

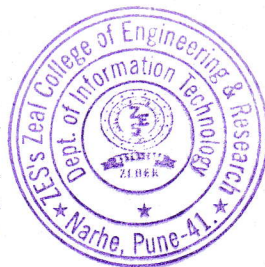



**ZEAL EDUCATION SOCIETY'S**  
**ZEAL COLLEGE OF ENGINEERING AND RESEARCH**  
**NARHE | PUNE -41 | INDIA**  
**DEPARTMENT OF INFORMATION TECHNOLOGY**

**INDEX**

**6.3.3 Percentage of teaching and non-teaching staff participating in Faculty development Programmes (FDP), professional development /administrative training programs during the A.Y. 2017-18**

Dates (from-to) (DD-MM-YYYY)	Title of the FDP / professional development / administrative training program	No. of participants	Link to relevant document / brochure / report hosted on official institutional website
06/06/2017 to 10/06/2017	Discrete Mathematics and Mathematical Modeling	50	
28/08/2017 to 01/09/2017	Firewall Installation, Configuration and Management	34	
11/12/2017 to 16/12/2017	STTP on system programming & advances in compiler construction	10	



  
**HOD**  
Dept. of Information Tech. Engg.  
ZES's Zeal College  
of Engineering & Research,  
Narhe, Pune - 411 041



**ZEAL EDUCATION SOCIETY'S**  
**ZEAL COLLEGE OF ENGINEERING & RESEARCH**  
**DEPARTMENT OF INFORMATION TECHNOLOGY**  
Sr.No. 39, Narhe, Pune-41. phone no. 020-67206127  
Website:www.zcoer.in

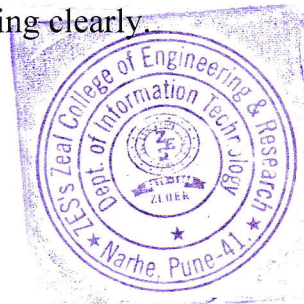
## **Report : Discrete Mathematics and Mathematical Modeling**

One week National level Short Term Training Program on “**Discrete Mathematics and Mathematical Modeling**” was organized by Department of Computer Engineering and Information Technology of Zeal college of Engineering and research during 6<sup>th</sup> to 10<sup>th</sup> June 2017. Total 34 participants from various engineering institutes and industries across Maharashtra state had participated in this workshop.

The aim of this STTP was to bring active and emerging topics of discrete mathematical models to describe our beliefs about how the world functions. In mathematical modeling, we translate those beliefs into the language of mathematics. There is a large element of compromise in mathematical modeling. The majority of interacting systems in the real world are far too complicated to model in their entirety. Mathematical modeling can be used for a number of different reasons.

### **Objectives:**

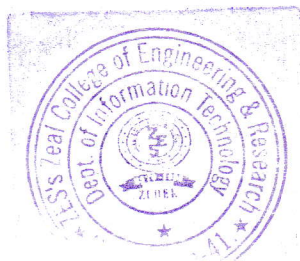
- To explore the concepts of discrete mathematics with its Engineering Applications.
- To provide new insights and knowledge about the topic through close interactions/discussions with the senior Faculty Members/Scientists and Experts of the respective field.
- To study how discrete objects combine with one another.
- To understand how computer implementations are significant in applying ideas from discrete mathematics to real world problems.
- To learn appropriate use of set, function and relation models to understand practical examples, and interpret the associated operations and terminologies in context.
- To determine number of logical possibilities of events and to learn logic and proof techniques to expand mathematical maturity.
- Formulate problems precisely, solve the problems, apply formal proof techniques, and explain the reasoning clearly.



Various experts from industries and academic institutes had contributed to this workshop by their able guidance. Following topics get covered in this workshop.

1. Set Theory & Logic, Relations and Functions by Dr. Om Prakash IIT, Patna.
2. Graph Theory by Dr. Charusheela Deshpande , College of Engineering Pune.
3. Permutation, Combinations & Discrete Probability by Dr. Swanand Khare IIT, Kharagpur.
4. Algebraic Structure & Coding by Dr. B. N. Waphare, Mathematics Department SPPU, Pune.
5. Tress by Dr. S.S.Barde, SKNCOE, Pune
6. Trees and its Applications by Dr. Sunil Dhore, Army Institute of Technolgy, Pune.
7. Applying Mathematical Modeling in research by Dr. P. N. Mahalle, BOS, Chairman, IT, SPPU, Pune.
8. Mathematical modeling by Prof. S. S. Shelke, PICT Pune.

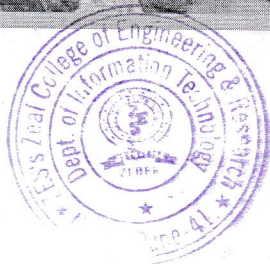
This Short term training program was inaugurated by **Dr. A. B. More**, Executive Council Member, ISTE, **Dr. Parikshit N. Mahalle** BOS, Chairman, IT, SPPU, Pune, **Dr. Om Prakash**, IIT, Patna **Dr. Sanjay A. Deokar**, Campus Director Zeal Education Society, **Dr. A.M.Kate** principal Zeal college of Engineering and Research, **Prof. S.M.Sangve**, Head of Computer Engineering Department, **Prof S.U. Kadam**, Head of Information Technology department.



## Day wise Session plan

Day	Date	Time	Topic	Resource Person
Day 1	06-06-2017	10:00 am to 12:00 pm	Set Theory & Logic	Dr. Om Prakash IIT, Patna
		12: 45 pm to 2:45 pm	Set Theory & Logic	Dr. Om Prakash IIT, Patna
		3:00 pm to 5:30 pm	Graph Theory	Dr. Charusheela Deshpande , COEP, Pune
Day 2	07-06-2017	09:00 am to 11:00 am	Permutation, Combinations & Discrete Probability	Dr. Swanand Khare IIT, Kharagpur
		11: 15 am to 1:15 pm	Permutation, Combinations & Discrete Probability	Dr. Swanand Khare IIT, Kharagpur
		2:00 pm to 4:00 pm	Relations and Functions	Dr. Om Prakash IIT, Patna
		4:10 pm to 5:30 pm	Relations and Functions	Dr. Om Prakash IIT, Patna
Day 3	08-06-2017	09:00 am to 11:00 am	Algebraic Structure & Coding	Dr. B. N. Waphare, SPPU, Pune
		11: 15 am to 1:15 pm	Algebraic Structure & Coding	Dr. B. N. Waphare, SPPU, Pune
		2:00 pm to 4:00 pm	Trees	Dr. S.S.Barde, SKNCOE,Pune
		4:10 pm to 5:30 pm	Trees	Dr. S.S.Barde, SKNCOE,Pune
Day 4	09-06-2017	9:00 am to 11:00 pm	Applying Mathematical Modeling in research	Dr. P. N. Mahalle, BOS, Chairman, IT, SPPU, Pune
		11: 15 am to 1:15 pm	Mathematical Modeling	Prof. S. S. Shelke, PICT Pune
		2:15 pm to 4:15 pm	Mathematical modeling	Prof. S. S. Shelke PICT Pune
Day 5	10-06-2017	10: 00 am to 1:00 pm	Mathematical Modeling	Dr. S. R.Dhore, AIT, Pune
		2:00 pm to 4:00pm	Mathematical Modeling	Dr. S. R.Dhore, AIT, Pune

**Photo Gallery of Discrete Mathematics and Mathematical Modeling:**





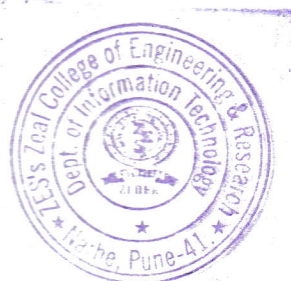
Convener : Prof. Sandeep U. Kadam

Prof. S.M. Sangve

Head of Information Technology

Head of Computer Engineering

HOD  
 Dept. of Information Tech. Engg.  
 ZES's Zeal College  
 of Engineering & Research,  
 Narhe, Pune - 411 041.



