9GUJARAT COUNCIL ON SCIENCE & TECHNOLOGY
Dept of Science and Technology, Govt of Gujarat
Format for the Submitting the Programme Report

1	Title of the Programme:	Research methodology and soft computing techniques for Civil Engineering
2	Category: (Seminar/Symposium/Workshop/STTP/Conference/etc.)	STTP
3	Date/s and Duration:	2 – 7 December 2019, 06 Days
4	Venue:	D2 Seminar Hall, C. K. Pithawala College of Engineering and Technology, Nr. Malvan Mandir, Via Magdalla Port, Dumas Road, Surat, Gujarat-395007
5	Dignitary/s present at inaugural function: (i) Name (ii) Designation (iii) Name of institute (iv) Contact details	Dr. S R. Joshi Principal, GEC, SURAT and Associate Dean of South zone (GTU) Dr. S. & S. S. Ghandhy Government Engineering College, Surat 0261-2653139, 09429265099
6	Invited speaker / Expert: (i) Name (ii) Designation (iii) Name of institute (iv) Contact details (v) Topic of lecture (vi) Lecture / presentation notes	Dr. J Banerjee Professor, MED SVNIT, SURAT 9879277675 Computational Fluid Dynamics: Basics and Applications
		Dr. S Arkatkar Associate Professor, CED, 8140252777 SVNIT, SURAT How to get research grant and how to write research proposal
		Prof. Darshan Mehta Assistant Professor,CED GEC, Surat 9428959910 1-D modeling of River Reach using HEC RAS to Assess Capacity: A case Study of Surat city
		Dr. G. J. Joshi Professor, CED, SVNIT, Surat 9879564862 Inferential Statistics for Civil Engineers
		Dr. Reena Popawala Associate Professor, CED, CKPCET, Surat 9724332400 Pipe condition assessment model using Analytic Hierarchy Process
		Dr. Chetan Patel Assistant Professor, CED, SVNIT, Surat 9898603853 Application of GIS for Civil Engineers
1		Dr. Tandra Banerjee Assistant Professor, CED, CKPCET, Surat

		9824420044 Nanoparticle evolution and dispersion from vehicles: an experimental analysis
		Dr. R. A. Christian Professor, CED, SVNIT, Surat 9426185768 Fuzzy Logic: Basics and Application for Civil Engineers
		Dr. N.D. Jariwala Assistant Professor, CED, SVNIT,Surat 9427492963 Application of Fuzzy rule based model in Civil Engineering
		Dr. Atul K Desai Professor, AMD, SVNIT, Surat 9327433390 Recent advances in Structural and Geotechnical Engineering
		Dr. BhavinTandel Assistant Professor, CED, SVNIT, Surat 9825553175 Application of Genetic Alogorithm In Prediction of Noise Pollution
		Dr .S M. Yadav Professor, CED, SVNIT, Surat 9426152906 Application of ANN for Civil Engineers
		Dr. JigarSevaliya Professor, CED, SCET, Surat 9909014896 Application of Computational Fluid Dynamics (CFD) in Civil Engineering
		Prof. Boski Chauhan Assistant Professor, CED, CKPCET, Surat 9898865266 Application of Vizzim software in Transportation Engineering
		Mustafa K. Sonasath Transport Planner, Surat Sitilink Ltd. 9913758346 Intelligent Transportation System, ITS: A case study of Surat City
		Dr. PrafulTimbadia Associate Professor, CED, SVNIT, Surat 9426137917 Data collection, Analysis and Presentation
		Dr. A. Khambate Professor, CED, SVNIT, Surat 9662539337 Application of Fuzzy TOPSIS in Environmental Engineering
		Dr. DivyanginiGohil

		Associate Professor, CED, CKPCET, Surat 9426741809 Analysis Performance of Shallow foundation under earthquake forces Using MIDAS software
		Prof MitalDholawala , Dr. Tandra Banerjee, &Dr.Reena Popawala Assistant Professor, CED, CKPCET, Surat 9712904100 Stress management in journey of Research
7.	Total no. of participants (provide full list with name, address, institutions and contact numbers)	

