CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY

Kokapet (Village), Gandipet, Hyderabad – 500 075

www.cbit.ac.in

DEPARTMENT OF CIVIL ENGINEERING

List of Value Added Courses

Index

S. No.	Name of the Activity	Page No.
1	Two week practice-oriented student internship program on "Software Applications for Sustainable Water Resources Management"	2
2	One week practice-oriented intensive training program on "Crying need in Bridge Engineering for Capacity Building"	26
3	3 week value added course on "Applications of Remote sensing and GIS"	37

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY (Autonomous) GANDIPET, HYDERABAD- 500075

DEPARTMENT OF CIVIL ENGINEERING

No: C BIT / CEO / 324/ 26/06/2023 Report on

Two-week Practice Oriented Student Internship Program (SIP) on "Software Applications for Sustainable Water Resources Management (SASWRM 2023)" during 29th May to 15th June 2023 in association with AICTE Idea Lab

About the Internship

This internship is an excellent platform for students and researchers to gain knowledge on applications of different computational tools in Water Resources Engineering. Theoretical knowledge is not solely sufficient to work in real-field problems. Therefore, this internship mainly focused on hands-on training on computational flow modelling, application of artificial intelligence in discharge assessment, remote sensing application, satellite image processing, realistic problems in water supply / distribution system and its solution, Hydrograph studies in flood routing, Rainfall-runoff simulation, Scouring depth prediction, which require an intense knowledge of relevant software and their working. The internship was handled by experts from resource persons from universities of national repute and Industries like IITs, NITs, HMWSSB and CGWB. The internship was conducted for total 90 contact hours with its numerous sessions include training, hands-on and project work. Assignments were given to all interns as homework and the same was evaluated. Assessment was done on a given project related to real-field application thereby enhancing the ability of the participants in carrying out its application in the future research.

The internship was conducted in association with AICTE IDEA Lab, CBIT. The aim of AICTE IDEA Lab in CBIT is to provide all facilities for conversion of an idea into a prototype. With these facilities in the campus, more students and faculty are being encouraged to take up creative work. In this process, students and faculty are getting trained on creative thinking, problem solving, collaboration etc. The IDEA Lab of CBIT is headed by Principal & Professor Dr. P. Ravinder Reddy, who is the chief mentor.

Organizing Committee:

Patron

Prof. P. Ravinder Reddy Principal, CBIT (A)

Chairman

Dr. K. Jagannadha Rao Professor & Head, Department of Civil Engineering, CBIT (A)

Convenors

Dr. Jnana Ranjan Khuntia Assistant Professor Department of Civil Engineering, CBIT (A)

Dr. Kamalini Devi

Assistant Professor Department of Civil Engineering, CBIT (A)

Coordinators

Sri E. Maheshwar Reddy, Assistant Professor

Sri Ramanarayan Sankriti, Assistant Professor

Dr. Angshuman Das, Assistant Professor

Dr. B. V. S. Rao, Coordinator, AICTE IDEA Lab CBIT

RESOURCE PERSONS

 Prof. Kishanjit Kumar Khatua Professor and Dean (AR), NIT Rourkela

 Dr. Bhabani Shankar Das Assistant Professor, NIT Patna

Mr. Mane S R Rohith
 Manager (engg), Shivam section
 Sub division -3, O&M Division -5, HMWS&SB

 Dr. Kamalini Devi Assistant Professor, CBIT (A), Hyd

Sri Ramanarayan Sankriti
 Assistant Professor, CBIT (A), Hyd

 Mr. Ketan Kumar Nandi Ph.D. Scholar, IIT Guwahati

 Mr. Sarjati Sahoo Ph.D. Scholar, NIT Rourkela

Sri Bijay Ketan Mohanta
 Scientist C, Central Ground Water Board, Southern Region, Hyderabad

Student Volunteers:

- · Edara V S S Sahithi
- Mamatha Choudhary
- K Rahul
- Abdul Rafeh Chouhan
- Macherla Vaishnav Ganesh
- Gadapa Madhu
- Shaik Sana Taslim

- Madu Shri Mokshagna Goud
- Madipally Mallikarjun
- Puppala Swetha
- Boiní Thirupathi
- Chidruppa Vishwa
- Niharika Kamisetty

Date: 29-05-2023 (Day 1)

An Inaugural ceremony for the internship program was conducted in Main Seminar hall at CBIT, Hyderabad on its first day. The program was started by welcoming the Principal and Patron Prof. P. Ravinder Reddy, Guests Dr. Bhabani Shankar Das, Assistant Professor, NIT Patna (Chief Guest), Er. Mane S. R. Rohith, Manager, Shivam Section, HMWS&SB (Guest of honour), Dr. K. Jagannadha Rao, Head-CED and Chiarman SASWRM-2023, Prof. U. K. Chaudhury, Director I&I, Dr. Jnana Ranjan Khuntia, Dr. Kamalini Devi, Assistant Professors, Convenors SASWRM 2023 at the stage. The inauguration function was started with lightening of the lamp the dignitaries. Then, it started with Saraswati Bandhana. After that, Principal has addressed the gathering and motivated students for the internship and felt that this internship program SASWRM 2023 would be awarding a promising career to the interns. Head, CED has addressed the interns and highlighted about the department and its activities/ achievements. Chief Guest has emphasized on the recent trends of developing ideas for new start-up and the skill development through the internship. Guest of honour addressed some key issues in water distribution and its solution of HMWS&SB. Director I&I focused on the AICTE Idea lab aim and objectives in helping to give the scope for different events. Convener Dr. Kamalini has foregrounded on the significance of conducting the internship. Convener Dr. Jnana Ranjan has accentuated evaluation process and rules and regulation of the internship program. Dr. Angshuman Das, one of the Coordinators SASWRM 2023 delivered vote of thanks at the end. 22 nos. of teaching and non-teaching staffs and 75 nos. of interns from CBIT and other institutions attended this inaugural program.





Fig. 1: Glimpses during inauguration of SASWRM 2023

Session 1: Water Distribution in Twin cities of Hyderabad and Secunderabad.

Speaker: Er. Mane SR Rohith

The session started with the role of HMWSSB in the distribution of drinking water and treatment of water water in the twin cities and its later introduction to the Musi River. Also,

further the topic of Water Cycle was introduced and the role it plays in the availability ground water rain water and surface water on earth. The different sources of water to the two cities were outlined since 1920 when Osmansagar and Himayatsagar served as water source and then with growing population and development of IT Hub, Singur dam (Manjira River Nagarjuna Sagar dam (Krishna River), Yellampally Barrage (Godavari River) were the current sources of water supply to the twin cities.





Fig. 2: Glimpses during Session1: by Er. Rohith SR Manne

Session 2: Application of Artificial Intelligence in Flow Assessment

The interns were introduced to the concept of machine learning like similarities and differences between human and artificial intelligence and membership functions.





Fig. 3: Glimpses during Session 2: by Dr. Bhabani Shankar Das

Date: 30.05.2023 (Day-2)

The session started with the Introduction and demo of software and ended with hands-on practice session to software like Win Gamma, MATLAB and ANFIS by Dr. Bhabhani Shankar Das. Afternoon session also witnessed Assessment-I (Quiz) on content delivered in previous day's lectures.



Fig. 4: Glimpses during Session 3 and Assessment: by Dr. Bhabani Shankar Das and

Date: 31.05.2023 (Day-3)

Flood routing by using HEC-RAS (Hydrology Engineering Center-River Analysis System) by Dr Bhabani Shankar Das and in the afternoon introduction to the importance of IDEA lab and Innovative Idea management and technology readiness level achievement by Dr. Umakanta Choudhury.



Fig. 5: Glimpses during Session 4 and AICTE Idea Lab session: by Dr. Bhabani Shankar Das and Dr. Umakanta Choudhury

Date: 01.06.2023 (Day-4)

Morning: Online training session and Demo of the ANSYS by Mr.Sarjati Sahoo of NIT Rourkela respectively.

Afternoon: Introduction to hands-on practice session of HEC-RAS software with Dr. Kamalini Devi, Dr. Jnana Ranjan Khuntia and Sri Ramanarayan Sankriti.

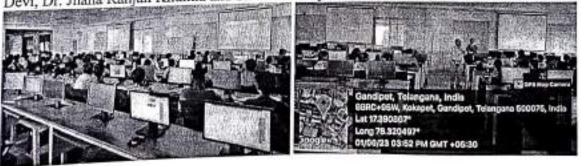


Fig. 6: Glimpses during Session 5 and AICTE Idea Lab session: by Mr. Sarjati Sahoo and Dr.
B. V. S Rao

Date: 02.06.2023 (Day-5)

FN- Dr Kishanjit Kumar Khatua has given one lecture on water conservation and its challenges. Also, he demonstrated of flow parameter measuring techniques in Laboratory and real filed cases.

AN- ANSYS hands-on session in CAD/CAM lab of MED.



Fig. 7: Glimpses during Session 6 and Hands-on Session: by Dr. Kishnajit Kumar Khatua and coordinators

Date: 05.06.2023 (Day-6)

FN-Conveyance Estimation System is explained and demonstrated by Dr. Kamalini Devi. The software CES is used to compute the conveyance of open channel like river/canal. Also, it is used to observe the variation of depth averaged velocity and bed shear stress across the channel.

AN-Assessment -II (Quiz). An assessment of the interns undertaken in the lectures taught after Assessment-I.



Fig. 8: Glimpses during Session 7 and Hands-on session: by Dr. Kamalini Devi and coordinators

Date: 06.06.2023 (Day-7)

Application of GEE in River health management by Mr. Ketan Kumar Nandi

River health management was assessed using NDWI and NDVI which gives a measure of wetness of the river valley in the peninsular rivers that don't carry water throughout the year.

AN-Georeferencing and Digitizing by Sri Ramanarayan S

The students were introduced to the concept of geo-referencing and how it is performed using QGIS. Also there was a demo of digitizing exercise in QGIS.



Fig. 9: Glimpses during Session 8: by Mr. Ketan Kumar Nandi and Sri Ramanarayan Sankriti Date: 7.06.2023 (Day-8)

FN- The morning session comprised of the Application of crop health assessment using Google Earth Engine (GEE) and QGIS with the Indices like Vegetation condition Index, Temperature condition index and vegetation health index. GEE codes for these indices were explained to students followed by DEMO and hands-on session.



Fig. 10: Glimpses during Demo and hands-on session of GEE: by Sri Ramanarayan Sankriti
AN-ANSYS Training session-II

The problem of drawing velocity contours and secondary flow currents in an open channel was explained using ANSYS Fluent by Mr. Sarjati Sahoo.

Date: 08.06.2023 (Day-9)

Formation of Project batches. All the interns have started their project work based to software learnt during training program.

Date: 09.06.2023 (Day-10)

Date: 10.06.2023 (Day-11)

Project Review-I. The review was done by Dr. Jnana Ranjan Khuntia, Dr. Kamalini Devi, Ramanarayan Sankriti and Dr. Angshuman Das.