## Advisory Committee

- Dr. V. B. Gaikwad**  
Dean, Science & Technology, SPPU, Pune
- Dr. V.H. Patil**  
Coordinator, BOS, Computer Engineering, SPPU, Pune
- Dr. S.K. Shinde**  
Chairman, BOS, Computer Engineering, Mumbai University.
- Dr. P. N. Mahalle**  
Chairman, BOS, Information Technology, SPPU, Pune
- Dr. P. D. Patil**  
BOS Member, Computer Engineering SPPU Pune
- Dr. R. R. Deshmukh**  
Head, Department of CSE & IT, DBAMU, Aurangabad
- Dr. D.M. Thakore**  
Head, Computer Engineering, BVDUCOE, Pune
- Dr.S.R. Sakhare**  
Head, Computer Engineering, VIIT, Pune
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Executive Secretary, ISTE
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Head, Computer Engineering, (Shift II), ZCOER, Pune
- Dr. A. K. Khandekar**  
Professor, E&TC, ZCOER, Pune

## Chief Patron

**Hon 'ble Mr. J. S. Katkar**      **Hon 'ble Mr. S. M. Katkar**  
Executive Director, ZES, Pune      Founder Director, ZES, Pune

## Patron

**Dr. S. A. Deokar**      **Prof. P.K. Desai**  
Director, ZES, Narhe      President, ISTE

**Dr. A. M. Kate**  
Principal, ZCOER, Pune

## Convener

**Prof. S. U. Kadam**      **Prof. S. M. Sangve**  
Head, Information Technology      Head, Computer Engineering

## Coordinator

**Prof. U. L. Talware**      **Prof. A. R. Sheikh**  
Computer Engineering      Information Technology

## Resource Persons



**Dr. Om Prakash**  
IIT, Patna



**Dr. Swanand Khare**  
IIT, Kharagpur



**Dr. B. N. Waphare**  
Savitribai Phule Pune University, Pune.



**Dr. C.M. Deshpande**  
College of Engineering Pune



**Dr. P.N. Mahalle**  
SKNCOE, Pune



**Dr. S.R. Dhore**  
Army Institute of Technology, Pune



**Prof. S.S. Shelke**  
PICT, Pune



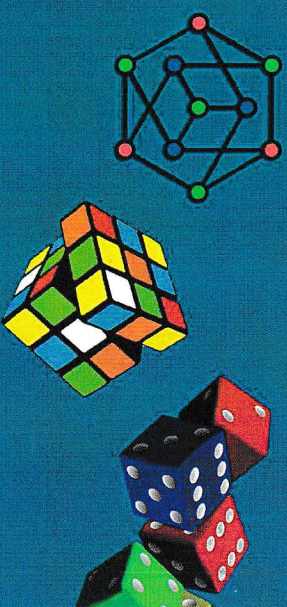
ESTD-1998

ISTE Approved

One Week National Level  
Short Term Training Program o

**Discrete Mathematics**  
**Mathematical Modeling**

6<sup>th</sup> June to 10<sup>th</sup> June 2017



Organized by  
Department of Computer Engineering  
Information Technology

ZEAL EDUCATION SOCIETY'S  
ZEAL COLLEGE OF ENGINEERING  
AND RESEARCH, PUNE- 411041.

### Vision :

To impart value added futuristic technological education

### Mission :

To contribute to society through the pursuit of educational and research.

To provide individual attention for character building to make students enlightened.

To produce competent and socially responsible professionals

## About Zeal Education Society:

Zeal Education Society (ZES) is established in year 1996 under able guidance of Hon'ble Shri. S. M. Katkar to noble cause of education. During last few years, ZES has proved for being a well known organization in the field of education. Within the time span of 20 years, ZES has established Dnyanganga English Medium school, Dnyanganga Junior college, Dnyanganga College of education, Silver Crest School at Hingane Campus and Zeal College of Engineering and Research, Zeal Polytechnic, Zeal Institute of Business Administration, Computer Application & Research, Zeal Institute of Management & Computer Application at Narhe Campus.

## About Zeal College of Engineering and Research:

Zeal Education Society's Zeal College of Engineering and Research (Formerly known as Dnyanganga College of Engineering and Research) is established in June 2007 which symbolized the beginning of new era in technical education. The Institute has been approved by AICTE, DTE and affiliated to Savitribai Phule Pune University, Pune. The Institute offers under graduate and post graduate engineering degree programmes in Information Technology, Computer, Electrical, Mechanical, Civil and Electronics & Telecommunication. The institute is also granted as PhD research center in Electronics & Telecommunication and Mechanical Engineering under Savitribai Phule Pune University, since 2013. Well qualified and experienced faculties with good research background are one of the key features of the institute. With state of art research, infrastructural, sports, cultural facilities the campus provides excellent academic ambience for the students. Dedicated Training and Placement Cell of the institute ensures a bright future to its students.

## About Department:

Departments of Computer Engineering and Information Technology are like prism reflecting the manifold shades of learning and co-curricular activities and determined towards the goal of providing innovative and quality education with high standard to achieve academic excellence. The Departments of Computer Engineering and Information Technology are facilitated with state of the art infrastructure and well equipped laboratories. We are confident that our students will emerge as assets not only to this institution and to the organization they belong, but also to the country at a large.

## About STTP:

Discrete Mathematics is a branch of mathematics involving discrete elements that uses algebra and arithmetic. It is increasingly being applied in the practical fields of mathematics and computer science. It is a very good tool for improving reasoning and problem-solving capabilities. This STTP is intended to explain the fundamental concepts of Sets, Relations and Functions, Mathematical Logic, Group theory, Counting Theory, Probability, Mathematical Induction and Recurrence Relations, Graph Theory, Trees and Boolean Algebra. Mathematical modeling translates real world problems into the language of mathematics. Another objective is to create awareness about applying mathematical modeling to the problems of Computer Engineering.

## Objectives:

- To explore the concepts of discrete mathematics with its Engineering Applications.
- To provide new insights and knowledge about the topic through close interactions/discussions with the senior Faculty Members/Scientists and Experts of the respective field.
- To study how discrete objects combine with one another.
- To understand how computer implementations are significant in applying ideas from discrete mathematics to real world problems.
- To learn appropriate use of set, function and relation models to understand practical examples, and interpret the associated operations and terminologies in context.
- To determine number of logical possibilities of events and to learn logic and proof techniques to expand mathematical maturity.
- Formulate problems precisely, solve the problems, apply formal proof techniques, and understand the reasoning clearly.

## Content of STTP:

Short Term Training Program is intended to explore the knowledge and techniques in following areas of Discrete Mathematics.

- Set Theory and Logic
- Relations and Functions
- Permutation, Combination & Probability
- Graph Theory
- Trees
- Algebraic Structures and Coding
- Mathematical Modeling

## Registration Details:

Please visit following link for registration:

<https://goo.gl/4t47GU>

Last Date of Registration: May 31, 2017

For more information please contact

Prof. S. S. Awate (8378 989 737)

Prof. S. P. Vanjari (9503 155 541)

## Mode of Payment:

Online: You can make online Payment using NEFT/IMPS  
Account No : 053011100003398  
IFSC Code : ABHY00065110,  
MICR Code : 411065013  
Bank : Abhyudaya Co-op, Bank Ltd. Sinhgad road, Pune  
Participants should mail transaction receipt of online payment to [dmm@zealeducation.com](mailto:dmm@zealeducation.com)

Accommodation: Paid Accommodation is available if required  
Contact : Prof. S. R. Gajbhaye (7030479786)

## Registration Fees:

Faculty /PG Student/Research Scholars	Rs.1
Industry Person	Rs. 2





One Week National Level Short Term Training Program on  
"Discrete Mathematics and Mathematical Modeling"

(6<sup>th</sup> June to 10<sup>th</sup> June 2017)

