norms.
- 3. Finalization of syllabus of all the semesters of PG Program.
- 4. Any other matter. (NEP implementation)

The files containing the above details are attached herewith for your reference and needful. I request you to kindly participate in the meeting and offer your valuable inputs.

You are also requested to kindly forward us your bank details such as Account no./Bank and Branch/ IFSC code etc. for the payment of honorarium.

Thanking you,

Yours faithfully,

(Dr. Udayashankar D. Hakari)

Head, Department of Civil Engineering, SDM College of Engineering and Technology,

DHARWAD - 580 002

(Cell: 7019284887, 9481930359)

# S.D.M. COLLEGE OF ENGINEERING AND TECHNOLOGY, DHARWAD DEPARTMENT OF CIVIL ENGINEERING

Meeting of Board of Studies (BOS) (Online through Google Meet)

## **MEETING EXCERPTS**

Date: 26.06.2021 Time: 10:30 AM

Venue: Chamber of HOD, Civil Engg. Dept.

## Agenda:

- Discussion / Finalization of Vision & Mission statements of the department.
- Finalization of syllabus of all the semesters of UG Program in the revised curriculum of 175 credits as per VTU norms.
- 3. Finalization of syllabus of all the semesters of PG Program.
- 5. Any other matter National Education Policy.

	Deliberations:					
Sl. No.	No. Matter					
1	Dr. U.D.Hakari, Head of Civil Engineering Department welcomed Dr. Subhash Yaragai, NITK, Suratkal, Dr. P. G. Rakaraddy, BEC, Bagalkot, Dr. G. S. Manjunath, GIT, Belagavi, Sri. Jagadish Nandi, Director, GMSPL and Prof. Anoop Shirkol, MNIT, Jaipur. He also welcomed the internal members of BOS and also the faculty members of the department.					
2	Discussion / Finalization of Vision & Mission statements of the department:  The members of BOS went through the vision and mission statements of the department					
Finalization of syllabus of all the semesters of UG Program in the revised of 175 credits as per VTU norms:  Presentation was made on the draft syllabus of all the semesters of UG Program in the revised curriculum of 175 credits as per VTU norms. After discussion and following suggestions/compliance were made:						
	Suggestions	Compliance				
	i) Inclusion of textbooks from foreign authors.	Complied				
	ii) Few experiments in BMT lab and Concrete and Highway lab overlapped, the same may be	Complied				
	avoided.  iii) In Structural analysis -I, Unit 4 – Couple of cases may be added and 'Structural Analysis' by Devdas Menon may be included in the	Complied				
	reference books. iv) In Structural analysis -I, columns and struts can be added	Already included in 3 <sup>rd</sup> Semester under the course 'Mechanics of Materials'.				
	<ul> <li>v) In 6<sup>th</sup> semester, non-structural program electives may be added.</li> </ul>	Suggestion is under consideration. It shall be incorporated in due course of time, may be for next year.				
	vi) Specific IS codes may be mentioned, instead of	Complied				
	"relevant IS codes",.  vii)In Structural analysis -II, Unit V – (Matrix method) can be split into two units  i. Flexibility matrix  ii. Stiffness matrix	Unit V deals with only Introduction to Matrix Methods. A separate elective in 6 <sup>th</sup> semester 18UCVE615 – "Matrix method of structural analysis" is offered in 6 <sup>th</sup> semester.				

	viii) In 5 <sup>th</sup> semester, "Design of RC Structural elements", combined footing topic can be shifted to 7 <sup>th</sup> semester "Advanced design of RC Structural elements".	Complied		
	ix) In 5 <sup>th</sup> semester program elective – "Alternate building material" name needs to be rewritten.	Complied		
	x) In 7 <sup>th</sup> semester "Structural Dynamics" – Introduction to MDOF and different types of dampers can be added which will be helpful to students in doing relevant projects.	Complied		
	xi) Chapter on foundation settlement in VIth semester GTE-II may be included under Consolidation chapter of GTE-I.	Complied		
	xii) Introduce "Lift irrigation systems".	The said topic is covered at introductory level in 8 <sup>th</sup> semester "Water resource Engineering" course.		
	xiii) Introduce concept of "drone survey".	The said topic is introduced in 3 <sup>rd</sup> semester course "Surveying" under modern surveying tools.		
4	Finalization of syllabus of all the semesters of PG Program:			
	Presentation was made on the draft syllabus of all the semesters of PG Program. After			
	discussion and deliberations, the syllabus was approved.			
5	Any other matter: Discussion on National educational policy was made and steps taken by			
	respective institutions in complying with National educational policy was noted.			
6	The meeting was concluded with vote of thanks.			