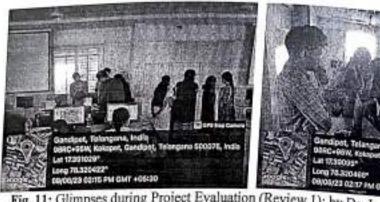


Fig. 11: Glimpses during Project Evaluation (Review 1): by Dr. Jnana Ranjna Khuntia, Dr. Kamalini Devi, Dr. Angshuman Das and Sri Ramanarayan Sankriti

PPT on ground water by Sri Bjiay Ketan Mohanta form CGWB, Govt. of India. He emphasized the various geological formations that enable storage of ground water and also how to get access to data related to ground water depths at various locations at different times of the year.







Fig. 12: Glimpses during Session 9: by Sri Bijay Ketan Mohanta

Date: 12.06.2023 (Day-12)

The students were involved in completion of the internship project. Each internship project was designed with the application of atleast 2-3 different software learnt during the previous days' training sessions.



Fig. 13: Review of work by the Conveners and Coordinators

Date: 13.06.2023 (Day-13)

Project Review-2: All the interns presented their group PPT and submitted their draft report during the evaluation process. The review process completed and assessed by Dr. Kamalini Devi, Dr. Jnana Ranjan Khuntia, Sri Ramanarayan Samkriti. Dr. K. Jagannadha Rao, Chairman SASWRM 2023 and Head of the department was the observer of the review process.

Date: 14.06.2023 (Day-14)

Industrial Visit: An Industrial visit to 23MLD and 51MLD Capacity Sewage Treatment Plants, Attapur of Hyderabad Metropolitan Water Supply and Sewerage Board (HMWSSB) also completed on 14th June 2023. Both 23MLD and 51MLD Capacity Sewage Treatment Plants were well conditioned and working very efficiently. Visit to water treatment plant was made possible for the interns to get an idea of water treatment process in Hyderabad city and further safe release of effluent into the River Musi. Both 23MLD and 51MLD Capacity Sewage Treatment Plants were well conditioned and working very efficiently. The latest 51 MLD STP uses the most advanced waste water treatment technology, C-Tech (cyclic-activated sludge Technology), provided by an Austria-based company, SFC Environmental Technologies Ltd. This technology is extensively used for treating domestic sewage and industrial effluents to the highest possible quality, at a low cost and by using minimum space. Though C-Tech is being used in over 30 plants countrywide, it is for the first time it is being used in the Telangana state by the Water Board. The technology used here with low investment and used 50% less power to get six times better 'outlet' characteristics. The HMWS&SB is using the STP to alleviate pollution in the Musi under the (NRCD) phase-I. People living in Rajendranagar, Attapur, Puranapul, Nayapul, Bahadarpua and nearby localities can breathe fresh air as the stench would

ĩ

vanish after treatment at the Attapur STP. The treated water could be used for agriculture and recycle applications like gardening. HMWS&SB is working hard to give the society a green and clear environment. Manger Ms. Ranjitha and her total team were very cooperative and explained each and every facilities clearly to our students/ Interns. Total 120 students and Interns have participated in this visit. The faculty coordinators were Dr, Jnana Ranjan Khuntia, Dr. Kamalini Devi, Sri E. Maheshwar Reddy and Sri G. Vishwanath, Assistant Professors, Department of Civil Engineering, CBIT (A).



Fig. 14: Glimpses of Industrial Visit at STP Attapur

Date: 15.06.2023 (Day-15)

Valedictory Session

A Valedictory ceremony for the internship program was conducted in N-Block Seminar hall at CBIT, Hyderabad on 15th June 2023. The program was started by welcoming the Principal and Patron Prof. P. Ravinder Reddy, IQAC Director, Prof. N V Koteswara Rao, Dr. K. Jagannadha Rao, Head-CED and Chiarman SASWRM-2023, Prof. U. K. Chaudhury, Advisor I&I, Dr. Jnana Ranjan Khuntia, Dr. Kamalini Devi, Assistant Professors, Convenors SASWRM 2023 at the stage. At First Director IQAC has addressed the gathering and motivated students for the internship and appreciated the initiation on good topic of internship. Head, CED has addressed the interns and congratulated all interns and appreciated the conveners & coordinators for successful completion of internship. Director I&I focused on the AICTE Idea lab aim and objectives in helping to give the scope for different events and appreciated the effort of civil

engineering department, Conveners and coordinators. Convener Dr. Kamalini has announced the winners of best Projects, best performers of the internship program and delivered vote of thanks at the end. Three groups were awarded with best project with first/second/ third prize and 15 participants were awarded with best performer award. Cash prizes and merit certificates were given to all awardees. 22 nos. of teaching and non-teaching staffs and 75 nos. of interns from CBIT and other institutions attended this valedictory program. During the valedictory session, Certificates were distributed to the interns upon the successful completion of the internship -programme. Certificate of Achievement, Certificate of Appreciation and certificate of internship were distributed to the interns in the order of merit. Seven students did not meet the eligibility criteria of getting the certificate. Dr. N. V. Koteswara Rao, Director IQAC distributed the best project certificates to the winner groups. Total 67 interns have received their internship certificates and 8 interns have not met the minimum requirements to get the same. Feedback was taken from the interns on their recommendations for similar programs in future. The interns were very happy from the outcome of the internship.





Fig. 15: Photo of valedictory Session and certificate/ Prize Distribution



Fig. 16: Group photo after successful completion of valedictory ceremony-SASWRM 2023

Annexure

Registration Details:

Total Number of Registration: 75 and online registration amount received at STUDENTACTIVITIES Account: Rs. 90,000/- (= 75 nos.*Rs. 1200/-)

S. No.	Name of Intern	Institute Name	onnne regist 0/- (≈ 75 nos.*] Mail id		_
12	Edara V S S Sahithi	CBIT (A), Hyderabad	ugs21005_ci vil.sahithi@ cbit.org.in, sahithiedara	Mobile 9390674655	Transaction i
			2004@gmail .com ugs21009_ci		5623430
2.	Mamatha Choudhary	CBIT (A), Hyderabad	vil.mamatha @cbit.org.in choudharym amata673@ gmail.com	9030540751	T230520235100 8110600
3.	A. Jayasree	VJIT (A), Hyderabad	a.jayasree14 7@gmail.co m	9160204354	T2305221222190
4.	K Rahul	VJIT (A), Hyderabad	kandakatlara hul18@gmai	9014560795	7765696 T2305221229240
5.	Abdul Rafeh Chouhan	CBIT (A), Hyderabad	l.com rafehabdull 7@gmail.co	8639280212	2681038 T230522145256
6.	M Sreeya Reddy	CBIT (A), Hyderabad	m sreeyar56@ gmail.com	7207562115	T230522145256
7.	B Aryan Reddy	CBIT (A), Hyderabad	aryanbandari 9999@gmail	9396571234	7649653 T230522150505
8.	Shashikanth Goud	CBIT (A), Hyderabad	.com shashikanthg oud07@gma il.com	7661003322	9697602 T230522151319 7679061
9.	Jatling Esha	CBIT (A), Hyderabad	eshajatling1 23456@gma il.com	8019989965	314243724657
10.	Meghana Manne	CBIT (A), Hyderabad	mannemegh ana9@gmail .com	9502533456	T230522151831 3952944
11.	Nenavath Akhila	CBIT (A), Hyderabad	'nenavathakh ila01@gmail .com	9392989935	T230522145300 2017228
12.	P.Akash	CBIT (A), Hyderabad	pakash9860 @gmail.com	7989784437	T23052215302 6650802
13.	G Harsha Sri Yogendra Kumar	CBIT (A), Hyderabad	gharshasriyo gendrakuma r@gmail.co m	7396057833	T23052215370 9377154
14.	Macherla Vaishnav Ganesh	CBIT (A), Hyderabad	ugs21112_ci vil.ganesh@ cbit.org.in	9177793579	314284438247

15	B.Anusha	CBIT (A), Hyderabad	anushabanot h62@gmail. com	7036216741	T230522170116875 3946972
16.	K Saichandana	CBIT (A), Hyderabad	saichandana 130@gmail.	9963137159	314285543526
17.	Gadapa Madhu	CBIT (A), Hyderabad	gadapamadh u3@gmail.c	8374013896	T230522171719770 1836502
18.	Shaik Sana Taslim	CBIT (A), Hyderabad	shaiksanatas lim@gmail.c	6281468981	T230522172836740 8110434
19.	Madu Shri Mokshagna Goud	CBIT (A), Hyderabad	MOKSHGO UD317@G MAIL.COM	7702233499	314287087962
20.	Madipally Mallikarjun	CBIT (A), Hyderabad	mallikarjun madipally20 @gmail.com	8374727900	T230522185022818 2395936
21.	Sana Firdaus	CBIT (A), Hyderabad	sanafirdaus l 111@gmail. com	83310 53623	T230522184625951 8807022
22.	Kandala Varshith	CBIT (A), Hyderabad	kandalavars hith418@g mail.com	6302452537	T230522185501658 9517730
23.	Puppala Swetha	CBIT (A), Hyderabad	puppalaswet hal0@gmail .com	9704737613	T230522185359262 0802930
24.	Boini Thirupathi	CBIT (A), Hyderabad	thirupathiboi ni19@gmail. com	9059464080	T230522190023461 7679986
25.	Irukulla Venkatasai	CBIT (A), Hyderabad	venkatasaiir ukulla@gma il.com	9390033859	T230522190323489 6216107
26.	B. Akshitha	CBIT (A), Hyderabad	akshithabell am2003@g mail.com	8688836951	T230522190458377 5200770
27.	Banoth Priyanka	CBIT (A), Hyderabad	banothpriya nka2003@g mail.com	9550483473	T230522185450014 9688775
28.	Manda Pralaya	CBIT (A), Hyderabad	mandapralay a2004@gma il.com	8688276992	T230522192032248 5623337
29.	Allamraju Lalitha Lakshmeerajyam	CBIT (A), Hyderabad	lalithaallamr aju167@gm ail.com	9966802008	314250684324
20 1	R.Deekshitha Yadav	CBIT (A), Hyderabad	deekshithara gam03@gm ail.com	6281653350	T230522194455708 6650623
	Panditi. Sai Venkata Cherishma	CBIT (A), Hyderabad	cherishmapa nditi@gmail .com	8977944382	T230522200311982 0877617
32.	A Subhushan	CBIT (A), Hyderabad	athotasubhus han@gmail. com	7075774887	T230522201311543 8807853
33.	S. Bhargavi	CBIT (A), Hyderabad	shettybharga vi1234@gm ail.com	9908440206	T230522201825839 3462561