Participants Attendance List

Date-08/06/2017

Sr No	Name of Participant	Morning	Evening
1	Mrs. Pooja V. Belhake		
2	Harshada Kokate	HK	HPK
3	Mr. S.N. Patil	SNP/6/17	SNP
4	Mr. Yogesh Muzumkar		
5	Bhauasaheb Dane	BPDane	BPDane
6	Pereira Danny J.		
7	Shakadwipi A.J.	ASJ	ASJ
8	R.S. Pisal	RSPisal	RSPisal
10	Mrs. S.H. Chandak		
11	Mrs. J.A. Deshpande	JAD	JAD
12	Smt. Dipmala B. Trimukhe	JMS	JMS
13	PRAVIN S. GAME		
14	Bhushan Zope		
15	Chougule Y.A.		
16	Mandar V. Datar		
17	Sandeep Borgankar		
18	S.A. Pahl	SA	SA
19	Arnol N. Dumbare		
20	Bhagyashri Vyas		
21	Samadeita Gulra		
22	Miss. Wale Smrita S.		
23	Joshi Dhanashri Pramod		

Sr No	Name of Participant	Morning	Evening
24	Nimbalkar S. S	<del>S.S.</del>	<del>S.S.</del>
25	Borate Sukesh	<del>S.P.</del>	<del>S.P.</del>
26	Dhigade N. B.	<del>N.B.</del>	<del>N.B.</del>
27	Pooja Patil	<del>P.P.</del>	
28)	Kajal Agrawal	<del>Agrawal</del>	<del>Agrawal</del>
29	Hansha R. Sonune	<del>S.O.</del>	<del>S.O.</del>
30.	Ms. Vijayalaxmi M.K	<del>V.M.K.</del>	<del>V.M.K.</del>
31)	V.T. Bandewal	<del>V.B.</del>	<del>V.B.</del>
32)	Sandip N. Patil	<del>S.P.</del>	<del>S.P.</del>
33)	Minal U. Torun	<del>T.U.</del>	<del>T.U.</del>
34)	P.V. Toraskar	<del>T.P.</del>	<del>T.P.</del>
34	Ananti Jagatkar	<del>J.A.</del>	<del>J.A.</del>
35)	Pramod P. Jadhav	<del>P.P.</del>	<del>P.P.</del>
36.	Balaji S Kamble	<del>B.K.</del>	<del>B.K.</del>
37.	Dnyaneshwar S. Gawali	<del>G.S.</del>	<del>G.S.</del>
38.	Chetan Gangai	<del>G.G.</del>	<del>G.G.</del>
39.	Roopali Gaikwad	<del>R.G.</del>	<del>R.G.</del>
40.	<sup>Dr</sup> S.R. Sheikh	<del>S.S.</del>	<del>S.S.</del>
41	M.R. Solanki	<del>M.S.</del>	<del>M.S.</del>
42	Shirke U.K.	<del>S.U.</del>	<del>S.U.</del>
43	Bhalekar T.A.	<del>T.B.</del>	<del>T.B.</del>
44	Varsha N. Patel	<del>V.N.</del>	<del>V.N.</del>
45	Shweta Hamid	<del>S.H.</del>	<del>S.H.</del>
46	Chabalswar M	<del>C.H.</del>	<del>C.H.</del>
		<del>C.H.</del>	



One Week National Level Short Term Training Program on  
"Discrete Mathematics and Mathematical Modeling"

(6<sup>th</sup> June to 10<sup>th</sup> June 2017)

Participants Attendance List

Date-09/06/2017

Sr No	Name of Participant	Morning	Evening
1.	Bhau saheb Dane	Bpdant	Bpdant
2.	Riyaz kazi	Rkz	Rkz
3.	Shakadwipi A-J.	ASJ	ASJ
4.	R.s. Pisal	Rsisal	Rsisal
5.	Chougule V.A.	Chougule	Chougule
6.	Smt. Dipnab B. Trimukhe	Trimukhe	Trimukhe
7.	Dhanashri P. Joshi	D Joshi	D Joshi
8.	Bhakti Ratnaparkhi	Bhakti	
9.	Mrs. S.A. Deshpande	SAD	SAD
10.	S.H. Chandak	SHC	SHC
11.	Shirke usha k.	Shirke	Shirke
12.	Bhushan Zope	BZope	BZope
13.	Mandar V. Datar	Mandar	
14.	Pramod P. Jadhav	P Jadhav	P Jadhav
15.	Samudrika Gulra	SG	SG
16.	Avinash B Raut	A B Raut	A B Raut
17.	Amol N. Dumbare	Amol	Amol
18.	S.A. Pahl	SAPahl	SAPahl
19.	Sandeep S. Borgankar	SB	SB
20.	Borate S.P.	Borate	Borate
21.	Kate S.D.	Kate	Kate
22.	Dhairate NRB	NRBhairate	NRBhairate





Zeal Education Society's  
**ZEAL COLLEGE OF ENGINEERING & RESEARCH,**  
**NARHE, PUNE.**



*One week National Level Short Term Training Program*

"DISCRETE MATHEMATICS AND MATHEMATICAL MODELING"

on  
*6th June to 10th June 2017*  
Organized by

*Department of Information Technology & Computer Engineering*

==== CERTIFICATE ====

This is to certify that Mr./Ms./Mrs. .... has participated  
in One week National Level Short Term Training Program on "*Discrete Mathematics and  
Mathematical Modeling*" from 6th to 10th June, 2017 held at Zeal College of Engineering and  
Research, Pune.

**Prof. S.U.Kadam**  
Head  
Information Technology

**Prof. S.M.Sangve**  
Head  
Computer Engineering

**Dr. A.M.Kate**  
Principal

**Dr. S.A.Deokar**  
Campus Director



**ZEAL EDUCATION SOCIETY'S**  
**ZEAL COLLEGE OF ENGINEERING & RESEARCH**  
**DEPARTMENT OF INFORMATION TECHNOLOGY**  
**Sr.no. 39, Narhe, Pune-41. phone no. 020-67206127**  
**Website:www.zcoer.in**

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## **Report of 05daysWorkshop on**

### **“Palo Alto Firewall Installation, Configuration and Management”**

Department of Information Technology organized 05 days workshop on “Firewall Installation, Configuration and Management” from 28<sup>th</sup> August 2017 to 01<sup>st</sup> September 2017. The objective of workshop is to make faculty members skilled in Palo Alto Networks® Next-Generation firewalls, installation, configuration and management.

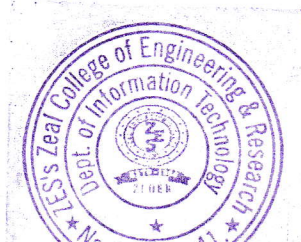
Workshop conducted by Mr. Shanmughavel S, Senior Manager – IT, Training and Research , ICT Academy from 28<sup>th</sup> August 2017 to 1<sup>st</sup> September 2017. On Successful completion of this course,the faculty members were able to install, configure, and manage the entire line of Palo Alto Networks® Next-Generation firewalls.

The welcome function was on 28<sup>th</sup> August 2017, Prof. P.A. Chowan introduced resource person, and then he got felicitated by Dr. A.M. Kate, Principal, Zeal College of Engineering and Research Pune. Prof. S. U. Kadam, Head, Department of Information Technology delivered welcome address and introduced about PaloAlto Networks association.

Faculty memersattending this workshop gained an in-depth knowledge of how to install, configures, and manages their firewall, as well as configuration steps for the security, networking, and threat prevention, logging, and reporting features of the Palo Alto Networks Operating System (PAN-OS®).

The contents of this course were designed to support the course objectives. The following focus areas were included in this course:


- Module 1: Platforms and Architecture
- Module 2: Initial Configuration
- Module 3: Basic Interface Configuration
- Module 4: Security and NAT Policies
- Module 5: Basic App-ID
- Module 6: Basic Content-ID
- Module 7: File Blocking and WildFire
- Module 8: Decryption
- Module 9: Basic User-ID
- Module 10: Site-to-Site VPN



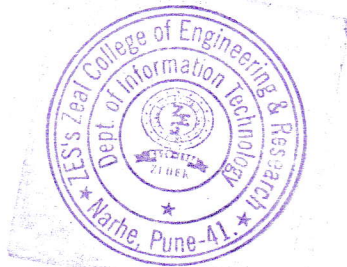
- Module 11: Management and Reporting
- Module 12: Active/Passive High Availability

Overall session was interactive and faculties were well trained about knowledge of palo alto firewall also provide the security and block particular sites, prevent network from external viruses, malware etc. Blocking of .exe file, creation of Virtual Machine, Adding more than 2 NIC cards on Virtual Machine and add adapters to connect internet on virtual machine.