Associate Pref. & HOD Dept. of Civil Engineering Dharwad-580 002

(Note: The above BOS Proceedings has been approved by External & Ditar College by Engl. & Tech the approval e-mails are available in the department) & also entered horizon

Internal Members:

1. Prof. I.T.Shirkol

2. Prof. M.S.Patil

3. Prof. K.V. Pramod

4. Dr.D.K. Kulkarni

5. Shri. P.I.Cholappanavar

# BOS 2021-2022 Meeting proceedings

# HOD Civil < hodcivil@sdmcet.ac.in>

Mon 7/5/2021 1:20 PM

To: subhashyaragal@yahoo.com <subhashyaragal@yahoo.com>; pgraddi@yahoo.co.in <pgraddi@yahoo.co.in>; galis.manjunath@gmail.com <galis.manjunath@gmail.com>; jagadeeshnandi@gmail.com <jagadeeshnandi@gmail.com>; jmsdwd@gmail.com>; Dr. Anoop I. Shirkol <anoopshirkol@gmail.com> <c: Prateek Cholappanavar <pic@sdmcet.ac.in>; itshirkol14@gmail.com <itshirkol14@gmail.com>; Pramod Karne cramodkarne626@rediffmail.com>; Dr.Dilip K Kulkarni <dkkulkarni@sdmcet.ac.in>

🛭 2 attachments (710 KB)

BOS Meeting Proceedings3.pdf; Action taken details.pdf;

Dear Sir(s),

Please find herewith attached, proceedings of BOS conducted on 26/06/2021.

You may please go through the same and communicate your approval at an early date.

Thanking you,

Yours faithfully,

(Dr. Udayashankar D. Hakari) Head, Department of Civil Engineering, SDM College of Engineering and Technology, DHARWAD – 580 002

(Cell: 7019284887, 9481930359

Dr. Anoop I. Shirkol <anoopshirkol@gmail.com> Mon 7/5/2021 1:40 PM

To: HOD Civil <hodcivil@sdmcet.ac.in>

Respected sir,

# The Syllabus can be approved.

Thanks for giving me the opportunity.

Thanks & Regards

DR. A. I. SHIRKOL M. Tech (Structural Engg), Ph.D (Ocean Engg.)

Assistant Professor

Department of Civil Engineering

MNIT Jaipur

Jaipur, India - 302017

On Mon, Jul 5, 2021 at 1:20 PM HOD Civil < <a href="mailto:hodcivil@sdmcet.ac.in">hodcivil@sdmcet.ac.in</a>> wrote: Dear Sir(s),

Please find herewith attached, proceedings of BOS conducted on 26/06/2021.

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Thanking you,

Yours faithfully,

(Dr. Udayashankar D. Hakari) Head, Department of Civil Engineering, SDM College of Engineering and Technology, DHARWAD – 580 002 (Cell: 7019284887, 9481930359

G.S.Manjunath Sathyanarayana <galis.manjunath@gmail.com>
Mon 7/5/2021 5:18 PM
To: HOD Civil <hodcivil@sdmcet.ac.in>
Sir,

I have gone through the excerpts of the BoS meeting. I approve the same.

Thanks for the opportunity extended to get associated with your esteemed organization

Regards

Dr. G S Manjunath

 $_{On\ Mon}$ , 5 Jul 2021, 1:20 pm HOD Civil, <  $\underline{hodcivil@sdmcet.ac.in}$  > wrote:  $\underline{pear\ Sir(s)}$ ,

Please find herewith attached, proceedings of BOS conducted on 26/06/2021.

You may please go through the same and communicate your approval at an early date.

Thanking you,

Yours faithfully,

(Dr. Udayashankar D. Hakari)
Head, Department of Civil Engineering,
SDM College of Engineering and Technology,
DHARWAD – 580 002
(Cell: 7019284887, 9481930359

# Subhash Yaragal < subhashyaragal@yahoo.com>

Mon 7/5/2021 9:06 PM

HOD Civil <hodcivil@sdmcet.ac.in>; HOD Civil <hodcivil@sdmcet.ac.in>; pgraddi@yahoo.co.in To: Householo.co.in>; galis.manjunath@gmail.com <galis.manjunath@gmail.com>; jagadeeshnandi@gmail.com <qalis.manjunath@gmail.com>; jagadeeshnandi@gmail.com cpgraudes/nandi@gmail.com>; jmsdwd@gmail.com <jmsdwd@gmail.com>; Dr. Anoop I. Shirkol zanoopshirkol@gmail.com>

cc: Prateek Cholappanavar <pic@sdmcet.ac.in>; itshirkol14@gmail.com <itshirkol14@gmail.com>; Pramod Karne Cc: Pratectal Granned 26@rediffmail.com>; Dr.Dilip K Kulkarni <dkulkarni@sdmcet.ac.in>

Dear sir,

Tapprove the meeting proceedings.

## Sent from Yahoo Mail on Android

On Mon, 5 Jul 2021 at 1:20 pm, HOD Civil <hodcivil@sdmcet.ac.in> wrote:

Dear Sir(s),

Please find herewith attached, proceedings of BOS conducted on 26/06/2021.

 $\gamma_{\text{OU}}$  may please go through the same and communicate your approval at an early date.

Thanking you,

Yours faithfully,

(Dr. Udayashankar D. Hakari) Head, Department of Civil Engineering, SDM College of Engineering and Technology, DHARWAD - 580 002 (Cell: 7019284887, 9481930359

Jagadeesh Nandi <jagadeeshnandi@gmail.com>

Tue 7/6/2021 9:59 AM

To: HOD Civil < hodcivil@sdmcet.ac.in>

Sir, I am in agreement with the proceedings. The same can be deemed approved from me.