34	. Sonal G	CBIT (A), Hyderabad	sonalgugulot h23@gmail.	9666094242	T2305222
		CBIT (A),	com	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	8277768
35.	Sree .Vatti	Hyderabad	sreevatti9@ gmail.com	7013066925	31429615
36.	D Jashwanth	CBIT (A), Hyderabad	jashwanth.d 23@gmail.c om	9848858916	T2305225
37.	Kondoju Muktesh	CBIT (A), Hyderabad	kmukteshch ary@gmail.c	9010723666	T2305222
38.	Chidruppa Vishwa	CBIT (A), Hyderabad	ugs21072_ci vil.vishwa@ cbit.org.in	9014695735	3946730 314200644
39.	Niharika Kamisetty	CBIT (A), Hyderabad	niharikakam isetty1743@ gmail.com	9010327320	T23052308 9406255
40.	Rohith Reddy	CBIT (A), Hyderabad	muninderred dynomula82 @gmail.com	7995555995	T23052215 9517001
41.	Bachala Pravalika	CBIT (A), Hyderabad	pravaliprava lika2003@g mail.com	9398428354	314307762
42.	Azmeera Pavani	CBIT (A), Hyderabad	azmeerapava ni2311@gm ail.com	7416766967	T23052312 3958436
43.	Saitejabandari	CBIT (A), Hyderabad	saitejabanda ri18@gmail. com	9581466566	3143146911
44.	Mohammed Nouman	CBIT (A), Hyderabad	m.d.nouman pasha12328 @gmail.com	6303361663	T230523141 2031233
45.	Gopu Sai Kiran Reddy	CBIT (A), Hyderabad	saikiranredd yg7225@gm ail.com	9014853180	3143168849
46.	Kontham Manikanta	CBIT (A), Hyderabad	k.manimonti 1969@gmail .com	9618198619	T23052314 2733967
47.	Begari Prashanth	CBIT (A), Hyderabad	prashanthbe gari85@gma il.com	+9196524438 51	T23052314 9563927
48.	Saketh Dubala	CBIT (A), Hyderabad	sakethdubala 866@gmail.	9533792224	314317195
49.	Rayudu Thonti	CBIT (A), Hyderabad	rayuduthonti 129@gmail. com	9182810595	T23052315 2395473
50.	Rohith Penta	CBIT (A), Hyderabad	rohithpental 2@gmail.co	7013686153	T23052315 8038879
51.	K.Sai Kiran	CBIT (A), Hyderabad	saikarukond a224@gmail .com	9390220734	T23052315 5811148
52.	L Manideep Reddy	CBIT (A), Hyderabad	manideep14 062003@gm ail.com	6301095782	T23052315 2395007

53	. U Vishnu Vardhan	CBIT (A), Hyderabad	vishnuvardh anudutha@g mail.com	8790235908	T230523160944895 9563089
54	. Sd Asif	CBIT (A), Hyderabad	syed0002asi f@gmail.co m	7569104872	314319828309
55	Thota Laleeth Shiva Kumar	CBIT (A), Hyderabad	laleethkumar thota@gmail .com	1 Use 2 Sept. 17 Co. 4 Co. 6 Sept. 19 Co. 12	T23052316391382-
56.	Afroz Shaik	CBIT (A), Hyderabad	shaikafroz93 46@gmail.c	6300393815	T230523163936323 8235926
57.	Abhiram	CBIT (A), Hyderabad	chinnuoffici al21@gmail. com	8790641348	314319254020
58.	Thanmai.P	CBIT (A), Hyderabad	pallithanmai 7937@gmail .com	7993542593	T230523165726808 7046842
59.	G Nitesh	CBIT (A), Hyderabad	niteshgadige 79@gmail.c	7780315546	T230523164615085 7950163
60.	Mallegari Shanmukh Reddy	CBIT (A), Hyderabad	shanmukhre ddy1234@g mail.com	7075003349	314370249033
61.	P.Jagadeesh	CBIT (A), Hyderabad	jaggu9196@ gmail.com	6281749086	T230523171530955 9962409
62.	Dumne Vijay	VJIT (A), Hyderabad	18253c090 @gmail.com	9573374968	314328632887
63.	Mansi	VJIT (A), Hyderabad	mansiramru pee@gmail. com	6305296002	314390940803
64.	Puli.Vikesh	VJIT (A), Hyderabad	pulivikeshya dav@gmail. com	9347278240	T230523200955364 8885808
65.	Badam Nikhil	VJIT (A), Hyderabad	nikhilbadam 032@gmail. com	6301788919	314328910442
66.	C.Pragathi	VJIT (A), Hyderabad	pragathiredd ychilkamarri 12@gmail.c om	9014607194	T230523202101054 8391360
67.	Korra Gouthami	VJIT (A), Hyderabad	gouthami92 6@gmail.co m	91 89789 21243	T230523203830048 0252395
	Sanghishetty Harshitha	VJIT (A), Hyderabad	sanghishetty 20@gmail.c om	9182118386	T230523204442403 2097223
69.	Bandi Tanidh	BVRIT Narsapur	22215a0119 @bvrit.ac.in	8500140660	351203822224
70.	Shaik Parvez	BVRIT Narsapur	22215a0114 @bvrit.ac.in	9391560084	314615525434
71.	Jangam Poojith	CBIT (A), Hyderabad: AI&ML	poojith1903 @gmail.com	6309312628	T230526113759616 9610266

72	Bayikade Deepika	CBIT (A), Hyderabad: CHEM	reddydeepik a2004@gma il.com	7989181323	314815
73.	Anvitha Raj Vantipuli	CBIT (A), Hyderabad: CHEM	anvitharaj 11 1@gmail.co	7661025576	314815
74.	Teegalapally Chendana	CBIT (A), Hyderabad; CHEM	chendanatee galapally@g mail.com	8500462539	314815
75.	Kammari Shivani	CBIT (A), Hyderabad: CHEM	shivanikam mari0@gma il.com	9346797982	T23052 435758

https://forms.gle/CwzWHoZ36wg3vWUHA



REGISTRATION FEE

Rs. 1200/- per participant (includes Kit, hands-on, and Certificate)

For more Information, visit https://sites.google.com/cbit.ac.in/saswrm-2023/home Brochure

ABOUT THE RISTILLED

Challenga Sharets institute ostablished in the Year 1979, esteemed as the premier engineering institute in the states of Telegata and Andhra Pradesh it is known in idelic surroundings of Gandipot Laine, Hideratiest The Institute, committed to education knowstion and over the 43 years, has emerged as a dream destination for students with a sewarding career and corporates to source well-rounded engineers. Best academic practices with quality aducation enabled the brettune to establish its Identity in the Technical Education in both the Tokigo Speaking States. The great learning esperiences in the matrix have enriched the lives of students and helped them to develop into a multiskilled and multi-tasking personalities that ensured. success in their careers and occupations. With the students being the singular objective, the institute has established excellent intrastructure ruch as state-of - the art laboratories, specious library with printed and digital collection of books and journ sports hostel, and other infrastruors on for early and co-curricular engagements with a total built-up area of about 57,714 m² in the serane ambience of 50 acres to inspire, encourage and pursue academics. In its rejentless strive for Academic excellence, CBIT has scaled great heights both nationally and interrutionally in industry and global universities.

ABOUT THE DEPARTMENT

Civil Engineering Department of the institute started functioning right from the inception of the inetitute, in the year 1979. It has well qualified, experienced and dedicated faculty and committed supporting staff. Apart from giving their best in academics, the students of the department are highly enthusiastic & actively participate in various co-curricular & extra-curricular activities. The laboratories of the department are well equipped with advanced and tophiclicated instruments, to fully safety training needs of the students and research and consultancy needs of the department as well. The department offers one UG programme (Two Sections) and one PG Programme (Structural Engineering). Conducting seminars, workshops and conferences on the latest developments in civil engineering, arranging expert fectures and industrial

visits for the benefit of staff & students, is a regular feature in the department. The department was offers Consultancy Services for various Government and Private Agencies and has completed a good number of prefigious projects. If it a matter of great price that this Department has submitted the draft for "Notice Policy" for the newty formed Tela

This scadernic year, CED has organised one 6-Day ALCTE sponsored training program on "Crying revol of Bridger and an international Conference "CACID702" in collapsisce with Universities strond and India. An interdecipinary (with Mechanical Engl Dept.) project worth Rs. 9.89 lakha sarctioned by DROC is under progress in current academic year CEO has published 21 research papers in reputed peer reviewed Journals/ conferences. Also, one palant has been granted and one is published. Students of the department are equally good in extraouricular & Colouricular activities and received some awards as well

ABOUT THE AICTE IDEA LAB OF OBIT

The arm of ARCTE IDEA Late in CBIT is to provide all facilities for conversion of an idea into a prototype. With those facilities in the comput. more paydents and faculty are being encouraged to take up creative work in this process, students and locally are getting trained on creative finking problem solving collections on. The OEA Lab of CBT in headed by Principal & Frohesor Dr. P. Rovincer Racing, who is the crief meetor. The program is being actively guided by Dr. UK Choudhary, Director I & I. Dr. BVS Rao and Dr. P. Sathish are coordinators. We also have strong team of four Technical Guru's. The IDEA lab at CBIT is equipped with 16 3-D Printers, 50 Robotic Kits, About 600 Students have already undergone training for Digital Fabrication using 3-0 Printers and iof prototype elopment. So that they become technically capable and confident to convert idea into prototype. Presently the IDBA Lab at CBIT is also trying to reach school and industries in and around Hyderatad, to train and tivate the students to use IDEA Lab in CEST.

IMPORTANT DATES

Registration Deadline - 28 May 2020 Confrontkin mail historia

28 May 2003 28 May to 15 June 2025



AICTE Idea Last Chartanya Bharathi Institute of Technology (Autonomouté Artisted to Ostavas Unit

Accredited by NAAC CCC are NBA-ACTS ISO 9001 2015 Centred Intotution Gendan, Hyderobad-75 (TS), Inch.

ABOUT THE INTERNSHIP

ABOUT THE INTERNISEP
This internation is an accelerat platform for students and researchers to gain introviletge on applications of different computational tools in Water Resources Engineering. Theoretical introviletge is not solely sufficient to work in saal-faild problems. Theoretical introviletge is not solely sufficient to work in saal-faild problems. Theoretical intelligence of displaying Application of artificial intelligence in displaying assessment, remote sensing application. Assessment processing resister problems in water supply of detribution system and the solution. Hydrograph. processing, researc properties in lease supply of delification system and the solution, hydrograph studies in face routing. Relative transfer immunous. Sociaring depth practicition, which require an informa-tion of the studies of the system of their working. browledge of network settimer and their working. Assessment will be dose on a given project related to real-field application throuby enhancing the ability of the participants in carrying out the application in the takes research. The proposed mismatch will be the future session. handled by experts from resource persons from ensities of national repute and industries.

WHO CAN ATTEMD

Studen (UG & PG) Hesearch Scholars VENUE

Department of Guill Engineering, GDIT (AL, Gondoor). Hyderated, 500075

REGISTRATION LINE OR Gode MANAGEMENT SECTION OF THE PROPERTY.