At the last day, participant faculties were instructed to do the hands on Paloalto Firewall Installation, Configuration and Management, and ask to compete the assignment. Prof. A.V.Patil put vote of thanks and session was ended by taking valedictory function.

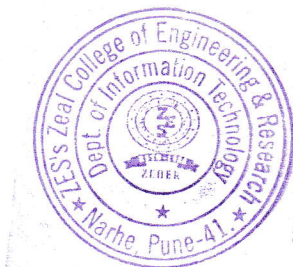
  
Prof. A.V. Patil  
Workshop Coordinator

  
Prof. S.U. Kadam  
HOD  
Head, Information Technology  
Dept. of Information Tech. Engg.  
ZES's Zeal College  
of Engineering & Research,  
Narhe, Pune - 411 041.





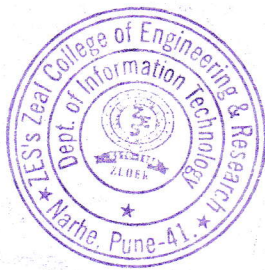
Firewall Installation Configuration and Management Workshop







Participants with Paloalto Firewall Installation and configuration workshop team.



Hosted by



In Association with

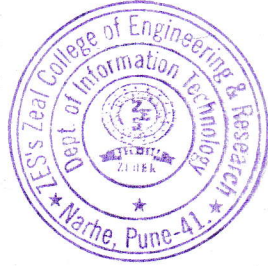


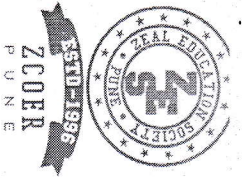
**ICT ACADEMY**  
Innovate... Collaborate... Educate...

# Faculty Development Programme on Firewall Installation, Configuration and Management

**28 Aug - 01 Sep 2017**

**Zeal Education Society's Zeal College of  
Engineering & Research, Pune**





ZEAL EDUCATION SOCIETY'S  
 ZEAL COLLEGE OF ENGINEERING & RESEARCH  
 DEPARTMENT OF INFORMATION TECHNOLOGY  
 Sr.no. 39, Narhe, Pune-41. phone no. 020-67206127  
 Website:www.zcoer.in

Faculty Development Program  
 Firewall Installation, Configuration and Management

28<sup>th</sup> Aug-1<sup>st</sup> Sept 2017

Attendance

Sr. No.	Participant Name	Name of College	Department	Signature	Signature	Signature	Signature	Signature
9.	Pranjali Kothawade	BVDUCEEP	computer					
10.	Prashant Shinde	BVDUCEEP	computer					
11.	Praveen Kumar	BVDUCEEP	computer					
12.	A.N. Kulkarni	ZCOER	EATC					
13.	P. B. Bhoze	ZCOER	ETC					
14.	R. R. Bukate	ZCOER	EXTC					
15.	Dejai R.B.	BSI OR	computer					
16.	Somnagar Kshude	ACS, camp, Pune	computer					





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PUNE

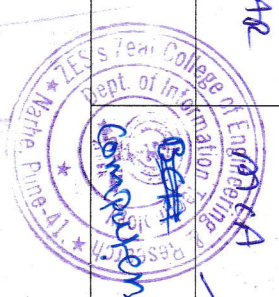
ZEAL EDUCATION SOCIETY'S  
ZEAL COLLEGE OF ENGINEERING & RESEARCH  
DEPARTMENT OF INFORMATION TECHNOLOGY  
Sr.no. 39, Narhe, Pune-41. phone no. 020-67206127  
Website:www.zcoer.in

Faculty Development Program  
Firewall Installation, Configuration and Management

28<sup>th</sup> Aug-1<sup>st</sup> Sept 2017

Attendance

Sr. No.	Participant Name	Name of College	Department	Signature	Signature	Signature	Signature	Signature
17	Pranesh Holgumlikar	SKNCOE Pm	computer					
18	Digambar T. Bodake	SKNCOE	computer					
19	Bhakti T. Pandhate	DYPIET, Ambli	Computer					
20	Amrutha P Kose	VIT	---					
21	Dnyanand Suryawanshi	ZIBACAR	MCA					
22	Prof. Kirti Samil	ZIBACAR	MCA					
23	Dr. B. J. Mohite	ZIBACAR	MCA					
24	Ranjit Anandate	ARCOER	ARCOER					





ESTD-1988  
ZCOER  
PUNE

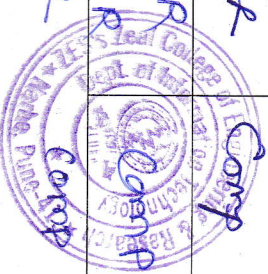
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DEPARTMENT OF INFORMATION TECHNOLOGY  
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Faculty Development Program  
Firewall Installation, Configuration and Management

28<sup>th</sup> Aug-1<sup>st</sup> Sept 2017

Attendance

Sr. No.	Participant Name	Name of College	Department	Signature	Signature	Signature	Signature	Signature
25	Audumbar Ankush Kabadre	ZIABACDR	MCA					
26	Kapil Madhavrao Alawade	MPTAOE Alandi (D)	Computer					
27	P. V. Kodam	ZCOER	IT					
28	S. m. Kolekar	ZCOER	Comp					
29	A. V. Venkatesh	ZCOER	Comp.					
30	P. D. Chavhan	ZCOER	IT					
31	R. P. More	ZCOER	Comp					
32	Ms. Mame Tejashini	ZCOER						
33	Ms. Mote Arpna	ZCOER						
34	Mr. Vikas Patil	ZCOER	Comp					





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# ZEAL COLLEGE OF ENGINEERING AND RESEARCH

Sr.No. 39, Narhe, Pune-411041, India. Phone No. 020- 67206103/131 Website : [www.zcoer.in](http://www.zcoer.in) E-mail : [contact@zealeducation.com](mailto:contact@zealeducation.com)

# SHORT TERM TRAINING PROGRAM

in association with



## STTP 2017

[www.zealeducation.com/workshops](http://www.zealeducation.com/workshops)



### About STTP

The main purpose of the STTP is to train the participants in the concept of subject, its objectives and expected outcomes. Considering the vision, mission of the institute and requirements of student, we have designed a faculty-responsive STTP which will lead to positive transformation in teaching learning process. In educational institutes, everyone is aware about the gradual increase in classroom absenteeism of students has become the matter of concern. Students are reluctant to attend classes because Lectures content delivered by faculties are available in textbook or on internet in the form of videos/PPTs/MOOC, being one of the reasons. In order to address this issue, this STTP brings you an opportunity to pursue academic excellence during interactive sessions where eminent hardcore teachers will explain various topics of SPPU syllabus by giving us a better idea and what we should focus on syllabus wise so as to make your lecture more effective and interactive.

### FACULTIES INVITED FROM



**COMPUTER  
 ENGINEERING**



**CIVIL  
 ENGINEERING**



**ELECTRICAL  
 ENGINEERING**



**E&T  
 ENGINEERING**



**INFORMATION  
 TECHNOLOGY**



**MECHANICAL  
 ENGINEERING**

# ABOUT ZEAL EDUCATION SOCIETY



Zeal Education Society (ZES) is established in year 1996 under the able guidance of Hon. Shri S.M. Katkar to noble cause of education. During last few years, ZES has proved for being a well known organization in the field of education. Within the time span of 20 years, ZES has established Dnyanganga English Medium school, Dnyanganga Junior college, Dnyanganga college of education, Silver Crest School at Hingane Campus and Zeal College of Engineering and Research, Zeal Polytechnic, The Zeal Institute of Business Administration, Computer Application & Research, Zeal Institute of Management & Computer Application at Narhe Campus.