Please note the name corrections.

<sub>Jagadeesh</sub> Nandi.

Managing Director.

JMSPL...JALAVAHINI MANAGEMENT SERVICES PVT LTD

THANK YOU,SIR

On Mon, 5 Jul 2021, 13:20 HOD Civil, < hodcivil@sdmcet.ac.in > wrote: Dear Sir(s),

Please find herewith attached, proceedings of BOS conducted on 26/06/2021.

 $\gamma_{0U}$  may please go through the same and communicate your approval at an early date.

Thanking you,

Yours faithfully,

(Dr. Udayashankar D. Hakari) Head, Department of Civil Engineering, SDM College of Engineering and Technology, DHARWAD - 580 002 (Cell: 7019284887, 9481930359

# prabhu rakaraddi <pgraddi@yahoo.co.in>

Tue 7/6/2021 10:23 AM

To: HOD Civil <a href="https://www.com.com/bandi@gmail.com/galis.manjunath@gmail.com/galis.galis

To: HOD claim | HO jagadeesiina ; jmsdwd@gmail.com > ; Subhash Yaragal <subhashyaragal@yahoo.com > ; Shirkol ; jmsdwd@gmail.com <jm

Shirkol Zaliour (Shirkol Zaliour) Shirkol Zaliour (Shirkol Zaliour) Shirkol Zaliour (Shirkol Zaliour) Shirkol Zaliour (Shirkol Zaliour) Shirkol Zaliour) Shirkol Zaliour (Shirko Cc: Praired | Cc

Dear sir,

Good morning,

Good the proceedings of the meeting.

With warm regards

On Monday, 5 July, 2021, 09:06:48 pm IST, Subhash Yaragal <subhashyaragal@yahoo.com> wrote:

Dear sir,

I approve the meeting proceedings.

Sent from Yahoo Mail on Android

On Mon, 5 Jul 2021 at 1:20 pm, HOD Civil <hodcivil@sdmcet.ac.in> wrote:

Dear Sir(s),

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You may please go through the same and communicate your approval at an early date.

Thanking you,

Yours faithfully,

(Dr. Udayashankar D. Hakari)

Head, Department of Civil Engineering, SDM College of Engineering and Technology,

DHARWAD - 580 002

(Cell: 7019284887 , 9481930359

Comedians Endopotated

#### 18UCVC301 **Mechanics of Materials** (4-0-0)4

Contact Hours: 52

Course Learning Objectives (CLOs): Mechanics of Materials is taught as a core course in Civil Engineering program. In this course, topics on Simple stresses and strains, Compound stresses, BMD and SFD for determinate beams, bending and shear stresses in beams, deflection of beams, Torsion of circular shafts, stability of columns and thin and thick cylinders are dealt. The evaluation is made by means of the internal assessment tests and semester end examination.

# Course Outcomes (COs):

Description of the Course Outcome: At the end of the course the student will be able to:		Mapping	2)/ PSO	
		Substantial Level (3)	Moderate Level (2)	Slight Level (1)
CO-1	Analyze and calculate simple stresses and strains, Elastic constants, thermal stresses.	1,2		
CO-2	Analyze and calculate Compound stresses by analytical and graphical method.	1,2		
CO-3	Analyze, calculate and draw BMD, SFD and calculate bending Stresses, Shear Stresses in beam cross section.	1,2	3	
CO-4	Analyze and calculate Slopes and deflections of beams & columns and buckling loads for long columns.	1,2		
CO-5	Analyze and calculate stresses and strains in circular shafts subjected to torsion and thin and thick cylinders subjected to internal pressures.	1,2	3	

POs	PO-1	PO-2	PO-3
Mapping Level	3	3	2

### Prerequisites:

Students taking this course shall have the knowledge of following:

Engineering Mechanics

### Contents:

Unit-l

Simple stresses and strains: Simple Stresses & Strains, Elastic constants, 10 Hrs. compound bars, thermal effects.

Unit-II

Compound stresses: Inter-relations of direct and shear stresses, Mohr's circle of 9 Hrs. stresses

Unit-III

Bending Moment and Shear Force Diagram: Simply supported, Cantilever, overhanging beams for standard and general loadings. Bending & Shear stresses: Calculation of bending and shear stresses in 12 Hrs rectangular and flanged sections.

**Unit-IV** 

Slopes and deflections: Calculation of slopes and deflections in determinate beams by Double Integration Method and Macaulay's method.

Long Columns: Elastic stability of Columns, Euler's theory, Rankine's formula.

12 Hrs.

Unit-V

Torsion: Torsion of circular shafts, power transmitted, design and comparison of hollow & solid shafts.

Thin and Thick Cylinders: Analysis and design of thin and thick Cylinders.

9 Hrs.

- 1) Punmia B.C., Ashok Jain, Arun Jain, "Strength of Materials", Lakshmi Publications, New Delhi.
- 2) Basavarajaiah and Mahadevappa, "Strength of Materials", Khanna Publishers, New Delhi
- 3) Bhavikatti S.S., "Strength of Materials", Vikas Publishers, New Delhi.
- 4) Ramamrutham, "Strength of Materials", DhanapathRai Publishers, New Delhi.
- 5) Beer & Johnston, "Mechanics of Materials", McGraw Hill Education.