Sr. no.	Name of Faculty	Name of Institute	Contact detail
1	NIDHI CHIRAG PANDYA	G.P.VALSAD	9426765262
2	MAYURI J. PATEL	DGGEC,SURAT	9099355127
3	HARESHKUMAR DAHYABHAI GOLAKIYA	GEC,DAHOD	9824083270
4	DIVYANGI SHAH	BITS,VADODARA	9727267437
5	RUCHI BALA PARMAR	BITS,VADODARA	9724925461
6	MITALI P MAKHANIA	RESEARCH SCHOLAR, GTU	9898571362
7	NIRAVKUMAR BALDEVBHAI UMRAVIA	GEC,DAHOD	9998511458
8	CHINTAN BHADRESHKUMAR NAIK	S.S.A.I.E.T, NAVSARI	7359933090
9	MRUNALINI H. RANA	SILVER OAK COLLEGE OF ENGINEERING & TECHNOLOGY	9879792545
10	MAULIK G. KAKADIYA	CGPIT, MALIBA	7285858569
11	KRUTARTH S PATEL	CGPIT, MALIBA	9033259663
12	TIMOL MUBLIN MUNIRAHMED	SNPITRC, BARDOLI	8238264670
13	KHOKHAR PAYAL RAMESHBHAI	SSASIT,SURAT	8905181692
14	SWATI AJITBHAI PAREKH	SSASIT,SURAT	8866999532
15	RINKAL V. SUTARIA	SSASIT,SURAT	7405343246
16	DIVYANGINI GOHIL	CKPCET, SURAT	9426741809
17	BOSKI PRANAV CHAUHAN	CKPCET, SURAT	9898865266
18	MAITRI MAYANKKUMAR RAVAL	CKPCET, SURAT	9099040880
19	PRANAV H. DESAI	CKPCET, SURAT	9427679123
20	BHATARIYA HINAL JAYANTBHAI	SCET,SURAT	9978693062
21	MEHTA BHOOMI GANESHBHAI	SCET,SURAT	7285880567
22	RUDRI JAYESH VAIDYA	SCET,SURAT	8140423303
23	MITAL J. DHOLAWALA	CKPCET	9712904100
24	HIRAL B. PATEL	CKPCET	9723373707
25	PRITI A. PATEL	CKPCET	9825643504
26	MODI JINAL KAMLESHKUMAR	B. A.I.T, SURAT	7046297480

27	RANA HETAL M	SCET,SURAT	9537419530
28	SAILOR KRUPA NITINBHAI	SCET,SURAT	8866123787
29	KRUTIKA A. CHAUHAN	G.I.D.C, NAVSARI	9624631000

8. PROGRAM SUMMARY

One week Short Term Training Program on Research Methodology and Soft Computing Technique, RMSCT 2019 for Civil Engineers from 02/12/19 to 06/12/19 was organized by Civil Engineering Department of C. K. Pithawala College of Engineering and Technology, Surat. The focus of this workshop was on development of research methodologies and applications of soft computing techniques in domains like structural engineering, design, hydraulic engineering, geotechnical engineering, transportation engineering, and environmental engineering.

The training program provided a forum for critical synthesis of literature, formulation of research questions and research gaps, composition of research hypotheses, proper design of field data collection and experiments, collection and analysis of data (observational and experimental), modeling of stochastic data using soft computing techniques, and interpretation and dissemination of research results.

The schedule of the six days program is as follows:

Day1 (02/12/19): The chief guest for the inauguration function was Dr. S. R. Joshi, Principal, DGGEC Surat. The principal of C. K. P. C. E. T., Surat, Dr. Anish Gandhi welcomed the audience and briefed them about the institute. Dr. Priti Patel, H. O. D., Civil Engineering Department highlighted the Civil Engineering Department Of the institute in her speech. This was followed by a speech by Dr. Reena Popawala, Co-ordinator of the event, talking about the various facets of the S. T. T. P. Dr. Tandra Banerjee, Co-Coordinator of the event then thanked all the agencies and people responsible for the successful conduction of the program. The master of the ceremony was Prof. Mital Dholawala, Assistant Professor, Civil Engineering Department.