# ABOUT ZEAL COLLEGE OF ENGINEERING



Zeal Education Society's, Zeal College of Engineering and Research (Formally Known as Dnyanganga College of Engineering and Research) is established in June 2007 which symbolized the beginning of new era in technical education. The Institute has been approved by AICTE, DTE and affiliated to Savitribai Phule Pune University, Pune. The Institute offers undergraduate and postgraduate Engineering degree programmes in Information Technology, Computer, Electrical, Mechanical, Civil and Electronics & Telecommunication. The institute is also granted as PhD research center in Electronics & Telecommunication and Mechanical Engineering under Savitribai Phule Pune University, since 2013. Well qualified and experienced faculties with good research background are one of the key features of the institute. With state of art research, infrastructural, sports, cultural facilities the campus provides excellent academic ambience for the students.

Dedicated Training and Placement Cell of the institute ensures a bright future to its students.

# COMPUTER ENGINEERING



## ***"RESEARCH TRENDS IN DESIGN AND ANALYSIS OF ALGORITHMS WITH R-PROGRAMMING"***

*December 04<sup>th</sup> to 08<sup>th</sup>, 2017*

### **About Department:**

Department of Computer Engineering is like prism reflecting the manifold shades of learning and co-curricular activities and determined towards the goal of providing innovative and quality education with high standard to achieve academic excellence. The Department is facilitated with state of the art infrastructure and well equipped laboratories. Thus we are confident that our students will emerge as assets not only to this institution and to the organization they belong, but also to the country at a large.

### **About STTP:**

Design and Analysis of Algorithm is a systematic way of writing algorithms. It is increasingly being applied in the practical fields of mathematics and computer science. This STTP is intended to elaborate the fundamental concepts like Divide & Conquer, Greedy Algorithms, Dynamic Programming, Backtracking, Branch & Bound along with the tractable and intractable problems. This STTP is also focusing on various algorithms used in data analysis using R programming and Machine Learning .

### **Contents of STTP**

Short Term Training Program is intended to explore the knowledge and techniques in following areas of Design and Analysis of Algorithms (DAA).

- DAA Fundamental
- Model and Abstract Algorithms
- Complexity Theory
- About R Programming
- Hands on R Programming
- Decision tree and Naive Bayes classifier
- Applications of Machine learning
- Pattern recognition and classification

### **Objectives**

To provide new insights and knowledge on STTP topic by interacting with the senior Faculty Members/Scientists and Experts of the respective field.

- To study the fundamental concepts of Design and Analysis of Algorithms
- To discuss the problem solving abilities using mathematical theories
- To discuss the concepts of Computer algorithms to find the optimal solution
- To discuss the concepts of analyzing the performance of algorithms
- To discuss the concept of P & NP problems
- To study the implementation of innovative and effective teaching learning methodologies for imparting the course knowledge amongst the students/learners of the subject
- To formulate problems precisely, solve the problems, apply formal proof techniques, and explain the reasoning clearly
- To discuss applications of DAA, R-programming & Machine Learning

## **Resource Persons**



**Dr. P. J. Kulkarni**

Deputy Director, WCE, Sangli



**Dr. P. N. Mahalle**

BoS (IT) Chairman,  
BoS (Comp) Member, SPPU, Pune



**Dr. Prachi Joshi**

SPPU, Pune



**Dr. A. C. Adamuthe**

RIT, Sakarale



**Mr. R. P. Kulkarni**

Consultant, Corporate Trainer  
Cag Gemini, Pune



**Prof. Abhijit A. M.**

COE, Pune



**Prof. S. S. Shelke**

PICT, Pune



**Prof. S. P. Pundlik**

MITCOE, Pune

## **Course Coordinators**

### **Prof. Deepali Lokare**

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9763722185

### **Prof. Balaji A. Chaugule**

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9552209907

**AICTE - ISTE Approved STTP**

**Last Date of Registration 2<sup>nd</sup> December, 2017**

**Registration Fees : 1500/-**



# INFORMATION TECHNOLOGY



## "SYSTEM PROGRAMMING AND ADVANCES IN COMPILER CONSTRUCTION"

December 11<sup>th</sup> to 16<sup>th</sup>, 2017

### About Department:

Department of Information Technology is like prism reflecting the manifold shades of learning and co-curricular activities and determined towards the goal of providing innovative and quality education with high standard to achieve academic excellence. The Department of Information Technology are facilitated with state of the art infrastructure and well equipped laboratories. Thus we are confident that our students will emerge as assets not only to this institution and to the organization they belong, but also to the country at a large. The Department is having association with International Software Testing Qualification Board, Hortonworks University-USA, Palo Alto Networks-USA, Asian School of Cyber Laws, Spoken Tutorial IIT Bombay, Amazon Web services Educate, DELL EMC for knowledge transfer and international certification programs.

### About STTP:

System programming aims to produce software and software platforms which provide services to other software. The STTP is intended to explore concept and advancement in compiler construction by renowned academicians invited from IIT, NIT, State Universities etc. Resource person from industry will help faculty member to enhance their practical skill in system level programming thorough hands on sessions.

#### Contents of STTP

Experts from academics and industry will elaborate following topics of system programming and advances in compiler construction.

- Introduction to Systems Programming and Assemblers
- Macro processors, Loaders and Linkers
- Introduction to Compilers
- Parsers
- Semantic Analysis and Storage Allocation
- Code Generation and Optimization
- Hands on sessions for implementing assembler, macroprocessor, parser etc.

#### Objectives

- To determine Basic syntax and semantics of Compiler Construction and Design
- To explore the concepts of Computer Organization and architecture, Processor Architecture and Interfacing and Theory of Computation: DFA, NFA, Regular expressions, Grammars
- To provide new insights and knowledge about the topic through close interactions/discussions with the senior Faculty Members/Scientists and Experts of the respective field
- To study and understand different system software like Assembler, Macro-processor and Loaders / Linkers
- To understand semantic analysis and storage allocation in compilation process
- To understand how to apply code optimization in the compilation process to use YACC tool for generation of syntax analyzer and to use tool LEX for generation of Lexical Analyzer
- To design and implement assemblers and macro processors
- Formulate problems in design and develop useful system software

## Resource Persons



**Dr. O.G. Kakde**

VNIT, Nagpur  
Former Director, WJTI, Mumbai.



**Dr. Pratyay Kuila**

NIT, Sikkim



**Dr. Jagannath V. Aghav**

COEP, Pune.



**Prof. Vidya V. Deshpande**

MIT, Pune



**Prof. Kirti. S. Korabu**

SCOE, Vadgaon.



**Mr. Mahesh A. Pavaskar**

Senior Software Engineer  
GS Lab, Pune

## Course Coordinators

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AICTE - ISTE Approved STTP

Last Date of Registration 5<sup>th</sup> December, 2017

Registration Fees : 1500/-

# CIVIL ENGINEERING



## ***“TEACHING LEARNING PRACTICES IN STRUCTURAL DESIGN AND DRAWING”***

*December 4<sup>th</sup> to 8<sup>th</sup>, 2017*

### **About Department**

A new feather in the cap of Zeal Education Society, the Civil Engineering Department was established in 2013. Although new, the department offers top class infrastructure to explore the potential of our students. Zeal College of Engineering and Research offers a four-year course leading to Bachelor's degree in Civil Engineering with an intake capacity of 60. Like all other institutes under Zeal College, the Civil Engineering Department is determined to offer and maintain high standards in extremely competitive and demanding world.