## SDMCET: Syllabus

18UCVL305

## **Basic Material Testing Lab**

(0-0-3) 1.5

**Contact Hours: 36** 

course Learning Objectives (CLOs) Basic Material Testing Laboratory is taught as one of the regular labs for III Semester Civil Engineering students. In this coarse various test on steel, aggregates cement, bricks, concrete blocks are dealt. The delivery of topics will be made through instruction classes, demonstration and laboratory works as per IS codes. The evaluation will be carried out through continuous evaluation & end semester practical examination.

### Course Outcomes (COs):

	ription of the Course Outcome: At d of the course the student will be	Mapping to POs (1,12)/ PSO (1,2,3)		
able to		Substantial Level (3)	Moderate Level (2)	Slight Level (1)
CO-1	Perform tests on metals and Interpret results.	4	9	8
CO-2	Perform tests on fine and coarse aggregate and arrive at suitability of aggregates based on test results.	4	9	8
CO-3	Perform test on Cement, interpret results. and Identify grade of cement.	4	9	8
CO-4	Perform tests on Bricks and classify based on results.	4	9	8

POs	PO-4	PO-8	PO-9
Mapping Level	3	1	2

### Prerequisite:

- 1) Building Construction
- 2) Strength of Materials

### Contents:

- 1) **Test on steel & metals:** Tension, compression, shear, Hardness and impact test.
- 2) **Test on fine aggregate:** Specific gravity, Bulk density, Silt and deleterious materials.
- 3) Test on Coarse aggregate: Specific gravity, Bulk density, water absorption.
- 4) Test on Cement: Specific gravity, Fineness, Normal Consistency, Initial and Final setting time.
- 5) Tests on Bricks: Size, water absorption, Compression strength.

Course learning objectives (CLOs): In this course, characteristics of cement, strength of aggregate, shape tests on aggregate, strength parameters of concrete, properties of bitumen are dealt. The delivery of topics will be made through demonstration and Laboratory work. The delivery of topics will be made through instruction classes, demonstration and Laboratory work. The evaluation will be carried out through continuous evaluation & Semester End practical examination.

### Course Outcomes (COs):

Descri	ption of the Course Outcome:	Mapping to POs (1,12)/ PSOs (13,1		Os (13,15)
At the	end of the course the student	Substantial Level (3)	Moderate Level (2)	Slight Level (1)
CO-1	Perform tests on cement and coarse aggregate.		15	9
CO-2	2	3	15	9
CO-3	Perform tests on bitumen.		15	9

POs	PO-3	PO-9	PO-15
Mapping Level	3	1	2

### Contents:

- Cement: Determination of grade of Cement.
- 2. **Aggregates:** Abrasion, Impact, crushing strength, shape tests Flakiness & Elongation.
- 3. Fresh concrete: Concrete Mix design, workability slump, compaction factor and Vee-Bee test.
- 4. Hardened concrete: Compressive strength and NDT.
- 5. Bituminous materials and mixes: Specific Gravity, Penetration, Ductility, Softening point, Flash and fire point, Viscosity. Marshall Stability tests, bitumen extraction. Sub grade Soil CBR Test.

- 1) Gambhir, M.L., "Concrete Manual", Dhanpat Rai & sons New Delhi.
- 2) "Highway Material Testing Laboratory Manual", Nem Chand & Bros.

**Course Learning Objectives (CLOs):** Structural Analysis-I is taught as one of the core courses in Civil Engineering program. In this course, topics on Structural systems, Deflection of beams, Strain Energy, Arches and Cables, Influence Line Diagram for Beams and Analysis of Indeterminate beams are dealt. The delivery of topics will be made through lecture classes. The evaluation is made by means of the internal assessment tests and semester end examination

Course Outcomes (COs):

Description of the Course Outcome: At the end of the course the student will be able to:			ng to POs (* PSO (1,2,3)	1,12)/
		Substantial Level (3)	Moderate Level (2)	Slight Level (1)
CO-1	Classify the different Structural Systems and Calculate the deflection in beams by Moment Area Method, Conjugate Beam Method,	1,2		
CO-2	Analyze beams, frames and trusses using energy principles and energy theorems.	1,2		
CO-3	Calculate the forces in arches and cables.	1,2		
CO-4	Calculate and sketch the bending moment and shear force in the beam under moving load using ILD.	1,2		
CO-5	Analyze the indeterminate beams by consistent deformation method and Clapeyron's theorem of three moments.	12		

POs	PO-1	PO-2
Mapping Level	3	3

### Prerequisites:

Students taking this course shall have the knowledge of following:

- 1) Engineering Mechanics
- 2) Strength of Materials

### Contents:

### Unit-l

Introduction to Structural Systems: Forms of structures, conditions of equilibrium, degree of freedom, linear and non-linear structures, one, two and three-dimensional structural systems, determinate and indeterminate structures [Static and Kinematics].

Deflection of beams: Moment area method, conjugate beam method. 12 Hrs.

