

B. M. S. College of Engineering Bengaluru-560019

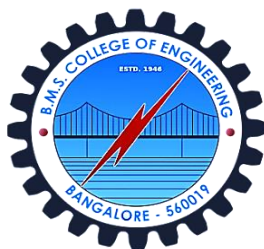
(Autonomous Institute Affiliated to VTU)

Report on

Two Weeks Value Added Course on

“Hands on Training on Computational tools in Chemical Engineering”

26th Dec. 2022 to 7th Jan.



Organized by

**Department of Chemical Engineering
B.M.S. College of Engineering
Bengaluru-560 019**

ORGANISING CHAIR

Dr. Y. K. Suneetha
Associate Professor & HOD
Ph. D. (VTU), B.M.S. College
of Engineering

CONVENER

Dr. G. N. Rameshaiah
Professor
Ph.D. (IITM), B.M.S. College
of Engineering

COORDINATOR

Dr. Sanjay Kumar
Assistant Professor
Ph.D. (IITKGP), B.M.S.
College of Engineering

SPEAKER

Dr. Sreelakshmi Diddi
Assistant Professor
Ph. D. (VTU), B.M.S. College
of Engineering

SPEAKER

Dr. Chetan A. Nayak
Assistant Professor
Ph.D. (CSIR-CFTRI), B.M.S.
College of Engineering

SPEAKER

Dr. Shivakumar. R
Assistant Professor
Ph.D. (VTU), B.M.S. College
of Engineering

SPEAKER

Dr. Hari Prasad U.
Assistant Professor
Ph.D., B.M.S. College of
Engineering

SPEAKER

Mr. Soumen Panda
Assistant Professor
M.Tech (IITM), B.M.S.
College of Engineering

B. M. S. COLLEGE OF ENGINEERING

B. M. S. College of Engineering was established in the year 1946 by Late B M Sreenivasaiah, and nurtured by his illustrious son, Late B S Narayan. BMSCE is the first private sector initiative in Engineering Education in India. BMSCE is in the 75th year of dedicated service in the field of Engineering Education. BMSCE today offers 14 Under Graduate & 15 Post Graduate courses, both in conventional and emerging areas. At present, 15 Departments are recognized as Research Centers offering PhD/MSc Engineering by Research in Science, Engineering, and Management. First Institution in the state bestowed with NBA Accreditation in Tier I Format (Washington Accord).

World Bank funded TEQIP Phase I, Phase II and Phase III Institute and Partner Institution of the Melton Foundation, USA which advocates Global Citizenship. Autonomous Institute (UGC approved) since 2008.

ABOUT THE CHEMICAL ENGINEERING DEPARTMENT

The branch of Chemical Engineering is established in 1995 with an intake of 30 students. Currently the intake has been increased to 60 students. The bright and highly motivated students are the real ambassador of the department. Department has well qualified faculty. In 2013 the department has started post graduate program in Biochemical Engineering, the first course in VTU with the title. The college has laid its focus to impart synergistic education in the field of Chemical Engineering between industry and academia. The institution has thus been able to contribute a large pool of talented Chemical engineers to the industry and also for research.

ABOUT THE WORKSHOP PROGRAM

Process engineering technology has become increasingly more difficult to design or optimize in chemical processes without any efficient software tools. Process simulation software, such as ASPEN PLUS, UNISIM, MATLAB, DoE CHEMCAD or PRO/II, now play a major role in a variety of chemical engineering areas. Many industrial process companies now license at least one of these simulation programs. The workshop aims at providing a detail hand on training on UNISIM MATLAB, DoE software used for design of steady & dynamic systems and also simulate the dynamic systems to get optimum results.

OBJECTIVES AND OUTCOMES OF THE VALUE-ADDED COURSE

Students will learn:

- to understand UNISIM, MATLAB, and DoE while learning multi-engineering courses
- to apply these tools to build process flow diagrams using simulation methods in engineering applications
- to use collaborative working skills with other students

DATE, TIME & VENUE OF THE VALUE-ADDED COURSE

Date: December 26, 2022 to January 7, 2023

Time: 2:00 to 4:00 PM (1st week online mode) & 4:00 to 6:00 PM (2nd week offline mode)

Venue: P.G. Block, 3rd floor, computer lab

BRIEF SUMMARY OF THE PROGRAMME

ONLINE MODE

1st Day (26/12/2022): Mr. Soumen Panda and Dr. Sreelakshmi Diddi gave a brief introduction on MATLAB and solved Chemical Engineering Problems using MATLAB. In the introduction a hands-on experience was provided on building arrays, Matrix, create loops, user defined functions, plotting data points etc. after the detailed discussion on the MATLAB introduction, Algebraic equations related to Chemical Engineering problems were solved using numerical techniques and MATLAB inbuilt function in MATLAB.