### **About STTP**

It has been observed that undergraduate Civil Engineering students feel some difficulties in understanding the structural Design subjects. In this context, it is necessary to train students with good scientific and engineering principles so that they can analyze and design different types of structures. On the contrary faculty find it challenging to teach this subject due to difficulty in visualizing the behavior of different structures. To Shapeup teaching learning practices and groom the faculty members about effective content delivery, Civil Engineering Department is organizing short term training program

#### **Contents of STTP**

Short Term Training Program is intended to explore the knowledge and techniques in following areas of Structural Design

- Steel Structures
- RCC Structures
- Pre-stress Structures
- Structural Software
- Site Visit

#### **Objectives**

- To Design Steel Structures by LSM
- To Design of RCC Structures
- To learn Fundamentals of Pre-stress and Design of pre-stressed girder
- To study application of Software
- To explore real time knowledge through site visit

## Resource Persons



**Dr. J. Ghosh.**  
IIT Bombay



**Er. Prashant Patil**  
Director  
Apex Consultant Pune



**Prof. Sachin B Kadam**  
WCOE Sangali



**Dr. U. R. Awari**  
AISSMS COE, Pune



**Er. Kishor Jain**  
Kishor Jain & Associate  
Pune

## Course Coordinators

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**Prof. H. S. Mandwe**

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**AICTE - ISTE Approved STTP**

**Last Date of Registration 30<sup>th</sup> November, 2017**

**Registration Fees : 1500/-**

# MECHANICAL ENGINEERING



## **"FLUID MECHANICS"**

*December 11<sup>th</sup> to 15<sup>th</sup>, 2017*

### **About Department:**

The department of mechanical engineering was established in the year 2007. The department offers Graduate, Post graduate and doctoral degree programs. The Department has highly experienced and dedicated faculties. The state of art faculties, modern workshops and well developed laboratories; to equipped students to cope up with the fast changing industry requirements. The department strives for the holistic development of students by arranging industrial visits to reputed industries and research organization, invited talks by eminent personalities and technocrats, organizing national and International conferences, seminars on recent developments. Being aware of social responsibilities, we inculcate the entrepreneurship development activities and motivate students for rural technological development. The department has Mechanical Students Student Association (MESA) which provides the platform to showcase their innovative talents and skills.

### **About STTP**

The main purpose of the STTP is to train the participants in the concept of Fluid Mechanics such as statics & dynamics of fluid. It covers the behavior and flow analysis of various kinds of fluids. It also aims to develop analytical solutions to variety of problems, understand the governing non-dimensional parameters, apply concepts of mass, momentum and energy conservation to flows and grasp the basic ideas of fluid mechanics.

This STTP brings you an opportunity to pursue academic excellence through interactive sessions, where eminent hardcore teachers from IIT's/NIT's and research scientist will explain various topics of Fluid Mechanics syllabus by giving us a better idea and what we should focus on syllabus contents wise so as to make our lecture more effective and interactive with industrial exposure.

### **Contents of STTP**

Short Term Training Program is intended to explore the knowledge and techniques in following areas :

- Basic two phase flow and flow regimes
- Experimental techniques of two phase flow
- Numerical prediction of interface by using volume of fluid method
- Lattice Boltzmann method and its implication in two phase flow
- Cavitation phenomenon in hydro-machines
- Use of MATLAB in analysis of complex flow problems

### **Objectives**

The objective is to bring renowned scholars and participants on a common platform to share & use their knowledge & expertise on the Advances in Fluid Mechanics in research program of Engineering and Technology.

- To understand of various properties of fluids
- To learn fluid statics and dynamics
- To understand of Boundary layer, Drag, and Lift
- To understand of Bernoulli's equation
- To Know of various applications of Bernoulli's equation

## **Resource Persons**



**Dr. Arup Kumar Das**  
IIT Roorkee



**Dr. Santosh K. Sahu**  
IIT Indore



**Dr. Neeraj Agrawal**  
BATU Lonere



**Dr. Dipankar Narayan Basu**  
IIT Guwahati



**Mr. Ashok Chavan**  
Ret. Additional Director CWPRS

## **Course Coordinators**

**Dr. Gadhave S. L.**

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**Prof. Magade P. B.**

Mobile No: 7709448019

Pramod.magade@zealeducation.com

**AICTE - ISTE Approved STTP**

**Last Date of Registration 11<sup>th</sup> December, 2017**

**Registration Fees : 1500/-**

# ELECTRICAL ENGINEERING



## “NETWORK ANALYSIS AND SYNTHESIS”

December 05<sup>th</sup> to 09<sup>th</sup>, 2017

### About Department:

Department of Electrical Engineering was established in year 2008. The Department of Electrical Engineering offers a vibrant environment for under graduate and post graduate in Power System with intake 24. The Department has excellent research infrastructure and laboratories having state of art equipments and software's like MATLAB, Simulink. The Department offers consultancy in the field of Energy Conservation and Green Audits, Substation Earthing. The goal of Department of Electrical Engineering is to provide students a balance of intellectuals and practical experience that enables them to serve a variety of societal & industrial needs.

### About STTP:

Network Analysis and Synthesis is one of the important course in electrical engineering. It has many applications in electrical engineering field like Load flow analysis, Transmission line performance, Electrical machines and so on. This STTP will enhanced analytical qualities of participant to solve vast and complex network.

#### Contents of STTP

Short Term Training Program is designed to enhance the basic concepts of electrical network and it will be clearly understood by the participants from the following topics.

- Basics of Network
- Network Theorems (with and without controlled sources)
- Analysis of Transient response in circuits by Classical method and Laplace transforms approach
- Two Port Network
- Network functions
- Hands on training on MATLAB software for two days

#### Objectives

To develop strong foundation for Electrical Networks among the participants and they will be able to apply the fundamental concepts in Electrical networks by interacting with leading academicians, scholars and industry persons of respective field.

- To bring together academicians, experts, researchers and industry persons from respective field common purpose
- To study the fundamental concepts related to Network Analysis and Synthesis
- To develop analytical qualities in Electrical circuits by application of various theorems
- To understand the behaviour of circuits by analyzing the transient response using classical methods and Laplace Transform approach
- To apply knowledge of Network theory for analysis of Power system, Control system, EHV AC Transmission, 2-port networks and design of other circuits like filters etc.
- To discuss the various methods of network analysis by hands on training on Matlab

## Resource Persons



**Dr. Y. V. Hote**  
(IIT, Roorkee)



**Dr. V.S. Bandal**  
(Govt. Polytechnic, Karad)



**Dr. Archana Thosar**  
(GCE, Aurangabad)



**Dr. D.B. Talange**  
(COEP, Pune)



**Prof. V.B. Waghmare**  
(GCE, Karad)



**Dr. H. R. Jariwala**  
(SVNIT, Surat)



**Dr. Rahee Walambe**  
(SITSIU, Pune)



**Mr. Hrishikesh Mehta**  
(Kuber Technologies, Pune)

## Course Coordinators

**Prof. M. R. Hans**  
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**Prof. C. V. Deshpande**  
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chaitanya.deshpande@zealeducation.com

AICTE - ISTE Approved STTP

Last Date of Registration 02<sup>nd</sup> December, 2017

Registration Fees : 1500/-



## ***“ANALOG, DIGITAL COMMUNICATION AND WIRELESS NETWORK”***

*December 12<sup>th</sup> to 16<sup>th</sup>, 2017*

### **About Department:**

Our vision is to provide quality technical education to meet ever changing and demanding needs of the electronics and telecommunication industries along with other interdisciplinary fields and mission is to provide educational environments in which students are developed to face the global challenges. The department has established, fully fledged and industrial standard PCB design developed laboratory. The department has well equipped laboratories and has well qualified and dynamic team of teaching faculty members.

### **About STTP:**

The STTP will focus on ideas, thoughts that will elicit the technical challenges and recent research trends such as Analog, Digital Communication and Wireless Networks also provide hands on various communication systems. The STTP brings together leading academic scientists, researchers and scholars across different domains. This STTP will certainly ignite the minds of the researchers for many research opportunities. The STTP thus guarantees a multi domain identical spirit in which experts will be able to present and motivate the participants to take up research challenges.