### Unit-II

Energy Principles and Energy Theorems: Strain energy and complimentary strain energy, strain energy due to axial load, bending and shear, theorem of minimum potential energy, Law of conservation of energy, principle of virtual work, the first theorem of Castigliano, Betti's law, Clarke -Maxwell's theorem of reciprocal deflection, deflection of beams and trusses using strain energy and unit load 12 Hrs. methods.

#### Unit-III

Arches and cables: Three hinged circular and parabolic arches with support at same levels and different levels, determination of thrust, shear and bending moment, analysis of cables under point loads and UDL, length of cables supports at same level and at different levels. 10 Hrs.

#### **Unit-IV**

Influence line diagrams for beams: Influence line for maximum shear force. maximum bending moment for simply supported, cantilever and overhanging beams. 08 Hrs.

#### **Unit-V**

Analysis of beams: Consistent deformation method -propped cantilever and fixed beams, strain energy method -propped cantilever and fixed beams Clapeyron's theorem of three moments -continuous beams. 10 Hrs.

- 1) Devdas Menon, "Structural Analysis", Alpha Science International Ltd.
- 2) Reddy C. S., "Basic Structural Analysis", Tata McGraw Hill.
- 3) Punmia B.C., Jain A.K., "Strength of Materials and Theory of Structures Vol I & II", Laxmi Publication
- 4) Ramamrutham S., "Theory of Structures"; Dhanpat Rai & Sons, Delhi.
- 5) Bhavikatti S.S., "Structural Analysis Volume I", Vikas Publications, New Delhi.

Course Learning Objectives (CLOs): Design of reinforced concrete structures is taught as a core course in Civil Engineering program. In this course, introduction to Working Stress Method and Limit State Method of design for design of beams, slabs, columns, footings, staircases are dealt. The delivery of topics will be made through lecture classes and site visits. The evaluation will be carried out through Internal evaluation and Semester End Examination.

### Course Outcomes (COs):

	iption of the Course Outcome: end of the course the student will be	Mapping to POs (1,12)/ PS (1,2,3)		
able to	):	Substantial Level (3)	Moderate Level (2)	Slight Level (1)
CO-1	Explain working stress method and limit state method.		1	
CO-2	Design and detail different types of beams for different support conditions.	1,3	2	6,8
CO-3	Design and detail different types of slabs.	1,3	2	6,8
CO-4	Design and detail columns and footings.	1,3	2	6,8
CO-5	Design different types of staircases.	1,3	2	6,8

Pos	PO-1	PO-2	PO-3	PO-6	PO-8
Mapping Level	2.8	2	3	1	1

### **Prerequisites:**

- 1) Mechanics of Materials
- 2) Structural Analysis I

#### Contents:

### Unit-I

General features of Reinforced Concrete: Introduction, design loads, materials for reinforced concrete, code requirements of reinforcements, elastic theory of RC sections, moment of resistance of section, balanced, under reinforced and over reinforced sections.

Principles of Limit State Design and Ultimate Strength of RC Section: Philosophy of limit state design, principles of limit states, factor of safety.

characteristic and design loads, characteristic and design strength, Analysis of sections for flexure and shear.

### Unit-II

Design of Beams: Practical requirements of an RCC beam, designing and detailing of singly reinforced, doubly reinforced and flanged beams for different support conditions. 9Hrs.

### **Unit-III**

Design of Slabs: Introduction, general consideration of designing and detailing of slabs, spanning in one direction, spanning in two directions for various boundary conditions and for different support conditions. 9 Hrs.

### **Unit-IV**

Design of Columns: General aspects, effective length, loads on columns slenderness limits for columns, minimum eccentricity, design of short axially loaded columns, design of column subjected to combined axial load and uniaxial moment using SP16. 7 Hrs.

Design of Footings: Introduction, loads for foundation, design basis, design of isolated footings subjected to axial load. 8 Hrs.

#### **Unit-V**

Design of Staircase: General features, types of staircase, loads on staircases, effective span as per IS code provisions, distribution of loading on stairs, design of staircases. Straight, dog legged and open well stairs. 7 Hrs.

- 1) IS Codes: IS 456-2000 & SP16.
- 2) Varghese P.C., "Limit State Design of Reinforced Concrete", Prentice Hall of India, New Delhi.
- 3) Karve S R. and Shah V.L., "Limit state theory and design of reinforced concrete", Vidyarthi Prakashan, Pune.
- 4) Jain A.K., "Limit state method of design," Nemichand and Bros, Roorkee.
- 5) Krishnaraju N., "Reinforced concrete design", New Age Publication.

Course Learning Objectives (CLOs): Advanced design of RC structure is taught as one of the elective courses in Civil Engineering program. In this course, design and drawing of simple portal frame, circular and rectangular water tank, cantilever and counter fort retaining wall and raft and strap beam footings are dealt along with detailed drawings of structural components. The delivery of topics will be made through lecture classes. The evaluation will be carried out through IAs and Semester End Examination.