2nd Day (27/12/2022): Mr. Soumen Panda and Dr. Sreelakshmi Diddi gave hands-on training on solving single and simultaneous differential equations using MATLAB. Differential equations related to Chemical Engineering were solved using numerical methods as well as MATLAB inbuilt functions in MATLAB.

3rd Day (28/12/2022): Dr. HPU gave a brief introduction on DoE and important terms involved in DoE with a wide range of applications in perspective of chemical engineering problems. And also, he explained the theoretical aspects of the factorial design and then solved and demonstrated some problems in Minitab software, in particularly, 2^k factorial designs with interpretation of the results. Finally, he gave a brief introduction on Response surface methodology and the same was continued in the next session.

4th Day (29/12/2022): Firstly, Dr. HPU gave some activity to students to collect the experimental data on a virtual catapult experiment which was available on the internet. Based on that information, he asked the students to interpret the data in Minitab software. And then

he solved some problems on central composite design along with interpretation of interaction plots, surface and contour plots. Finally, he gave a brief introduction on Box Behnken design and the same was continued in the online session.

5th Day (30/12/2022): Dr. Shivakumar R

6th Day (31/12/2022): Dr. Shivakumar R

OFFLINE MODE

1st Day (02/01/2023): Session was taken by Mr. Souman Panda & Dr. Sreelakshmi. In online sessions single and simultaneous Algebraic equations related to Chemical Engineering problems were solved using numerical techniques and MATLAB inbuilt function in MATLAB and students were asked to solve assignment problems. An open discussion with students was conducted to clarify doubts.

2nd Day (03/01/2023): Session was taken by Mr. Souman Panda. In the online session single and simultaneous Differential equations related to Chemical Engineering were solved using numerical methods as well as MATLAB inbuilt functions in MATLAB. Students were asked to solve assignment problems and an open discussion with students was conducted to clarify doubts.

3rd Day (04/01/2023): Dr. HPU solved some problems based on Box Behnken design and demonstrated the same in Minitab software and asked the students to solve that problem.

4th Day (05/01/2023): Dr. HPU gave a brief introduction about published journal papers and explained to students what data needs to be used for solving the same in Minitab software. And then he solved the journal paper and compared the regression model equation and surface/contour plots with the literature.

5th Day (06/01/2023): Dr. Chetan A Nayak/Dr. Shivakumar R

6th Day (07/01/2023): Dr. Shivakumar R

LIST OF PARTICIPANTS

List of Participants Registered for the Course					
Sr. No.	Name of the participant	Email id	Mobile number	Name of the institution	Department
1	N Lipthashree jain	lipthashree.ch20@bmsce.ac.in	8088834774	BMSCE	Chemical Engineering