REGISTRATION FEE Re. 1200/- per participant (includes Kit, handson, and Certificate)

Circled sent up to 60 rays. Register first to book your seal.

HER AND REASON OF STRAIN OF PARTIES OF PARTI

Dr. Jihania Radjon Rhumia, And Proc Email <u>production of thirty Asian</u> Phone 707/86(acan

Sat Rymensrayon Sonson, Post, Prof. Break sammanayari (mindistas) is Prome: 97948520-69

ORGANISMS COMMITTEE

Patron

Prot. P. Revinder Radicy Principal, CRIT (A)

Chairman

Dr. K. Jagawadin Rao

Department of Chill Engineering, CBIT (A) Conveners

Dr. Jama Ranjan Khomba Assistant Professor

Department of Child Engineering, CBIT (A)

Dr. Kornalini Devi Assistant Professor

Department of Chill Engineering, CBIT (A)

Coordinators

Sri E. Maheshwar Reddy, Assistant Professo Sri Ramenerayan Benkrik, Assessor Protessor Dr. R. V. S. Roo, Goodmann, ACCTE (CEA Let) CBT

RESOURCE PERSONS

- 1. Prof. Kishanjil Kumur Khatus Professor and Dean OUR, NIT Rountels
- 2. Dr. Bheberi Sherkar Dea
- Assistant Professor, NT Falso 3. Mr. Mane S.R. Rorett
- Manager (angg), Shivani section Sun disease -3, CSM Division -3, HRWS&SB 4. Dr. Kavsitini Devi
- Assistant Professor, CEIT (A), Hyd 5. Se Remanarayan Sankriti
- Assistant Professor, CBIT (A), Hyd. 6. Mr. Keton Kumer Nand
- Ph.D. Scholar, IT Guestion 7. Mr. Sorjeti Sehoo
- Ph.D. Scholer, N.II Rosekela
- 8. Srl Dijoy Kelan Motanto Science C. Central Ground Water Board. Southern Region, Hydrolabed

REGISTRATION FORM

For

Two-week Practice oriented Internable On

Software Applications for Sustainable Water Resources Management

00° May-15" June, 2023

Designation:

Semester and Year: Institute: ____

Melling Address:

Contact Number with STD Code

Mobilel:

Email (Dr

Transaction Id.: __ Bank _, Date: _

Signature: QR code for registration lies



- See Self Color

Poster



Any other relevant information/document

Chaitanya Bharathi Institute of Technology (A), Hyderabad-75 Department of Civil Engineering

Two-Week Practice Oriented Internship

Software Applications for Sustainable Water Resources Management
(SASWRM-2023)

Internship Timings: 9 am to 12 noon (FN) and 1pm to 4pm (AN): Total 6 hours per day

Program Schedule: 18 Hours of Live Sessions

5. 3	Resource Person	Topic name	Date	Daniel
ı.	Er. Mane S R Robith Manager (Engg), Shivam section Sub division -3, O&M Division -5, HMWS&SB	Water Distribution: Issues and Solutions	29-05-2023	2 hours (FN)
2.	Dr. Bhabani Shankar Das Assistant Professor, NIT Patna	Application of Artificial Intelligence in Flow Assessment	29-05-2023	2 hours (AN)
3.	Dr. Bhabani Shanker Des Assistant Professor, NIT Patne	Flood Routing by using HEC-RAS	30-05-2023	2 hours
4.	Mr. Sarjati Sahoo Ph.D. Scholar, NIT Rourkela	Application of ANSYS Fluent for Turbulent Flow Modelling	31-05-2023	2 hours (FN)
5.	Sri Ramanarayan Sankriti Assistant Professor, CBIT (A). Hyderabad	Delineation of Catchment Boundary using Remote Sensing and GIS	01-06-2023	2 hours (FN)
6.	Prof. Kishanjit Kumar Khatua Professor and Dean (AR). NIT Rourkela	Methods of Computational Fluid Dynamics in Flow Modeling	02-06-2023	2 hours (FN)
7	Mr. Ketan Kumar Nandi Ph.D. Scholar, IIT Guwahati	Application of Google Earth Engine in River Health Management	05-06-2023	2 hours (FN)
8,	Dr. Kamalini Devi Assistant Professor, CBIT (A), Hyderabad	Flow Modelling in Natural River System using Conveyance Estimation System	06-06-2023	2 hours (FN)
. 8	Sri Bijay Ketan Mohanta Scientist C (Hydrogeology), Central Ground Water Board, Southern Region, Hyderabad	Ground Water Assessment	10-06-2023	2 hours (FN)

Certificate Sample Copy:









CERTIFICATE OF INTERNSHIP

This is to certify that Mr. Ms. Tessalapally Chandana, Roll no 160(3)802015

student of CRIT(A), Hyderabad, 100015, has successfully completed with A+ / A / B+ / B grade in the two-week practice oriented internship programme on "Software Applications for Sustainable Water Resources Management (SASWRM-2023)" from 29th May 2023 to 15th June 2023 (90 contact hours) at Chaitanya Sustainable Institute of Technology (Autonomous), Hyderabad organised by Department of Civil Engineering with the association of AICTE Idea Lab.

Dr. Joans Ranjan Khunila

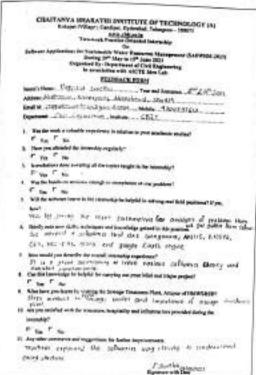
Dr. Umakanta Choudhury

Dr. K. Jagannadha Rao

Prof. P. Ravinder Raddy Principal, CBIT (A)

1,9

Feedback Form Sample Copy:



	40 (CO C) (CO C)
	ocych
	CHAITANYA BEARATHE INSTITUTE OF TECHNOLOGY (A)
	CHAITANYA BHARATHI INSTITUTE OF THE AND
	Colombia Colombia Colombia
	Co. Management (Co.Co.Co.Co.Co.Co.Co.Co.Co.Co.Co.Co.Co.C
	Debends Applications for Designation Water Employment (Coc)
	in the state of th
	PERSONAL PROPERTY.
	market Line Colored Colored Carlo Belleville
	marker Carpett Stange And Laboratory (a)
	Seattle Hope Streen and Seattle Seattle Seattle Seattle of Schooling
	September Come Street terms while Freite helder of history
	and the second s
	 Was the work a reliable experience in whiteen re-your analysis attribute.
	D To T No.
	New you would be investig-topicity?
	Securities are covering all the lacks begin to the investibility
	1
	Was for hands no workers concept or many factors of costs publican?
	Tips 150 Will do solvens have to the intensity to target as solving and first problems? If you
	to a distance
	there were the control of the delegant to these of the things
	An integrated upon on an an in the water water many
	Barely manuscription, inchesped and community in
	- junction the organic telephone
	- soften cons
	Fire world pro ducable the overall insensity experience?
	THE DESCRIPTION OF THE PARTY OF
	Telephone in the second
	Cardio topicidge to helpful the surying on your little and object protect?
	P to F to constant
	What have you borned by couling the Scoops Treasurest Flast, Adopter of 1817/8/58/597
	the stilling to Salaryouth - Intelligent most in minutely fundament
	Are you said and with the recovers, bearingly and inference are pre-stant during the
	and the second s
- 14	tup who assume and expension for further improvements
	. 5 has his work trader 16 also streamen proceed he behandly
	morething in lateral region indicately facility with
	Equation of the control of the contr
	11 14 15 15 15

Prepared by:

Convener: Dr. Jnana Ranjan Khuntia

Coordinator: Sri Ramanarayan Sankriti

Dr. Kamalini Devi Assistant Professor Convenor SASWRM-2023 Dr. Jnana Ranjan Khuntia Assistant Professor Convenor SASWRM-2023 Dr. K. Jagannadha Rao Professor and Head Chairman SASWRM-2023

CRAFT OVA BELARATER DISTRICTE OF TECHNOLOGY (
BRIGGE VERGEL ORDER), Value of Control (
The state Process Ordered Instruction)

Software Applications for Socializable Water Resources Mediagenesis (SASWO)4.260% During 29" May to 15" June 2813

Daring 27" May to 15" July 2013

Organizati 2y: Department of Chil Engineering in association with AICTE Idea Lab

Attendance Second: Chil A2: Tradeing and Handsons Sendon

8	Name	Distignation	Schener and Year	Program/ Degree	Name -	29-45 FN	3825 AN	50-45 EN	-3423 -AN	51-95 954	AN	60-06-	AN-	60-46-1	AN	FK	AN	FN 18	AN I	61-06-18: 5%	AN
1	B Arpen Reddy	Stadies	4th scin Inf year	(B.E./B.Tesh	сви	750	AST	RA	الما	MA	ATT	W.	Jeeg.	Jest!	Assel	题	图	EST	ES 13	1	25
İ	P.Akadi	Student	Sec. 4,3ad year	(B.E./B.Tech	сип	akan	akask	(A)	(A)		alien			ukash	afan	akin	alarh	challe	OF	0	day
	G Hamba Sei Yogendra Kamar	Suden	th countries lad year	UG (9.E./B.Tech	CBIT	CHET	CARA	NAME OF THE PARTY	CHELLE	2.85	W.S. T.				(6)	0,161	E. HST	GREAN	CARSIN	CH SA	LN
	Macherta Vaisheav Ganeda	Suplost	Sem 4,200) year	ME/MTH (ME/MTH	DOMESTIC.	Visitra	Listeral	fair	Ville	1		Willer	Aires	fillun	distant	Bulan	Miller 1	Vhishor	distant.	History	النظ
5	Gadepa Madau	Student	Ath some and Stall year	(B.E./B.Tes)	сви	A. Cook	Great	1 Mal	horal	(1.50	13.7/	O.F.	4.00	17.5	Service Services	Grid	140	479	61	6/2	100
6	Shaik Sava Tudini	Studiet	and yes to sepaster	(D.E./B.Tee	CBIT	Faro	conc	-000	coro	sano	Son	ear	Son	SOUCH	SOND	saro	3000	50M		3310	90
1	MADU SHI MORSHAC A GOUD	N Student	40x seriesk and 2nd ye	th H.H.D.Too	A CHIT	1.1.0	MB	NB	MS	148	ME	M8	MB	MA	Me	MB	1/18	MR	M8	6. 3	p.
1	SANA FIRDALI	Darlos		ed (B.E.AB.To	-	tors!	d cont	34	Contr	and the	and the	1	(0)	4	(F	ant	Don't	200	2010	30100	للويا
	S PUPPAL SWETTE		4th and 2	od (S.E./S.Te	ch can	Swell	Swill	- sell	a Swel	h Swell	o Swel	ha Swell	a Swell	n Swell	Sweth	South	n. Swietho	Swette	Swelle	Swette	Sam
	IN THURUPA	TH Studen	IV SEN And 2nd YEAR	(BE/B.T)	se can	MY LAS	and the same	P	Jenh	A. Saya	r Section	ai jigupa	i the	Silved	G singl	Thirty	N Things	Birmel	triorph	Sample	-pin-
Ī	tt Banaria priyask		(V sem.)	00 (18.80) he	rely CBT	1 Sept	best	4(A)	1	(F	646	phoh	Pich	Prah	M proget	PMP	d bloky	DAME	phypl	6:48	Pit
Ī	II A Sabhai	him Studie	Ath server , 2nd Ye		eià CBI	1 81	· Se	B	Hop	1	40	0	1	Sal	+ (F	Sal	10	(A)	0	1	6
ľ	13 Seeal C	Stules	4th spiners Indige		eth Clif	\$	do	14	14	+ of	40	(0	(4)	B 6	0	0	B	@	1	0
1	14 Srze.Va	n Snder	416.00	2 CONTRACT	ech CBI	77.7	-2	- Q2	- 0	1 Al	10	0	10	10	0	100	349	B.	B	2	
	12 D Jashwa	uit Stoder	4th server , 2nd ye		ock CH	7 7. L	Pages	7	19/10		4112	* (E	A	4	1	100	70	(1)	34	100	75
	A Chidrage		4th seems		esh CH	T Li	W ANT	A B	المرام المرام	de Azel	Just Jan	de divi	La day	Sand Child	Jack Jack	die	divi	LUN LOW	trop	diety	7.3