### Course Outcomes (COs):

Description of the Course Outcome:  At the end of the course the student will be		Mapping to POs (1,12)/ PSO (1,2,3)		
able to		Substantial Level (3)	Moderate Level (2)	Slight Level (1)
CO-1	Design Portal frame, water tank, retaining wall and foundations.		2,13	1
CO-2	Prepare the structural drawings of Portal frame, water tank, retaining wall and foundations.		2,13	1
CO-3	Prepare the structural drawings for staircase, continuous beam, column footing, slab systems, prepare layout drawings for the components of the structure.		2,13	1

PO's	PO-1	PO-2	PSO-13
Mapping Level	1	2	2

### Prerequisites:

- 1) Design of RC structural elements
- 2) Structural Analysis

### Contents:

Unit-I

Portal frames: Design and Drawing of the portal frames (single bay, single storey).

#### Unit-II

Water tank: Design and Drawing of the water tanks (circular and rectangular resting on the ground) as per IS code method.

#### Unit-III

Retaining wall: Design and Drawing of the cantilever and counterfort retaining walls.

### **Unit-IV**

Foundation: Design and Drawing of the combined, raft and strap beam footing.

#### Unit-V

Detailing: Prepare detailed drawings of staircases, beam and slab systems, 8 Hrs column footing and layout drawing for a structure.

### Question paper pattern:

Part A - 2 Questions of 60 marks each are to be set from Unit I to unit IV out of which anyone is to be answered.

Part B - 3 Questions of 20 marks each are to be set from Unit V out of which any two are to be answered.

1) Krishnamurthy, "Structural Design and Drawing (Concrete Structures)", CBS,

- Publications New Delhi.
- 2) Krishnaraju N., "Design of RCC Structures", CBS publishers, New Delhi.
- 3) Punmia B.C., "Reinforced Concrete Structures", Vol 1 & 2, Laxmi Publication Pvt Ltd
- 4) Krishnaraju N., "Structural Design and Drawing", University press, Hyderabad.
- 5) IS Codes: SP-34, SP-16, IS 456: 2000, IS 3370: 2009 and IS: 875:1987 Part I to V.

Course Learning Objectives (CLOs): Alternative Building Materials is taught as one of the elective courses in Civil Engineering program. In this course, the students understand environmental issues due to building materials and the energy consumption in manufacturing building materials. The course also exposes the students to the study the various masonry blocks, masonry mortar and the study the alternative building materials in the present context. Students shall also understand the alternative building technologies which are followed in present construction field. The evaluation will be carried out through Internal evaluation and Semester End Examination.

### Course Outcomes (COs):

Description of the Course Outcome: At the end of the course the student will be able to:		Mapping to POs(1,12)/ PSO (1,2,3)				
		Substantial Level (3)	Moderate Level (2)	Slight Level (1)		
CO-1	Explain the facts of energy, environment, cost effectiveness of different building materials.			1		
CO-2	Explain the elements of structural masonry.			1		
CO-3	Explain the types, characteristics and strength of mortars.			1		
CO-4	Explain and apply the concepts of alternative building materials, types, properties.		1,2,7			
CO-5	Discuss the equipment for production of alternative materials and cost concepts.			1		

POs	PO-1	PO-2	PO-7
Mapping Level	1.2	2	2

### Contents:

#### Unit-l

Introduction: Energy in building materials, environmental issues concerned to building materials, Global warming and construction industry, environment friendly and cost-effective building technologies, requirements for building of different 6 Hrs. climatic regions.

Elements of Structural Masonry: Elements of Structural Masonry, Masonry materials, requirements of masonry units, characteristics of bricks, stones, clay blocks, concrete blocks, stone boulders, laterite blocks, Stabilized mud block. Manufacture of stabilized blocks, cementations materials, sand, natural & manufactured 8 Hrs.

### Unit-III

Mortars: Types of mortars, classification of mortars as per BIS, characteristics and requirements of mortar, selection of mortar, uses of masonry, masonry bonding, Compressive strength of masonry elements, Factors affecting compressive strength, Bond strength of masonry, Flexure and shear, Elastic properties of masonry materials.

8 Hrs.

### Unit-IV

Conventional and Non-conventional Materials: Lime, Pozzolana cement, Raw materials & Manufacturing process, Properties and uses. Fibers- metal and synthetic, Properties and applications. Fiber reinforced plastics, Matrix materials, Fibers organic and synthetic, Properties and applications. Building materials from agro and industrial wastes, Types of agro wastes, Types of industrial and mine wastes, Properties and applications. Masonry blocks using industrial wastes. Construction and demolition wastes.

#### Unit-V

Equipment for Production of Alternative Materials and cost concepts: Machines for manufacture of concrete, Equipment for production of stabilized blocks, Moulds and methods of production of precast elements, Cost concepts in buildings, Cost saving techniques in planning, design and construction, Cost analysis, Case studies using alternatives.

- 1) K. S. Jagadish, B.V Venkatarama Reddy and K.S Nanjunda Rao, "Alternative Building Materials and Technologies", New Age International Pvt. Ltd.
- 2) Arnold W Hendry, "Structural Masonry", Macmillan Publishers.
- 3) S. K. Duggal, "Building Materials", New Age International Pvt. Limited.

Course Learning Objectives (CLOs): Structural Dynamics is taught as one of the elective courses for civil engineering program. In this course, mathematical model for single degree, multi degree of freedom systems for un-damped, damped forced and free vibrations are dealt. The delivery of topics will be made through lecture classes. The evaluation will be carried out through IA tests and SEE.