The technical session started with a lecture by Dr. Jyotirmay Banerjee, Professor, Mechanical Engineering Department, S.V. N. I. T., Surat on Computational Fluid Dynamics: Basics and Applications. The second lecture was by Dr.S. Arlatkar, Associate Professor, Civil Engineering Department,S.V. N. I. T., Suraton How to Get Research Grant and How to Write Research Proposal. The day concluded with a lecture by Prof.Darshan Mehta, Assistant Professor, Civil Engineering Department, DGGEC, Surat on 1-D Modelling of River Reach Using HEC RAS to Assess Capacity: A Case Study of Surat City.

Day2 (03/12/19):The session started with a lecture on Inferential Statistics for Civil Engineers by Dr. G. J. Joshi, Professor, Civil Engineering Department, S.V. N. I. T., Surat. The session was followed by a lecture on Pipe Condition Assessment Model using Analytic Hierarchy Processby Dr. Reena Popawala, Associate Professor, Civil Engineering Department, C. P. C. E. T., Surat. Post lunch session started with a lecture by Dr. Chetan Patel, Associate Professor, Civil Engineering Department,S.V. N. I. T., Surat on Application of GIS for Civil Engineers and the day concluded with a lecture on Nanoparticle Evolution and Dispersion from Vehicles: An experimental Analysis by Dr. Tandra Banerjee, Assistant Professor, Civil Engineering Department, C. P. C. E. T., Surat.

Day 3 (04/12/19): A Lectureon Fuzzy Logic: Basics and Application for Civil Engineers by Dr. R. A. Christian Professor, Civil Engineering Department,S.V. N. I. T.,Surat started the day. The second session was a lecture by Dr. A. K. Khambate, Professor, Civil Engineering Department,S.V.N.I.T.,Suraton Application of Fuzzy TOPSIS in Environmental Engineering. Post lunch session included lectures on Recent Advances in Structural and Geotechnical Engineering by Dr.Atul Desai, Professor, Applied Mechanics Department, S.V. N. I. T., Suratand a lecture on Application of Genetic Algorithm: Basic Theory and Applications by Dr.Bhaven Tandel.

Day 4 (05/12/19): The day started with a lecture on Predicting Storage Capacity of Sukhi Reservoir Using ANN by Dr. S. M. Yadav, Professor, Civil Engineering Department,S.V.N.I.T., Suratand was followed by the next lecture onApplication of Computational Fluid Dynamics (CFD) in Civil Engineering by Dr. JigarSevaliya, Professor, Civil Engineering Department, S. C. E. T., Surat. Lecture on Application of Vissim Software in Transportation Engineering by Prof. Boski Chauhan, Assistant Professor, Civil Engineering Department, C. K. P. C. E. T., Surat started the post lunch session.The day concluded by a talk on Intelligent Transportation System, ITS: A case study of Surat City by Mustafa K. Sonasath, Transport Planner, Surat Sitilink Ltd.

Day 5 (06/12/19):Pre-Lunch session day included two lectures. The first lecture was on Data collection, Analysis and Presentation, by Dr. Praful Timbadiya, Associate Professor, Civil Engineering Department, S.V.N.I.T., Surat. The second lecture was on Application of Fuzzy rule based model in Civil Engineering by Dr. Namrata Jariwala, Assistant Professor, Civil Engineering Department,S.V.N.I.T.,Surat. The Post lunch session involved a visit to Surat Fort for covering aspects likePlanning, Restoration and Rehabilitation of a Heritage Structure. Mr. SumeshModi, Architect interacted and explained every aspects of the restoration process to the participants.

Day 6 (07/12/19):The last day of the training program started with a lecture on Analysis Performance of Shallow Foundation Under Earthquake Forces Using MIDAS Software by Dr. Divyangini Gohil, Associate Professor, Civil Engineering Department, C. K. P. C. E. T., Surat. The last lecture of the program was a joint lecture by Dr. Tandra Banerjee, Dr. Reena Popawala and Prof. Mital Dholawala on Stress Management in Journey of Research. The program concluded with a valedictory session involving feedback session and certificate distribution.