annem, season 23 1864

_	P	-	/	SOUTH THE		Mater	100	or the last	F 70	65	100	1 400	1 41.44	2003 1	1	1000	80.00c	800 /	PH V	AR .	97.00-7	415
1	1	Knower	Station	2nd year	rites, de Ten		Sheet	- Shall	Sheet	300	Singer .	Show	1 Park	1 State	2300	SHE	100	Willes	1300	Single	(with the	3/
1	14	Harloth reside	Swins	49.h species Trid year	(0.E/0.hea	cur	1446	Figh	P. A.	FAU	Politi	Lake B	地	(1)	(A)	B	100	(A)	(A)	1 (A	(A)	(A)
1	+/	Astrocos Favari	States	4th seinemu	ID E /R Tech	свит	Bani	Pacceri	Po Con	goronti	Paises	Poster		in Brown	to Post	-	A Pos	100	a post	an least	m que	the second
20	10	angebesder	States	dish sciencister 2nd year	OF E-18 Tech	CBIT	en.	66v	龉	dy	晒	ME	0.8	1 881	SVX, C	1- (A)	180	1 58	8	EV 188	10/3	199 st
20		Cope Sor ion Roddy	Sudor	2 year 4 seas	UG (S.E./B.Tech	CBIT	3	A	@	Car-	529	Si	83	- 6	6	Q;	- 08	S	i	10	1/5	200
12		Konflees	Stadent	2-year 4-szas	UG (II.E./B.Tech	CDIT	Lake !	8/	Musi	1	1	D	100	60	10	16	0	26	3	2 1	0	dy O
29	T	Begun producth	Student	2nd year 4th servesion	UG (III.E./II.Tech	CHIL	Prophas	Levarior	1	100	10	2	100	P P	5 Q	3 (A	10	10	1	1 8	W D	A G
34	84	Accia Debate	Student	442	UG (B.E./B.Tech	свп	Speck	304	3000	Select	360	- belleville	Callel	Cond	h so	_	2 1 1 1 1 1	10	0	Sol	1 (m)	All god
25	1	Royado Thomas	Student	2 ad year 4	UG (ILE/II) Tech	25000	Ō	(A)	1	Farel	Page	gin		100	1 day	6	15	17	4	10	yelf.R.	11 10
20		Robids Passa	Stochase	4th see & 2nd year	UG (B.E./U.Treb	свя	(A)	@	(A)	(A)	(F)	File	Retu	Alda	dela	0	Poh.		a Ch	A Pal	m Ra	A Path
2	,	K.Su time	Stadies	4th work, 2nd Year	UG (B.E.D.Toch	сви	(A)	A	0	(A)	0	Beri	Be	Bat	But	6	apa;	5 No.	80	10	Ren	Bi
2		1. Manideep Roddy	Student	2 year, 4 sess	(0.E.m.Tech	сви	Mega	made	Bon	NAD	Traf	Year.	Mund	ng	0	0	Med	1168	10	10	- 64	(A)
,	10	U Visheo Vardhan	Student	4 sees Zyese	(0.5.0.Tech	сип	vishes	10/10	Jules	Jishno	vishm	visten	vidini	1790	vis hns	dishm	siche	elshor	vishm	at a rishm	y Juden	
a ,		SD ASIF	Studost	46 sem and Jad year	.00 (B.E.B.Twk	CRIT	ast	asif	asi4	asif	asif	asif	ast	agent	asif	asif	astF	asif	wit	wit	asif	asif
,		Thuta Laleeth Shiva Korper	Student	4th sera med 2nd year	(B.E.B.Tech	сит	lalath	lalect	Laledh	blech	later	declari	Lalecti	Liyal)	ldeeth	0	tales H	laler	(allei)	Idle!		
3	2	Africatolk	Stadent	46 see-2nd year	(B.E./B.Tesh	сви	(b)	(3)	(P)	(A)	0	(8)	0	0	Almas	Africa	Afros	Aloz.	Forta	Alog	-	West &
7.	,	G Nach	Student	2nd year 4rms	(B.E.B.Tech	свит	地地	199	detail	Walter .	Seed	jegdi	NAS+	199	(A)	0	Media	Atted	die	Alder	(Mar)	Halland A
3	4	Mallegari Shanawilli Roddy	Student	4th sesseries, 2nd year	UG (B.E./B.Tech	сит	8	A	M	W	W		9	0	1	1	8	NO.	OK.	100		
38		7 Jegadeesk	Student	48: Sen, 2nd year	UG (B.E./B.Tech	сап	Bath	age bal	zagódi	Explish	agailt.	Set !	Des.	49 5	popular.	(A)	100	Togski	Sople	Topal	(A)	A

Two-counts Practice Sciences Special Company Country of the State Special Company of the State Special Company of the Special Company of Decing 29" May to 12" June 2013.

Organized By: Department of Civil Engineering in wantedge, with AICTE bins Lab

- 9	1 200	T-	Senseter	Programy	Institute	99.70	Atte	schemes Re-	medi Civil		ing and the	ests on Se	minn.								-
Ne	Name	Designation	and Year	Degree	Name	FN	2823 AN	30-65 TN	-2925		-2923	51-84		93.66	2013	65-94	1635	9646	2923	97-96-3	0.00
í.	Edam V S S Sababi	Student	41 acm 2nd	UG (B.E./B.Tech	СШТ	gu	Du	Olo	man	CHAT	STAN.	SOLL.	AN	911	AN I	FN	AN.	68	AN	FN	AN
2	Marata Cleeday	System	Sem 4,2 sal	UG (B.E./B.Tech	СВІТ			0	Br.		10.	No.	40	A-	St.	4	Mr.	Br	Dr	Jan.	8
	ADDOL BAPER	States	year 4th semester	U0 .	DATE OF	Manual	Marrah	Man	(Bank)	fine	Marcalla	1.07.22		Memal	.Varre	Alteng	Cana	Port	diline	E Manu	y A
+	CHOUMAN	-JAAKEL	and year	(B.E./B.Yech	CHIT	BAS	Ed.	RA	Bile	Lake	and .	Roteb	Bald	Bokh	Pals	1/18	- BH	Bla	10	Pall	B
1	M Snesya Reddy	Student	Sem 4.Jml year	(M.E./M.Tec b.)	світ	profest	and the	M.SK	Mr. San	430	W. S. C	A	(8)	Mayor	Mister	1.50	nake.	100	The s	of sa	*
1	Shuhikarth Goad	Student	4ti sem and 2st year	UG (B.E./R.Tesh	CBIT	(A)	(F)	61	4	4	03	(A)	(8)	online	-	10	D	6	Æ	10	4
6	Juliug Esta	Student	2nd year 4th, scraenter	(B.E./B Teck	CRIT	SML	sit	Soll	SUL	sol	214	Sill	E.L	BILL	SU	811	Else !	Ell Ell	158	Pell	82
7	Mogkam masse	Student	oth somester and 2nd year		сип	(P)	(P)	((Mug	My	(A)	(A)	poline	B	(A)	P	A	6	1	1
1	NENAVATII AKHILA	Student	4th sem (2nd year)	UG (B.E./B.Tech	CBIT	Akhila	dKlab	AXXX b	OKK%	white	dkhila	delah	arlih	dklůb	athib	100	F	ANCE	dik	akt/%	uhi
٠	B.Aresha	Student	4th and 2nd	(R.E./B.Took	CBIT	Mest	and	and	-Min	amal	Son	OC.		E ST	1	(cc)	Stack	23	1	X.S	Za.
10	K Szichonásca	Student	JV SEM And 2nd YEAR	UG (R.E./R.Tesh	світ	Justani	Come	مطيون	Change	Charle	A Ball	Cardo	No. No.	wards	Jankor	Lorgal .	Seal Control	O Selection	A SHA	1000	2
п	Madipuly Mulikurjus	Student	IV sens 2nd year-do	UG (B.E./B.Tech		Water Land		L. Walley	MARCH	Militar	VALOR	P. Stoller	Market	T' diffe	THE SAME	S. Stilly	N. A. W. W.	W. Cabill	Pictor	Mary Che	Part of
12	KANBALA VARSHITH	Stadent	4h sementer , 2nd Year	UO (B.E./B.Tech		504	100	Bar	10 g	KQ.	KR	KO	Programme and the	Rey	is Ce	A	A	A	K OL	K(E)	12/03
1	bukulla verkatasat	Student	4th seriester, 2nd year	(B.E./B.Tech	сип	Daley	Jak	Au	Deli	On	dur	N. V.	del	Du	Deld'	8 JA-	D.L.	11.0	2.14	Aller	10