## Course Outcomes (COs):

Description of the Course Outcome:  At the end of the course the student will be able to:		Mapping to POs(1,12)/ PSO (1,2,3)				
		Substantial Level (3)	Moderate Level (2)	Slight Level (1)		
CO-1	Explain D-Alembert's principle, SDOFS for free vibration of damped un-damped systems.	1,2	3			
CO-2	Explain Harmonic loading case and vibration isolation system for SDOFS.	1,2	3			
CO-3	Analyze the Multi storey shear building under free and forced vibration for damped and undamped conditions.	1,2	3			
CO-4	Explain the effect of impulse load using Duhamel's Integral.	1,2	3			
CO-5	Apply the knowledge of Fourier	1,2	3			

PO's	PO-1	PO-2	PO-3
Mapping Level	3	3	2

### Prerequisites:

Students taking this course shall have the knowledge of following:

- 1) Engineering Mechanics
- 2) Structural Analysis I
- 3) Structural Analysis II

### Contents:

#### Unit-l

Single Degree of Freedom System: Degrees of freedom, un-damped system, springs in parallel and series. Newton's laws of motion, free body diagrams. D'Alembert's principle, solution of the differential equation of motion, frequency and period, amplitude of motion. Damped Single degree of freedom system – viscous damping, equation of motion, damped system - critically, over, under and logarithmic decrement.

8 Hrs

### **Unit-II**

Harmonic Loading: Response of single degree of freedom system to harmonic loading – un-damped harmonic excitation, damped harmonic excitation, evaluation of damping at resonance, bandwidth method (Half power) to evaluate damping, response to support motion, force transmitted to the foundation, seismic instruments, generalized single degree of freedom system (rigid body and distributed elasticity).

8 Hrs

### Unit-III

Multi Degree of Freedom System: Introduction, Generalized Co-ordinates and Rayleigh's method, Multistory Shear Building, free vibration — natural frequencies and normal modes, zero modes of vibration, forced vibration — modal superposition method, response of a shear building to base motion. Damped motion of shear building — equations of motions, Introduction to dampers and its types. 8 Hrs

### **Unit-IV**

Impulse load using Duhamel's integral: Response to general dynamic loading, Impulsive loading and Duhamel's integral, numerical evaluation of Duhamel's integral, un-damped system, numerical evaluation of Duhamel's integral. 7 Hrs

### **Unit-V**

Application of Fourier series: Fourier analysis and response in frequency domain – Fourier analysis, Fourier co-efficient for piece-wise linear functions, exponential form of Fourier series, discrete Fourier analysis, fast Fourier transforms.

8 Hrs

- Mario Paz, "Structural dynamics: Theory and Computation", CBS Publisher and
- 2) Clough and Penzien, "Dynamics of Structures", McGraw-Hill, New Delhi.
  3) Mukhopadhyay, "Vibration, Dynamics and Structural problems", Oxford IBH

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# Geotechnical Engineering - I

(3-0-0)3

Contact Hours: 39 Course Learning Objective (CLOs): Geotechnical Engineering – I is taught as one of core subject for Civil engineering program. It consists of various engineering properties of soil and the principles of soil mechanics are imparted to the students.

Topics covered include the index properties of soil, soil classification, flow of water through soils, compaction/ consolidation of soils and shear strength of soil along with numerical problems. The delivery of the topics is achieved through lecture classes, problem solving and demonstrations. The evaluation will be carried out

through Internal evaluation and Semester End Examination.

### Outcomes (COs)

Description of the Course Outcome:  At the end of the course the student will be able to:		Mapping to POs(1,12)/ PSO (1,2,3)				
		Substantial Level (3)	Moderate Level (2)	Slight Level (1)		
CO-1	Explain the soil formation, phase diagram, derive inter relations, identify soils in the field, explain various index properties of soil.		4	1, 2		
CO-2	Explain soil classification, compute the permeability of soils, explain the laboratory methods for determination of permeability, explain seepage / superficial velocity and the quicksand phenomenon.	4		1,2		
CO-3	Describe the compaction of soils, Explain the laboratory methods for	4	2	1		
CO-4	Explain the consolidation and its characteristics of soils.		2, 4	1		
CO-5	Explain the shear strength of soil,		2, 4	1		

POs	PO-1	PO-2	PO-4
Mapping Level	1	1.6	2.4

### Prerequisites:

tests.

Students taking this course shall have the knowledge of following:

- 1) Strength of Material
- 2) Building Engineering Science

### Contents:

#### Unit-l

Introduction: Origin and formation of soil, phase diagram, inter relations of soil

properties, field identification of soils.

Index Properties of Soils: Definition and importance of Index properties of soils viz., specific gravity, water content, particle size distribution, consistency limits and indices, in situ density, and density index etc. Determination of specific gravity, 8Hrs. particle size distribution and consistency limits.

### Unit-II

Classification of Soils: Particle size classification, MIT classification, textural classification, unified soil classification and IS classification, plasticity chart and its importance.