9. Finale Statement of Income and Expenditure:

STATEMENT OF INCOME				
(1)INCOME FROM REGISTRATION FEES				
PARTICIPANTS	NUMBER	REGISTRATION FEES	TOTAL AMOUNT(RS)	
STUDENTS PG/RESEARCH SCHOLAR	09	1200	10800/	
FACULTIES	20	1500	30000/	
TOTAL PARTICIPANTS	29	**TOTAL INCOME**	40800/	**40800/-**
SANCTIONED FINANCIAL ASSISTANCE FROM GUJCOST				**50000/-**
TOTAL INCOME				**90800/-**

STATEMENT OF EXPENDITURE				
SR. NO	PARTICULARS	NOS.	COST PER ITEM	AMOUNT IN (RS)
1	FLOWER BOUQUET	5	40	200/-
2	STTP KIT (FOLDER+NOTE PAD+I CARD+PEN)+ CERTIFICATE	35	87.40	3059/-
3.	STTP BANNER	2	210	420/-
4.	SMALL WATER BOTTLES			150/-
5.	WATER JUG & BOTTLES			500/-
6.	MOMENTO	25	60	1500/-
		01	110	110/
7.	AFTERNOON TEA (CANTEEN)	25 X 4	5	500/-
8.	MORNING TEA+ BREAKFAST+ LUNCH (2 TO 7 DEC 2019) 6 DAYS			37000/-
9.	SNACKS FOR EXPERT + (LUMPSUM)			630/-
10.	DISPOSABLE PLASTIC GLASS			240/-
11.	ENTRY FEES FOR VISIT OF FORT	28	40	1120/-
12.	REMUNERATION OF EXPERTS	19	2000	38000/
TOTAL EXPENDITURE (Rs.)				83429

TOTAL INCOME (Rs.)	TOTAL EXPENDITURE (Rs.)	Unspent Amount(Rs)
90800/-	83429/-	7371/-

TOTAL EXPENDITURE (Rs.)	Registration Fees(Rs.)	Amount Expected from GUJCOST(Rs.)
83429/-	40,800/-	42629/-

UTILISATION CERTIFICATE

For the financial year (1st April 2019 to 31st March 2020 in every financial year)

1	Title of the Project / Scheme		Research methodology and soft computing techniques for Civil Engineering
2	Name of the Institute		C.K.PITHAWALA COLLEGE OF ENGINEERING & TECHNOLOGY,SURAT
3	Name of Director		Dr. ANISH H.GANDHI
4	**GUJCOST** Sanction Order No & Date of sanctioning the project		**GUJCOST/Seminar Grant2360/2019-20 /806 dated 10th June 2019**
5	Amount brought forward from the previous financial year. **GUJCOST** letter no and date on which the authority to carry forward the said amount was given.		NIL
6	Amount to be received from **GUJCOST** during the Financial year (Sanction order No. & date as per Sr. No. 4)		**50000/-**
7	Total amount that was available for expenditure incurred during the financial year (Sr. 5+6)		**50000/-**
7(a)	STTP Registration Fee		**40800/-**
8	Actual Expenditure Incurred during the financial year (up to 31st March)		**83429/-**
9	Balance amount available at the end of a financial year (up to 31st March) (Sr. 7 - 8)		**NIL**
10	Unspent balance refunded, if any (please give details of chq no. & Chq Dt., with Forwarding letter no. & Ltr dt.)		**NIL/-**
11	Amount to be received from GUJCOST.		**42629/-**

Certified that the expenditure of Rs. 83429/-(Rupees EIGHTY THREE THOUSAND FOUR HUNDRED TWENTY NINE ONLY) mentioned against column 8 was actually incurred for STTP AT CKPCET, SURAT centre for the purpose for which it was sanctioned.

Place: CKPCET,SURAT

Signature of the   Signature of   **Signature of Head of the**
Project Coordinator   **Chartered Accountant**   **Institution/Organization**
                              FOR KALESH SHAH & CO.
                              Chartered Accountants

                              (K.K.SHAH)
                              Proprietor
                              M.No.045785
                              FIRM REGN.NO.113182 W
                              DATE: 17-12-2019.
                              UDIN: 19045785AAAAHG2086