7	PRALAYA	States	Att summer	1 10		R. AM	marga	3110	H-20, 410	-	-	8:42	V. CA	-	11 1	-	1 10	275	83.46	5/5	April 1
1	Alianny.	1	, 2nd year	CHECKTOCK	CHIT	grates	probable.	model.	brokel	p-A-	Add.	Vest	120	Stalant	4442	asce I	mile	19 July 1990	Maril	A TOME	And
16	Lakshmonogy (80)	Student	and 2nd year	(B.E./B.Tsch	CRIT	lute	jidis.	Like	1.8	8	135/	St.	K. 1	Parish P	made It	- id	wit b	and for	- Sepher	Lafe	
17	R.Deckstutha Vadov	Student	4th (enn- Zad year	DO (B.E./R Tech	CBIT	500	00 del	(A)	0	(D)	M.	120	12	Pr	12,1	15. I	Pal	my fr	X /3	- 1	D L
18	Panditi Sai Venkata Cherubera	Student	4th scenister 2nd year	U.G B.E./B.Tach	CHIT	Sichel	wind	المانمو	(A)	(A)	Comment	1 Page	A Laboratory	Online Hy white	(A)	(A)	(D)	8	EZZINE I	C. Codden	D
19	S. Blargovi	Student	4th semester (UG B.E./B.Tech	CBIT	81. 15 apr	1 2500	Lorge	dog	1 00	of the same	Charles and	ella	9	Mar	Sept.	(Sept	(Pront)	0	0	0
26	Kondoju Muktesh	Student	4th concutar 2nd year	UG (B.E./B.Tech	СВІТ	0	(A)	P	(A)	A	7	(A)	000	0.00	(A)	學	As y	bert	A SHE	Act 8	10
21	Dackaja Pravalika	Stales	2 year 4 som	UG (B.E./B.Tech	світ	Peakoli	~	- orbit	المدين	0 .6	N AND	N N	e asi	(4)	(A)	(3)	(F)	(1)	(A)	P	0
22	Moturmed Nourage	Student	2-year 4-sees	UG (B.E./B.Toch	CHT	(A)	(A)	N. GOREGE	1,00	(Nagy	Angle Angle	Question 9	Person	(A)	(A)	Pages.	CONTRACTOR	Chesales.	potente	Sec. of	Carried States
11	Abhine	Student	- Accounts	UCI (B.E./B.Tech	CBIT	A	(A)	(A)	A	(A)	(A)	Aha	(A)	0	100	Septe	\$5°°°	(A)	STA BE	Chillego	2000
24	THANMALF	Studeni	4&2	UG (B.E./B.Tech	CBIT	C. T. Land	P. Darrio	Mari	100	1	N-BERGO	(A)	10	(A)	(P)	(d)	1	0	(A)	(A)	A
				-		160	P.o.	K.v.	18.40	5.40	100	10	10	8.40	0	K. don	9.400	" Hope	8.800	o barre	(A)

Concret samenzers

Suffrage Application for Sunsingle Water Resource Management (AASWELD SELE)
Original Style Department of CHE Engineering in association with AECIE Lines Lab

	1	Neme	Designation	m Armenter		Name .		- posts	30.0	-rots		3923	ming and I	Bereitens 5	01-96-	5813	95-66-5	ON T				
_1		1	1	466 year let	1100	- mante	FN	AN	FN	AN	PN-	675	FH	AN	MN	AN	MAN /	AN	PH 1	AB \	67.64L-9	200
1	1	A Arganie	Staden	attender.	OR E. OR TUCK	Ant	Sayam	Tryan	Toyen	Typen	T244.80	Tayana	Jagan	Tagan	E-MAD	Tours	Toyana	Source	(A)	@\	Tours	-
1	=	Kitchur	Studior	4th year list senseiter	CB.E.OL Tech	yar-	rotaly	e-24	n Ed	بالمناع	with	wych	115 Edg	130V	104	EEL		mm.	week	K.W.		v ste
	1	DUMNE	STUDENT	dili year Ini man	UG (B.E./B.Yech	varr	ix	20	20	20	444	TAM!	wind	128		9	in	W/	1501	ijug	(A)	A
4	1	Mreii	Stulmi	4-1	(B.E./B.Tech	SWY.	Marrie 1	vario	(rough	group	Sincer	meny	(A)	(A)	н	B	A	1	(A)	D	- with	Q
1		Paksikuh	Status	Tend4	(B.E.M. Tech	VZIT	8.8	P.VI	v84	Pul	1004	PIL	7.00	2.10	14	6	ow	RHY	W. a	T.	20	01
6	1	Nadaan Nië kië	Student	41	UG (B.E./B.Tech	varr	Belich	Balch	B. inh	No July	(Salietel)	S MIN	Enliste	E-NEW	h	0	E ALIEN	Balah	Beach	日本(日本)	84005	11 Ja
,		C.Preprisi	Student	Ist normand 4th year	UG (B.E./B.Tech	VIII	questi	out i	- The same	and the	(Æ)	(A.	RIVE .	10000	0	160	2	all i	200	81	2
		Kara Grehari	wadeed	ist severage and 4th year	UO (B.EW.Yesk	VIII	0.070.7	Green and	Gotha	collar.	اسالت	nill car	Silvania.	The street		The same of	No. of trans	No.	Carly Bay	No.	(D)	W.X
-	,	imphishety Hardritu	exclusi	4-1	UG (B.E.R. Tech	varr	المعام و	1. 3.06	1.1	Chauda	Shooks	chartes	s had	chesta		100	Sanda	-	(A)	(A)	(A) Si koni	6-160
,	0	Bandi Tendh Tendi Fe	Student	2.81	DE TANTAL	BVRJT Natroper	255	25	350	250	750	7.16	97.16	35	20	916	33	714	20	(M)	31	THE CAN
1	1	She & Parvoz.	Student	2nd year (2nd semester	UG (RE/B.Tech	BVRIT Nanopar	Ban.	The state of	Vanier .	Thurst	Berg	Val.	Tomb	Pour	The state of	Carlo	D.M.	Posts	To All	Faull	2mgs	Rock
12	2	JANGAM FOORTH	Stedent- AWML	4TH SEM IND YEAR	U.G (B.E./B.Tech	сви	teg	Troft	x ridge	3.800	1645	cardin.	\$800)	and a	Som	E C	1 (200)	Time!	0.5	(max)	ariel.	arailk'
13		Baydade Dwgda	Stadent	Ath scenarior 2nd year- Chem	(B.E.S.Tech.	сви	registers.	weigh	teres	Tough	with	STATE OF THE STATE	- Cuit	Canada Canada	Control of	Harris	CONT.	(P)	Court .	of the state of	divis	TOTAL
14		zavitka raj Varstpali	Station	4th seasons:	UG (B.E./B.Tech	свиг	Ð	(A)	X	X	d	A.	4	1	2/7]	3,	A	P	A	(D)	de	a
13.		regalapaily Chericana	Student	4h someter	(B.E./B.Tech	сит	7,00	100	[LEST	和歌	A	(A)	T.HEW	100	311	29	N. L. STORY	1000	ith"	Par Control	OF.	1558
10		Kanneri Shijanir	Studen	4th corrector 2nd year-	UG B.E./B.Tech	свит	(A)	(F)	V-384	VSL	4.She	4964	上沈江	4. A.	X914	MG 1. 2	Vola	VW	G.	294	WAR.	EW.
			Conven	· SACHINA	WILLIAM TO	+	9		- 1	-	-	1	de	1/	1	1	400	11-15		1 100	-0	13.7

WHO CAN ATTEND

Students (UG & PG) Faculty Members

Research Scholars

Consultants and Industry Professionals

VENUE

DURATION Seminar Hall ,CBIT ,Gandipet, Hyderabad, 500075

18 Hours (Each day 3hours in the FN session for 6 days)

CHAIRMAN

ORGANISING COMMITTEE

Principal - CBIT Dr. P. Ravinder Reddy

CONVENER

Dr.K.JagannadhaRao

Department of Civil Engineering, CBIT

CO-ORDINATOR

Assistant Professor, Sri. P. Srinivas Reddy

Department of Civil Engineering, CBIT

Sri. M. Kalyan

Assistant Professor

Department of Civil Engineering, CBIT

Dr. T. Chaitanya Srikrishna

Assistant Professor

Department of Civil Engineering, CBIT

REGESTRATION LINK

fdSXxeYm7QSevnujYOnlxMwzIBw/viewform?usp+sf_link https://docs.google.com/forms/d/e/1FAlpQLSelVO0Pz2HwWl6qSwdwQ0-

REGISTRATION

No registration fee, Registration is mandatory

CONTACT

Sri. M. Kalyan

Email:Kalyan_civil@cbit.ac.in, Phone: 9030144407

chaitanya_civil@cbit.ac.in , Phone: 8019206828 Dr. T. Chaltanya Srikrishna



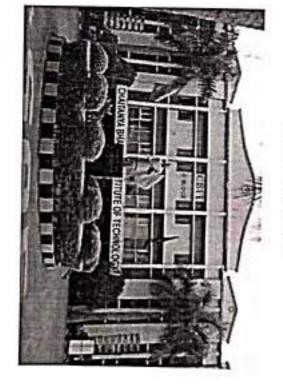


AICTE approved

One Week Practice -Oriented Intensive Training Program

Crying Need in BRIDGE Engineering for CAPACITY-BUILDING

22-27, August 2022



Organized by

DEPARTMENT OF CIVIL ENGINEERING ChaitanyaBharathi Institute of Technology

Accredited by NAAC-UGC and NBA-AICTE ISO 9001:2015 Certified Institution Affiliated to Osmania University Gandipet, Hyderabad, 500075 (Autonomous under UGC) Telangana State, INDIA



ABOUT COLLEGE

CBIT, a pioneer in technical education in the state of Telangana, is one of the premier Engineering Colleges in India. It is located in idyllic surroundings of Gandipetlake, Hyderabad and has been standing as a temple of knowledge for the past 42 years. CBIT is an autonomous institution under UGC from 2013 and accredited by NBA-AICTE and NAAC-UGC. The college offers 9 UG and 11 PG programs over the years, CBIT produced several eminent and skillful engineers, spread all over the globe. The institute has received research grants to the tune of Rs. 2.5 Crores from various funding agencies such as AICTE/UGC/DST. Brilliant and meritorious candidates with good EAMCET ranks seek admissions at CBIT. The students are prepared and perfected to secure placements in MNCs through college Career Development Center.

ABOUT THE DEPARTMENT

Civil Engineering Department of the institute started functioning right from the inception of the institute, in the year 1979. It has well qualified, experienced and dedicated faculty and committed supporting staff. Apart from giving their best in academics, the students of the department are highly enthusiastic & actively participate in various co-curricular & extra-curricular activities. The laboratories of the department are well equipped with advanced and sophisticated instruments, to fully satisfy the training needs of the students and research and consultancy needs of the department as well. The department offers one UG programme (Two Sections) and one PG Programme (Structural Engineering). Conducting seminars, workshops and conferences on the latest developments in civil engineering, arranging expert lectures and industrial visits for the benefit of staff & students, is a granging expert lectures and Private Agencies and has completed a good number of for various Government and Private Agencies and has completed a good number of prestigious projects. It is a matter of great pride that this Department has submitted the draft for 'Water Policy' for the newly formed Telangana State.