Permeability: Darcy's law, assumptions and validity; coefficient of permeability and its determination in laboratory, Factors affecting permeability, Permeability of stratified soils, Seepage velocity, Superficial velocity and coefficient of percolation. 8Hrs. quicksand phenomenon, Capillary phenomenon.

### **Unit-III**

Compaction of Soils: Definition, standard and modified Proctor's compaction tests, factors affecting compaction, effect of compaction on soil properties, field compaction methods, rollers and vibrators, field compaction control, Procter's needle 8Hrs.

#### **Unit-IV**

Consolidation of soils: Definition, mass-spring analogy, Terzaghi's one dimensional consolidation theory, assumptions and limitations. consolidated, under consolidated and over consolidated soils, pre-consolidation pressure and its determination by Casagrande's method, characteristics of soil viz., co-efficient of consolidation, co-efficient of volume change, co-efficient of compressibility, compression index. Foundation Settlement, ill effects of settlement of soil on buildings, immediate, primary and secondary settlements. 8Hrs.

### Unit-V

Shear Strength of Soil: Concept of shear strength, Mohr's strength theory, Mohr Coulomb theory, measurement of shear parameters, direct shear test, unconfined compression test, triaxial compression test and vane shear test, Factors affecting 7Hrs.

- 1) Punmia B.C., "Soil Mechanics and Foundations", Laxmi Publications (P) Ltd., New Delhi.
- Gopal Ranjan and A.S.R Rao., "Basic and applied soil mechanics", New Age
- International Publishers, Bangalore. 3) Narasimha Rao A.V. and Venkatramaiah C., "Geotechnical Engineering",
- University Press (India) Ltd., Hyderabad. 4) Singh Alam and Chowdhary G.R., "Soil Engineering in Theory and Practice", CBS Publishers and Distributors Ltd., New Delhi.

(4-0-0)4

**Contact Hours: 52** 

Course Learning Objective (CLOs): Surveying is taught as a core course in Civil Engineering program. The course deals with topics on measurement of distances, angles and elevations. The usage of instruments like chains, tapes, dumpy level and theodolite are dealt with. The delivery of topics will be made through lecture classes and demonstrations. The evaluation is made by means of the internal assessment tests and semester end examination.

## Course Outcomes (COs):

Description of the Course Outcome:  At the end of the course the student will be able to:		Mapping to POs (1,12)/ PSOs (13,15)			
		Substantial Level (3)	Moderate Level (2)	Slight Level (1)	
CO-1	Explain basic principles of surveying, carry out leveling operations.	1			
CO-2	Carry out theodolite survey and determine heights and distances by trigonometrical methods.	1	9		
CO-3	Determine heights and distances by tacheometric principle and understand the concept of contours.	1	9		
CO-4	Design different types of curves based on suitability.	3	9, 6, 15		
CO-5	Calculate areas and volumes of civil engineering works, set out works and use modern equipment like GPS and Total Station.	5	9, 8	10	

POs	PO-1	PO-3	PO-5	PO-6	PO-8	PO-9	PO-10	PO-15
Mapping Level	3	3	3	2	2	2	1	2
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### Prerequisites:

Students taking this course shall have the knowledge of following:

1) Trigonometry and geometry

### Contents:

### Unit-I

Introduction: Definition and classification of surveying, units of measurements, maps and plans, Survey of India Topographical maps and their numbering, Basic principles of surveying. Measurement of horizontal distances - Chains and  $T_{apes}$ 

Ranging of lines-Direct and Indirect.

Ranging of lines-Direct and Indirect.

Levelling: Principles and basic definitions, Fundamental axes and part of a dumpy

Levelling: Types of levelling. level, Temporary adjustments of a dumpy level, Types of levelling. 10 Hrs.

### Unit-II

Theodolite Survey: Types of theodolites, Measurement of horizontal and vertical angles by repetition and reiteration methods.

Trigonometric Levelling: Determination of heights and distances.

10 Hrs.

### Unit-III

Tacheometry: Principles of tacheometry, measurement of heights and distances Contouring: Contours, characteristics and uses. 10 Hrs.

### **Unit-IV**

Curve Setting: Curves-Necessity-Types of curves, Simple curves, Compound curves, Reverse curves, transition curves and vertical curves. Setting of simple circular curves by successive bisection of chords, offsets from long chord, Rankin's method. Compound curve, Reverse curves of equal and unequal radius. Examples Transition curves-Necessity, elements and type of curves, Vertical curves -Types of vertical curves- Numerical examples. 10 Hrs.

### Unit-V

Areas and Volumes: Computations of areas and volumes by trapezoidal and prismoidal methods

Construction Survey: Setting out of works for buildings and tunnels

Modern surveying instruments: Introduction to GPS, Total station and drone survey. 12 Hrs.

### Reference Books:

- 1) Punmia B.C., "Surveying, Vol- 1& 2", Laxmi Publishers (Pvt.) Ltd., New Delhi.
- 2) Chandra A.M., "Plane Surveying", New Age International (P) Ltd.
- 3) Chandra A.M., "Higher Survey", New Age International (P) Ltd.
- 4) S.K Kanetkar, "Surveying", Vol- 1& 2".

HOD, Civil Engineering