### **Contents of STTP**

- Characterization of Communication Signals & Systems, Random processes
- Introduction of Analog communication, behavior in presence of noise
- Introduction of Digital communication, behavior in presence of noise
- Information Theory and Coding Techniques
- Introduction to wireless network, LTE
- WiMAX, VOIP, VoLTE
- Hands on training and Industrial visit (BSNL Pune)

### **Objectives**

- To provide new insights and knowledge about the topic through close interactions/discussions with the senior Faculty Members/Scientists and Experts of the respective field
- To study the fundamental concepts related to Analog & Digital Communication
- To discuss the problem solving abilities using mathematical analysis
- To discuss the concepts of Characterization of Communication Signals & Systems
- To discuss the concepts of analyzing the performance of communication systems
- To discuss the concept of random signals & noise
- To study Information Theory and Coding Techniques
- To study the evolving wireless technologies and standards

## **Resource Persons**



**Dr. Jayanta Mukherjee**  
IIT, Mumbai



**Dr. Abhay Gandhi**  
VNIT, Nagpur



**Dr. B.S. Chaudhari**  
MIT Pune



**Dr. G.R. Patil**  
AIT, Pune



**Mr. Mukund Bhopale**  
Mihir Enterprises



**Mr. Anirudha Kulkarni**  
MUMLAB Technologies

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smitta.palnitkar@zealeducation.com

**AICTE - ISTE Approved STTP**

**Last Date of Registration 10<sup>th</sup> December, 2017**

**Registration Fees : 1500/-**

# CHIEF PATRONS



**Hon'ble Shri Sambhaji M. Katkar**  
Founder  
Zeal Education Society, Pune



**Hon'ble Shri Jayesh S. Katkar**  
Executive Director  
Zeal Education Society, Pune

# PATRONS



**Dr. Sanjay A. Deokar**  
Campus Director, ZES, Narhe, Pune.



**Dr. Ajit M. Kate**  
Principal, ZCOER, Pune

# ADVISORY COMMITTEE



**Dr. Suresh D. Shirbahadurkar**  
HOD, Dean Academics  
E & Tc Engineering



**Dr. Mahadev G. Unde**  
HOD  
Electrical Engineering



**Dr. Prasad S. Halgaonkar**  
HOD (Shift I)  
Computer Engineering



**Dr. Swapnaja A. Ubale,**  
HOD (Shift II)  
Computer Engineering



**Dr. Sunil G Dambhare**  
HOD (Shift I)  
Mechanical Engineering



**Dr. Amol B. Ubale**  
HOD (Shift II)  
Mechanical Engineering



**Prof. Sandip U. Kadam.**  
HOD  
Information Technology



**Dr. Pralhad P. Walvekar**  
HOD  
Civil Engineering

# CONVENERS

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Dr. Suresh D. Shirbahadurkar  
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HOD (Shift I)

Dr. Swapnaja A. Ubale,  
HOD (Shift II)

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**Department of Civil Engineering**  
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### Computer Department

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**Prof. B. A. Chaugule**

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### Civil Department

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**Prof. C. V. Deshpande**

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**Prof. S. S.Palnitkar**

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**Prof. R. R.Bukate**

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### IT Department

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**Prof. S. D. Bachpalle**

Mob. 9284518422  
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### Mode of payment:

Online: You can make online payment using NEFT/IMPS  
Account No.:053011100003398  
IFSC code: ABHY0065110, MICR code: 411065013  
Bank: Abhydaya Co-operative, Bank Ltd. Sinhgad Road , Pune.  
Participant should mail transaction receipt of Online payment to Co-ordinator  
Demand Draft: Demand Draft can be drawn in Favour of "Zeal College of Engineering & Research" payable at Pune.

For paid Accommodation contact to concerned co-ordinators

## CONTACT

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Phone No.: 020-67206103/131

Website : [www.zcoer.in](http://www.zcoer.in)

E-mail : [contact@zealeducation.com](mailto:contact@zealeducation.com)

### DIRECTION MAP

TO  
ZEAL, NARHE CAMPUS



This information given in catalogue is indicative and is subject to change for betterment of the program. Student should refer to prospectus or visit website for further details.

### How to reach Zeal Education Society?

24.2 Kms. From Airport 13.7 Kms. From Pune Station 5.1 Kms From Katraj Bus Stand



**ZEAL EDUCATION SOCIETY'S  
ZEAL COLLEGE OF ENGINEERING &  
RESEARCH DEPARTMENT OF INFORMATION  
TECHNOLOGY**

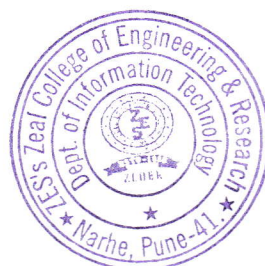
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**“SYSTEM PROGRAMMING AND ADVANCEMENT IN COMPILER  
CONSTRUCTION”**

One week National level Short Term Training Program on “**SYSTEM PROGRAMMING AND ADVANCEMENT IN COMPILER CONSTRUCTION**” was organized by Department of Information Technology of Zeal college of Engineering and research during 11th to 16th Dec 2017. Total 31 participants from various engineering institutes and industries across Maharashtra state had participated in this workshop.

System programming is the activity of programming computer system software. The primary distinguishing characteristic of systems programming when compared to application programming is that application programming aims to produce software which provides services to the user directly (e.g. word processor), whereas systems programming aims to produce software and software platforms which provide services to other software, are performance constrained, or both (e.g. operating systems, computational science applications, game engines and video games, industrial automation, and software as a service applications).

The STTP is intended to explore concept and advancement in compiler construction by renowned academicians invited from IIT, NIT, State Universities etc. Resource person from industry will help faculty member to enhance their practical skill in system level programming thorough hands on seminars.



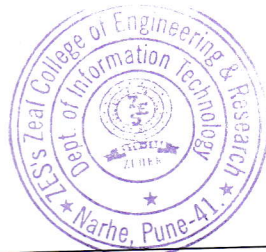


## Objectives:

- To determine Basic syntax and semantics of Compiler Construction and Design.
- To explore the concepts of Computer Organization and architecture, Processor Architecture and Interfacing and Theory of Computation: DFA, NFA, Regular expressions, Grammars.
- To provide new insights and knowledge about the topic through close interactions/discussions with the senior Faculty Members/Scientists and Experts of the respective field.
- To study and understand different system software like Assembler, Macro-processor and Loaders / Linkers.
- To understand semantic analysis and storage allocation in compilation process.
- To understand how to apply code optimization in the compilation process to use YACC tool for generation of syntax analyzer and to use tool LEX for generation of Lexical Analyzer.
- To design and implement assemblers and macro processors.
- Formulate problems in design and develop useful system software.

## Content of STTP:

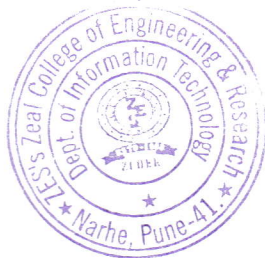
- Introduction to Systems Programming and Assemblers.
- Macro processors, Loaders and Linkers.
- Introduction to Compilers.
- Parsers.
- Semantic Analysis and Storage Allocation.
- Code Generation and Optimization



Various experts from industries and academic institutes had contributed to this workshop by their able guidance. Following topics get covered in this workshop.

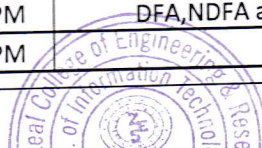
1. Introduction to System Programming & Assembler by **Prof. V.V. Kulkarni**, MIT, Kothrud, Pune.
2. Macro processors, Loaders and Linkers by **Prof Kirti S. Korabu**.
3. Compilers & Parsers by **Dr. Pratyay Kuila** Assistant Professor, NIT Sikkim.
4. Implementing Lexical Analyzer & Yacc Programming by **Dr. Mrs. M.A Jawale**
5. Semantic Analysis and Storage Allocation by **Dr. O.G. Kakde** VNIT Nagpur, Former Director VJTI Mumbai.
6. Code Generation and Optimization by **Dr. O.G. Kakde** VNIT Nagpur, Former Director VJTI Mumbai.
7. Hands on sessions for implementing Parser by **Mr. M.A. Pavaskar**, Senior Software Engineer, GS Lab India Pune.
8. DFA, NFA and Turing Machine by **Dr. J.V Aghav**, Professor COEP Pune.