ABOUT THE TRAINING PROGRAMME:

Bridges have been the symbols of Civilization and the standing examples of human Bridges have been the years. Bridge construction dates back to as old as the age of ingenuity over the years. Bridge construction dates back to as old as the age of primitive man and the bridge forms have evolved over centuries posing challenge to principle of this field reveals that although there is not much of change in the basic insight into this field reveals that although there is not much of change in the basic insight into this field reveals that although there is not much of change in the basic principles of analysis and design of bridges, it is the new materials and the principles of analysis and for the budding engineers to keep themselves abreast of the developments in bridge construction while comprehending the basics of bridge developments in bridge construction while comprehending the basics of bridge analysis and design. Realising this need, the Civil Engineering Department of CBIT analysis and design. Realising this training programme by utilizing the services has taken initiation in organising this training programme by utilizing the services of a renowned professional in the field as facilitated by AIC

TOPICS TO BE COVERED IN THE TRAINING PROGRAM

- Development of the bridge-form globally during the past 3500 years 1 day
- Why do bridges in our part of the world crack and demise much earlier than in many of the first world countries ?? – 2 days
- Economics and quantity-trends in alternative bridge-structure schemes –
 days
- Economics and quantity-trends in alternative flyover-structure schemes 1 day

OBJECTIVES OF THE TRAINING PROGRAM

This training programme is intended to enable the participants

- Understand and appreciate the evolution of bridge form over the years
- Know the specific reasons for why the bridges in this part of the world are more vulnerable to damages and decay
- Understand the economics of various types of bridge structures and the adaptability of various alternative forms
- . To gain exposure to various alternative form of flyover structures

ABOUT THE SPEAKER

Dr.Virindra K. Raina

Ph.D.(London), DIC (London), MICE (London), C.Eng.(London), P.Eng. (Ontario, Canada)

- Registered CHARTERED Engineer: UK and Europe
- Registered PROFESSIONAL Engineer: Ontario, CANADA
- Distinguished Chair Professor BRIDGES : AICTE

Dr. Virindra Kumar Raina is a towering personality in the field of bridge engineering. He is a highly qualified and experienced practicing professional civil engineer with sustained private sector experience.

Dr. Raina has completed many challenging consultancy assignments in over 20 countries in the world, like Qatar Sea link (40km long Causeway through the Arabian Gulf). He has designed and supervised construction of over 100,000 lanemeters of concrete bridges in different countries on various types of lanemeters in different substrata conditions. He has impurted training to many senior engineers, all over the world. Dr. Raina is a recipient of various

prestigious awards

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY (AUTONOMOUS), HYD-75 DEPARTMENT OF CIVIL ENGINEERING

Date: 29-06-2022

No: CBIT/CED/038/25-6-2022.

Note submitted to the Principal:

Sub.: Request for Budget approval for conducting workshop -Reg.

Ref.1. Letter of AICTE, SCRO; from Principal, Email Dated: 13-5-2022.

2: Department letter email to AICTE, SCRO, dated: 19-5-2022.

3: Email from AICTE, SCRO dated: 23-06-2022.

In Ref.1 cited above, AICTE has approved five training programs of 6 days each (every day two sessions of 3 hours each) on "Crying Needs in Bridge Engineering" to be delivered by Prof Dr. Virindra K. Raina, Distinguished Chair Professor - BRIDGES: AICTE to the Faculty and Students (UG & PG) from Civil Engineering and allied disciplines. AICTE, SCRO asked for the consent of CBIT to organise one such programme as a nodal centre. In the Ref2, Cited above, the department of Civil Engineering has prepared the budget estimate (Rs.1,80,000/-) and drafted a letter to the AICTE. AICTE has approved CBIT as a nodal center to conduct the above workshop from 22nd to 27th August, 2022 (Ref 3). The honorarium for the resource person will be borne by the AICTE. The expenses for lunch and snacks are proposed to be met from the registration fees. Hence an amount of Rs 65,000/- is the budget to be sanctioned by the Institute. The proposal and the budget for the workshop may be approved.

Head CED.

Enclosures:

Ref.2 & 3 above

An Amount be approxima

Binipal

Can de la contraction de la co

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY (A), Hyderabad Department of Civil Engineering

Date: 05-09-2022

Note Submitted to the Principal:

Sub: CBIT – CED -AICTE Approved One week Training program on Crying Need in Bridge Engineering for Capacity – Building – Adjustment of accounts - Reg.

Ref: 1. Email from Director FDC AICTE dated July 25, 2022.

Ref: 2.Letter for Budget Approval No- CBIT/CED/038/25-06-2022 dated - 29-06-2022.

The following is the expenditure incurred for the training programme mentioned in the subject:

EXPENDITURE DETAILS

	Posterdana		Amount					
s. No	Particulars							
1.	Conveyance charges (To Airport & return) on 21/08/2022							
2.	Conveyance charges (Hotel to CBIT and return)							
	22 nd to 27th August 2022(2000+2000+500)							
3.	Conveying charges (To Airport & return) 28/08/2022 + 2400 (1)							
4.	Parking charges at Airport on 21/08/2022							
5.	Parking charges at Airport on 28/08/2022		100.00					
6.	Food Fungasor from 23/08/2022 to 28/08/2022	465.41						
0.	a). 23.06.2022							
	b). 24.08.2022	450.40						
_	c). 25.08.2022	326.46						
_	d). 25.08.2022	644.70	3,526.86 400.00					
	c). 27.08.2022	784.95						
	d). 28.08.2022	854.94						
7.	Flower Bouquets for guests							
8,	Flight Tickets	7,871.00						
	a). Delhi to Hyderabad -21/08/2022	8,184.00						
	b). Hyderabad to Delhi – 28/08/2022	250.00						
	c). Aisle seat charges Delhi to Hyderabad	250.00	16,555.00					
	d). Aisle seat charges Hyderabad to Delhi		27,115.0					
9.,	Hospitality and Accommodation at the hotel							
-	Total Expenditure							

Total Expenditure excluding Hospitality and Accommodation at the hotel = 27.782

Advanced Drawn (15,000+12,000) = 27,000

Balanced to be reimbursed

782

An amount of Rs. 782/- is to be reimbursed to HoD (Civil), and the bill for Hospitality and Accommodation at the hotel Rs. 27,115/- to be paid to the account details given in the cancelled cheque attached.

Head, CED

Files

	Chaitanya Bharathi Institut	The state of the s						
	Crying Need in Bridge Engineeric							
5.No Name Participants List Designation								
	Dr.K.Jagannadha Rao	Faculty						
	Dr.M.V.Krishna Rao	Faculty						
	Sri A. Balaji Rao	Faculty						
	Dr. N. R. Dakshina Murthy	Faculty						
	Smt K. Manasa	Faculty						
	Sri. P. Srinivasa Reddy	Eaculty						
	Sri.E Maheshwar Reddy	Faculty						
7 140	Sri. M. Kalyan	Faculty						
	Dr. T. Chaitanya Srikrishna	Faculty						
	Sri. Vishwanath Gopisetty	Faculty						
		Research Scholar, NIT						
11	B.S.Chaitanya	Warangal						
	S.Vinod Kumar	Engineer						
10000	G.Karunakar	ME						
	A.Sai Krishna	ME						
15	S.V.muthesham Ahmed	ME						
_	S.Anil	ME						
17	M.Sai Maheshwar Reddy	ME						
-	SK.Humer	ME						
19	P.Rithvik Sai Kumar	ME						
	S.Kavya Sri	ME						
	D.Ashok Kumar	ME						
_	R.John	ME						
	Md.Maurijuddin	ME -						
24	M.A.Quadar	BE						
25	Sreejan Reddy Kandi	BE						
	chirag nankani	BE						
-	K.Anjaneya varma	BE						
-	P.Rakesh	BE						
29 F	(hyathi Vardhini	BE						
	S.Ibrahim	BE						
31 E	3.K.R.Srikari	BE						
	.Akhila	BE						
	Pravalika	BE						
	i.Tulasi	BE						
-	.Nandini	BE						
_	Sundoju rahul	BE						
	Aoosa Mohammed	BE						
	aivanth Kumar	BE ·						

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY Gandipet, Hyderabad – 500075

Report

on

AICTE Approved

One Week Practice - Oriented Intensive Training Program

or

Crying Needs in BRIDGE Engineering for CAPACITY-BUILDING 22-27, August 2022

Resource Person - Dr. Virindra K.Raina

Convener - Dr.K.Jagannadha Rao

The Following Topics were discussed in the Training Program by the speaker

DAY - 1

Development of the bridge-form globally during the past 3500 years

Dr.Virindra K.Raina has briefed about the historical development of bridges

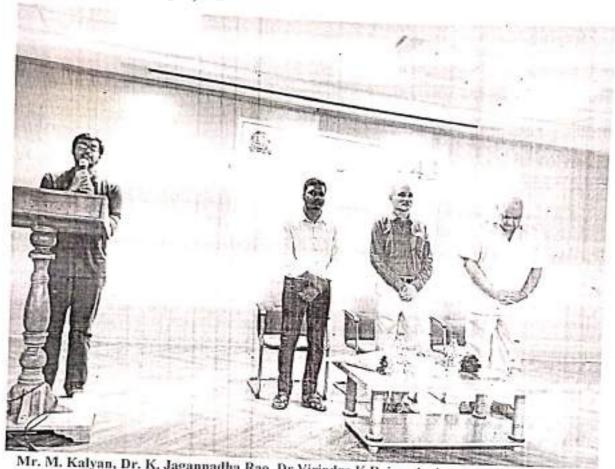
Back in 1502, the great master Leonardo da Vinci produced master sketch for a 240 M stone Structure intended to span the Golden horn inlet in Istanbul but then nearly 500 years ago, when the sketch was made, the available technology was incapable of realising such an ambitious structure. Later in 1840's the transition from timber to steel began. In this period cast iron was tried out by bridge builders in 1856.

Bessemer patented a process for making large quantities of steel economically by the turn of 19th century, the growing use and availability of structural steel and greater skills in analysis, design and construction-methods paved the way for longer span bridges. Many elegant bridges were built, like Lin-dern-thal's manhattan bridge (1909) with 450m span. Amman, a Swiss engineer, Amman's Verrazano narrow bridge in New York was opened in 1964 with a span of 1300m which was a landmark in history of long span suspension bridges.

Dr. Raina also explained the lessons in ensuring aerodynamic stability were learnt in a hard way by the tragedy of the 855 Tacoma Narrows Bridges which fluttered and perished in 1940 at a 64 km/hr wind. Later in 1960's a new type bridge of suspension bridge deck was made for the Tagus Bridge in Libson. Severn Bridge, Wales, and it was the first suspension bridge of the modern type (Aerofoil deck-section), 1962-1966. Dr. Raina also explained The Hyatt Regency hotel walkway collapse as a major introspection based on many a Bridge Disaster. Later he added that the Kings Bridge failure due to brittle fracture did not mean that welding of steel box girders was banned. It only underlined the need for the right welding technique to be made available for the bridges. He then discussed the series of box girder failures of the 1970's could not lead to the conclusion that there was anything fundamentally wrong with the thin plated structures.