This Short term training program was inaugurated by **Dr.S. R. Sakhare**, Head Computer & Engineering Department, Vishwakarma Institute of Information Technology, Pune., **Dr.S.D. Shirbahadurkar**, Dean Academics ZCOER **Dr. Sanjay A. Deokar**, Campus Director Zeal Education Society, **Dr. A. M. Kate**, Principal ZCOER, **Prof. Sandip U. Kadam**, Head of Information Technology Department, ZCOER



## Day-wise Session Plan

Day & Date	Start Time	End Time	Session details	Name of Speaker
Day 1 11/12/2017	10.00AM	12.00PM	Systems Programming And Assemblers.	Prof. V.V. Deshpande
	12.00 PM	12.45 PM	LUNCH	
	12.45 PM	02.45 PM	Systems Programming And Assemblers.	
	02.45 PM	03.00 PM	TEA BREAK	
	03.00 PM	05.00 PM	Hands on sessions for implementing Pass - I of Two - pass assembler.	
Day 2 12/12/2017	10.00AM	12.00PM	Macro processors, Loaders and Linkers.	Prof. K. S. Korabu
	12.00 PM	12.45 PM	LUNCH	
	12.45 PM	02.45 PM	Macro processors, Loaders and Linkers.	
	02.45 PM	03.00 PM	TEA BREAK	
	03.00 PM	05.00 PM	Hands on sessions for implementing Macro Processor.	
Day 3 13/12/2017	10.00AM	12.00PM	Compilers	Dr. Pratyay Kuila
	12.00 PM	12.45 PM	LUNCH	
	12.45 PM	02.30 PM	Parsers	
	02.30 PM	02.45 PM	TEA BREAK	Dr. M.A Jawale
	02.45 PM	05.30 PM	1. Hands on sessions for implementing Lexical Analyzer. 2. Hands on sessions for implementing calculator using LEX and YACC.	
Day 4 14/12/2017	10.00AM	12.00PM	Semantic Analysis and Storage Allocation.	Dr. O.G. Kakde
	12.00 PM	12.45 PM	LUNCH	
	12.45 PM	02.45 PM	Semantic Analysis and Storage Allocation.	
	02.45 PM	03.00 PM	TEA BREAK	
	03.00 PM	05.00 PM	Hands on sessions for implementing Recursive Descent Parser.	
Day 5 15/12/2017	10.00AM	12.00PM	Code Generation and Optimization.	Dr. O.G. Kakde
	12.00 PM	12.45 PM	LUNCH	
	12.45 PM	02.45 PM	Code Generation and Optimization.	
	02.45 PM	03.00 PM	TEA BREAK	
	03.00 PM	05.00 PM	Hands on sessions for implementing Intermediate code generation using LEX & YACC.	
Day 6 16/12/2017	10.00AM	12.00PM	Hands on sessions for implementing Parser, Industry Approach	Mr. M.A. Pavaskar
	12.00 PM	12.45 PM	LUNCH	
	12.45 PM	02.45 PM	Hands on sessions for implementing Parser, Industry Approach	
	02.45 PM	03.00 PM	TEA BREAK	
	03.00 PM	05.00 PM	DEFA, NDEFA and Turing Machine	Dr. J.V Aghav
	05.00 PM	05.30 PM	<b>Certificate Distribution</b>	



**Day-1 [06 Hours]**

**Resource Person:** Prof. V.V. Deshpande

**Session:** - Morning

**Content:-**

- Introduction to Systems Programming
- Assemblers

**Session:** - Evening

**Content:-**

- Hands on sessions for implementing Pass - I of Two - pass assembler

**Day-2 [06 Hours]**

**Resource Person:** Prof. K. S. Korabu

**Session:** - Morning

**Content:-**

- Macro processors
- Loaders and Linkers

**Session:** - Evening

**Content:-**

- Hands on sessions for implementing Macro Processor

**Day-3 [06 Hours]**

**Resource Person:** Dr. Pratyay Kuila

**Session** - Morning

**Content:-**

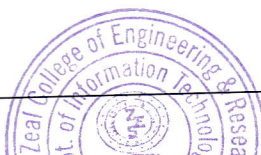
- Compilers
- Parsers

**Resource Person:** Dr. M.A Jawale

**Session:** - Evening

**Content:-**

- Hands on sessions for implementing Lexical Analyzer
- Hands on sessions for implementing calculator using LEX and YACC



**Day-4 [06 Hours]**

**Resource Person:** Dr. O.G. Kakde

**Session – Morning/Evening**

**Content:-**

- Semantic Analysis and Storage Allocation
- Hands on sessions for implementing Recursive Descent Parser

**Day-5 [06 Hours]**

**Resource Person:** Dr. O.G. Kakde

**Session: - Morning/Evening**

**Content:-**

- Code Generation and Optimization
- Hands on sessions for implementing Intermediate code generation using LEX & YACC.

**Day-6 [06 Hours]**

**Resource Person:** Mr. M.A. Pavaskar

**Session: - Morning**

**Content:-**

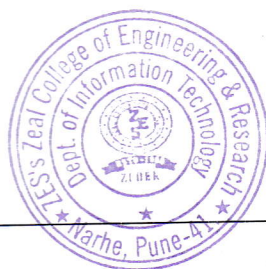
- Hands on sessions for implementing Parser, Industry Approach.

**Resource Person:** Dr. J.V Aghav

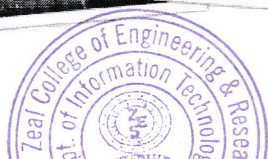
**Session:- Evening**

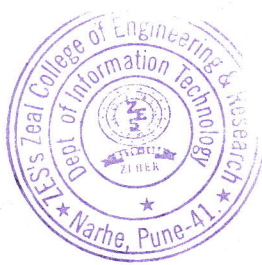
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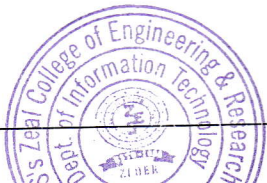
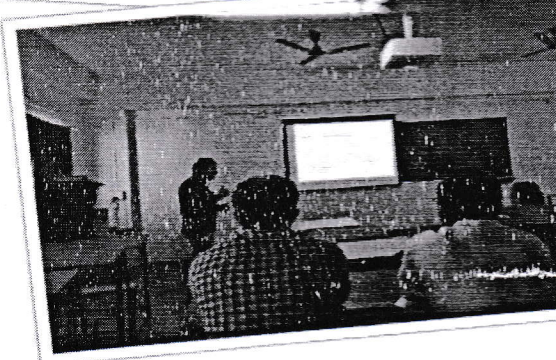
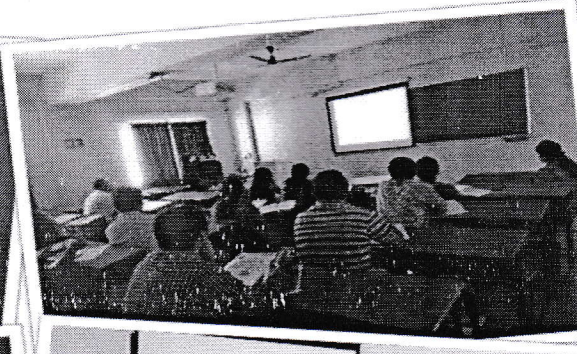
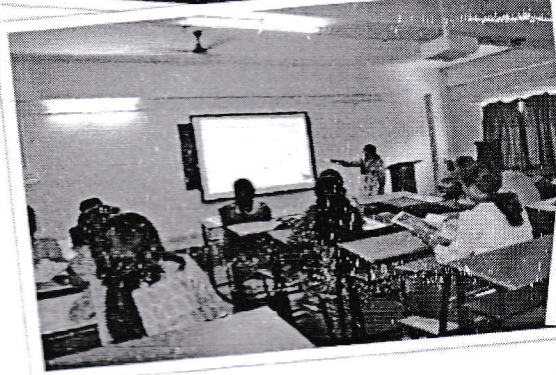
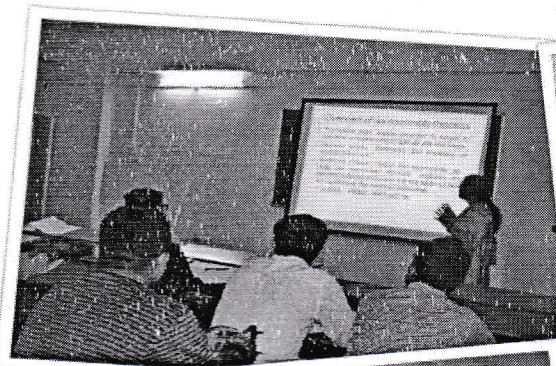
- DFA
- N DFA
- Turing Machine



# PHOTO GALLERY







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