Sound design is achieved above all by wisdom and judgment with which the designer applies his results with great courage and judgment are demanded of the Enquirer, as he has a task which requires freedom from bias while at the same time demanding a definite option "good judgment comes out of experience and good experience often comes out of bad judgement".

Dr. Raina concluded the session on Day 1 with a gratitude to a great prof. Fritz Leonhard. who hypothecated the use of A-form pylons with corresponding inclination of planes of cables, fan shaped smaller diameter cables at closer spacing etc., are the new trends in the design to realise the large spans.



Mr. M. Kalyan, Dr. K. Jagannadha Rao, Dr. Virindra K.Raina, during the inaugural session.

DAY - 2

Why do Bridges in our part of the world crack and Demise much earlier than in many of the first world countries??

Dr. Virindra K. Raina clarified the error we make when determining compressive strength by testing three cubes, which has an accuracy of 3/20. Later, he described the acceptable cube strength criterion, the appropriate time to start concrete curing, concrete mixing drum agitating rpm, effect of wind, relative humidity and ambient temperature for concreting. He then explained why Plastic concrete can develop cracks when the surface evaporation is much more than the rate of bleeding of the concrete. This majorly occurs in slabs and quite less in beams because beams have less surface area exposed to the atmosphere. But the lack of knowledge about this in the filed costed a contractor around \$64M USD.

The solutions to the above mentioned aspects were very clearly explained by Dr. Raina stating that the the cube should be tested when it is wet inside and dry outside, curing is done

right after its initial setting time and the concrete's initial setting time should be 45-60 min without additives and 120-180 min with additives like plasticisers and retarders. While mixing concrete, the speed should be 25rpm and it should be mixed well for 90-120 sec and while transporting the concrete the agitating speed should not be more than 2-5 rpm.

Dr. Raina explained the importance and effect of optimum temperature for concrete work and stated that it should be around 32°C, and variation in temperature will have adverse effects and results in poor durable concrete. The surface evaporation of concrete should be I lit/sqm/hr. This can also be calculated from the Neville's graph. He further suggested that, in order to tackle this issue when the temperatures are high in summers the concreting work should start from 5pm and continue all through night until morning 11am or accordingly where the temperature is below 32°C.

Dr. Raina went on to provide more comprehensive explanations of the various plastic shrinkage, plastic settlement, and contraction cracks, as well as the typical failure modes in concrete structures, such as flexural cracks, shear cracks, flexure-shear cracks, web shear cracks, failure in deep beams, shear-compression failure, cantilever failure, and torsional failure.

DAY - 3

Dr. Raina continued his talk on "Why do Bridges in our part of the world crack and Demise much earlier than in many of the first world countries??" on Day 3. He explained the various failures in bridge bearings, expansion joints, shrinkage cracks in abutment footings and also suggested measure to rectify such problems. He further continued to explain the pier-column subjected to sea water, delamination of concrete, plastic shrinkage cracks in r.c.wearing course, etc. The cause for shear, flexure and abutment crushing failure in bridges were clearly explained by Dr. Raina and further he suggested the measures to strengthen them.

Dr. Raina classified the Cracks mainly of 2 types, one is dead cracks – which never open, and the second is live cracks -which open and close. The 28days time is a green phase where the concrete is young and gains strength very fast during this phase the top surface shrinks faster than the bottom surface results in the example given 64 million USD loss. After 28 days the phase of the concrete is known as the service phase.

He further discussed the chemical cracks occur after 4 years that mostly occur in the areas of high moisture like Vizag and Bombay. The chemical cracks are due to Sulphate attack and Chloride attack. To avoid this Dr. Raina suggested to use Colloidal concrete (blast furnace slag cement) or use sulphate resisting cement when the temperatures of that area is below 25 degrees and should be strictly avoided in tropical regions

Dr. Raina explained the common repair technique in treating cracks, i.e. epoxy injection. He further added that it is advisable to use a 2-component epoxy (resin + hardener) for effectiveness. He further explained the crack healing by epoxy use various real life examples. He further explained the significance of stapling / stitching in arresting cracks.

DAY-4

Economics and quality-trends in alternative bridge-structure schemes

The training course's fourth day is titled "Quantity trends in certain alternative Flyover structure schemes." The program started with the Pearl of Perfection by the great master Leonardo Da Vinci, but the inspiration for it extends back many years to earlier from a log across a stream, successive logs jetting out, a cantilever, etc. The development of bridge forms, grade separators, viaducts, flyovers, etc. were also covered by Dr. Raina. He then went on to describe the requirement and significance of design, drawings, and bill of quantities that the customer is expected to provide.

Dr. Raina explained how to decide the trial dimensions, analysing a structure, designing based on iterations, detailing, drawings, bill of quantities and finally the cost. He then discussed the choice of construction materials, type of bridges to be considered for design based on the field conditions and extended to the efficiency of flanged I & T sections, voided slab deck.

As the discussion went from short span bridges to heavier and longer spans, Dr. Raina explained how circular void cells evolved into rectangular void cells, leading to the creation of the Box section. He continued shortly after by saying that a single cell box was transformed into a multiple cell box whose section depth was limited and offered greater torsional strength.

"FLY-the-traffic-OVER-and-across-an-obstruction" is how Dr. Raina defined the term "FLYOVERS." The significance of the flexibility and stiffness matrix approach of structural analysis was then discussed. Dr. Raina discussed the various types of sectional elements in a flyover girder, stability tower, precast abutments and wingwalls.

DAY-5

The training program's fifth day is titled "Economics and Quantity - Trends in alternative bridge structural plans." The resource person has described how bridges will be analyzed and developed in accordance with the client's requirements while taking into account a variety of alternative choices, such as the types of bridge, span, deck type, type of concrete, etc. Dr. V.K. Raina also went over the development of the drawings, detailing, and bill of quantities.

The development of building materials and construction techniques, including the voided deck slab, single cell box section, and multiple cell box section, was then covered by Dr. Raina. The resource person has described the relationship between span length and cost per unit of deck plain area as well as the estimated amounts of concrete and steel used in different types of bridge decks.

Dr. Raina also discussed the optimal span lengths for various bridge designs. Dr. Raina went into great depth on the various types of bridge structure, construction, traffic details, construction time, and maintenance for various types of bridges i.e., continuous beam and slab R.C.deck bridge(cast-in-situ), continuous box girder R.C. decks(cast-in-situ), simply supported precast prestressed girders with cast-in-situ R.C. diaphragms, simply supported

P.S.C. box girder. He then went on to discuss how different criteria, such as deck depth, span, cost per unit area, reinforcement, concrete content, prestressing force, etc., affect different bridge types.

DAY-6

Economics and quality-trends in alternative Flyover-structure schemes

Dr. Raina has continued his lecture from Day 5 by addressing the significance of span lengths (two, three, and four spans), the span-to-depth ratio, and concrete deck thickness for the safety and efficiency of the bridge structure. Different types of bridges, including continuous beam and slab R.C. deck bridges (cast in situ), continuous box girder R.C. decks (cast in situ), simply supported precast prestressed girders with cast-in-situ R.C. diaphragms, and simply supported P.S.C. box girder, were the subject of the design investigation.

These studies gave us some really useful information for developing a concrete bridge part. The design output was then described by Dr. Raina in terms of the reinforcement requirements based on different span lengths and span-to-depth ratios. Dr. Raina displayed the several forms of bridges, each with a different number of spans, span-to-depth ratios, and the accompanying concrete and reinforcement requirements, showing the most efficient type of bridge based on those specifications. The resource person's extensive material shows how the economics of a bridge is impacted by factors like the number of spans, span lengths, and span-to-depth ratios.

Finally, in addition to the necessary amount of concrete, the reinforcement in terms of kg/cu.m of concrete and kg/unit length was also discussed. Dr. Raina assimilated all of the available data and profoundly recommended the bridge that would be the strongest and most cost-effective.

PROFESSOR & HEAD

Department of Civil Engineering Chaitanya Bharathi Institute of Technology

GANDIPET, HYDERABAD-5000 075





Kokapet (Village), Gandipet, Hyderatiad, Telangana-500075, www.cbit.ac.in

AICTE Sponsored One week Training Program

150 Certified 9001:2015

-- Jiju

CRYING NEEDS IN BRIDGE ENGINEERING FOR CAPACITY-BUILDING

CERTIFICATE

This is to certify that Mr. A.Sai Krishna, III Semester M.E., CBIT(A), Hyderabad has participated and successfully completed the AICTE Sponsored One week Training Program on "CRYING NEEDS IN BRIDGE ENGINEERING FOR CAPACITY-BUILDING" organized by the Department of Civil Engineering in association with Prof.V.K.Raina during 22 - 27 August, 2022.

Dr. K. Jagannadha Rao

Dr. P. Ravinder Reddy Principal



Chaitanya Bharathi Institute of Technology (A) Department of Civil Engineering

Circular

Date: 23-01-2023

This is to inform you that a value added 3-week course on "Applications of Remote Sensing and GIS" will be conducted out from 3.05-4.05 PM every day far 2nd year (3nd sensester) anadeurs of A1 and A2 sensions in clausrooms A303/A304 Practical (or Hands-on) sensions are schoduled to be conducted an every Monday (2.05-4.05 PM). Classes will be effective from 25-01-2023 and will continue till 10-02-2023.

Course modules along with content and assessment computents are attached herewith for your reference.

No.	Contest
Module-1	Introduction to remote sensing
Module-2	Satellites and semon
Hands-on	Application of remote sensing in civil engineering disciplines: Environmental engineering applications
Madule-3	Congraphical Information System (GIS):
Module-i	Application of GIS in EIA and WRPM
Hands-on	Application of GIS in civil engineering disciplines: Water resources engineering applications.

Course coordinator

(Dr. D. Bharath Kimur)

HODE

(CED)

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY GANDIPET, HYDERABAD – 75

LIST OF STUDENTS PARTICIPATED

15.02.2023

The following students have participated in a 3-week course on "Applications of Remote Sensing and GIS" which was conducted from 25.01.2023 to 10.02.2023 daily from (2:05 pm to 4:05 pm).

Date	Roll Numbers							
17.02.2023	1601-21-732-001-1601-21-732008, 1601-21-732010-1601-21-732-19,							
	1601-21-732-022-1601-21-732-024, 1601-21-732027-1601-21-732032,							
	1601-21-732-034-1601-21-732046, 1601-21-732048-1601-21-732049,							
	1601-21-732-051-1601-21-732-054, 1601-21-732056- 1601-21-732-061,							
	1601-21-732-064-1601-21-732073, 1601-21-732-075 - 1601-21-732093,							
	1601-21-732-095-1601-21-732-131, 1601-21-732-301- 1601-21-732-							
	315.							

The following students had attendance of more than 80% over the entire duration of the course.

PROFESSOR & HEAD
DEPARTMENT OF CHARLES OF TECHNOLOGY
DIAMETERS HAVE THE OF TECHNOLOGY
DIAMETERS HAVE THE OF TECHNOLOGY