2	Varsha Relekar	varsha.ch20@bmsce.ac.in	9740216614	BMSCE	Chemical Engineering
3	Priyanka	priyanka.ch20@bmsce.ac.in	9620890254	BMSCE	Chemical Engineering
4	Saraswathi vijapur	saraswathi.ch20@bmsce.ac.in	7204561769	BMSCE	Chemical Engineering
5	PRASHANTH	Prashanth.ch21@bmsce.ac.in	8197690636	BMSCE	Chemical Engineering
6	Ojaswini A Sastry	ojaswinisastry@gmail.com	9900174544	BMSCE	Chemical engineering
7	Alaka Atrey	alakaatrey.ch19@bmsce.ac.in	8088106478	BMSCE	Chemical engineering
8	N DIVYA REDDY	reddydivya947@gmail.com	8147399331	DSCE	Chemical engineering
9	Deepthi. M	deepthideeps1528@gmail.com	9743463574	DSCE	Chemical engineering
10	Kishore	kishore.ch20@bmsce.ac.in	9380588028	BMSCE	Chemical Engineering
11	Sumaiya Tahsina S	sumaiya.ts02@gmail.com	9113837232	DSCE	Chemical Engineering
12	Chaithanya V	chaithanyav.ch20@bmsce.ac.in	9743354055	BMSCE	Chemical Engineering
13	Diksha kartik	dikshak.ch19@bmsce.ac.in	8197756026	BMSCE	Chemical engineering
14	Shakainah Jerusha	shakainahjerusha2520@gmail.com	7338298778	DSCE	Chemical engineering
15	Vaishnavi Sudarsan Perumbully	vaishnavi.ch20@bmsce.ac.in	9036232777	BMSCE	Chemical engineering
16	Anushka Goud	anuskatg.ch19@bmsce.ac.in	9880742197	BMSCE	Chemical Engineering
17	Mamatha.L	Mamathalokesh900@gmail.com	7619122953	BMSCE	Chemical Engineering
18	Prakyath T P	prakyatht.ch20@bmsce.ac.in	7676032632	BMSCE	Chemical Engineering
19	venu GOPAL GOWDA B M	venugopal.ch20@bmsce.ac.in	9606172575	BMSCE	Chemical Engineering
20	Rao Jaganmaya Jayaprakash	jaganmaya.ch20@bmsce.ac.in	9538956699	BMSCE	Chemical engineering
21	AMAN PARVEZ	amanparvez.ch20@bmsce.ac.in	7022850391	BMSCE	Chemical Engineering
22	Pramod S	pramods.ch20@bmsce.ac.in	6362417311	BMSCE	Chemical Engineering
23	S KATHIR SHANKAR	kathirshankar.ch20@bmsce.ac.in	7899305659	BMSCE	Chemical engineering
24	Gowtham K P	gowthamkp1551@gmail.com	8867189286	BMSCE	Chemical engineering
25	Anirudha Pai H N	anirudhapai.ch20@bmsce.ac.in	8310786805	BMSCE	Chemical Engineering
26	Prathyusha N.D	prathyushand.ch20@bmsce.ac.in	8310258979	BMSCE	Chemical engineering
27	Chinmayee P B	chinmayee.ch20@bmsce.ac.in	8970802920	BMSCE	Chemical engineering
28	dhanush h	dhanushh.ch20@bmsce.ac.in	6363991501	BMSCE	Chemical Engineering
29	Jaahnavi Urs	jaahnaviurs.ch19@bmsce.ac.in	9632412193	BMSCE	Chemical engineering

30	Shraveni M.	1520ch028@sit.ac.in	9019853879	SIT	Chemical engineering
31	Harshitha H. Y.	harshithahu06@gmail.com	8867546088	SIT	Chemical engineering
32	Nagadarshan S S	1512ch020@sit.ac.in	853115472	SIT	Chemical engineering

List of Participants		
Sr. No.	Gender	Number
1.	Male	15
2.	Female	17
3.	Transgender	0
Total		32

SUPPORTING DOCUMENTS

1. Brochures 2. Schedule 3. Attendance Sheet 4. Photographs

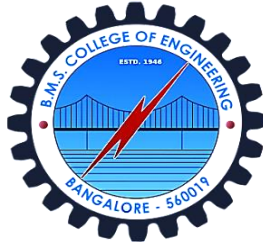
B. M. S. College of Engineering Bengaluru-560019

Two Weeks

Value Added Course
on

Hands on Training on Computational tools in Chemical Engineering

26th Dec. 2022 to 7th Jan. 2022



Organizers

**Department of Chemical Engineering
B.M.S. College of Engineering
Bengaluru-560 019**

B. M. S. COLLEGE OF ENGINEERING

B. M. S. College of Engineering was established in the year 1946 by Late B M Sreenivasaiah, and nurtured by his illustrious son, Late B S Narayan. BMSCE is the first private sector initiative in Engineering Education in India. BMSCE is in the 75th year of dedicated service in the field of Engineering Education. BMSCE today offers 14 Under Graduate & 15 Post Graduate courses, both in conventional and emerging areas. At present, 15 Departments are recognized as Research Centers offering PhD/MSc Engineering by Research in Science, Engineering, and Management. First Institution in the state bestowed with NBA Accreditation in Tier I Format (Washington Accord).

World Bank funded TEQIP Phase I, Phase II and Phase III Institute and Partner Institution of the Melton Foundation, USA which advocates Global Citizenship. Autonomous Institute (UGC approved) since 2008.

ABOUT THE CHEMICAL ENGINEERING DEPARTMENT

The branch of Chemical Engineering is established in 1995 with an intake of 30 students. Currently the intake has been increased to 60 students. The bright and highly motivated students are the real ambassador of the department. Department has well qualified faculty. In 2013 the department has started post graduate program in Biochemical Engineering, the first course in VTU with the title. The college has laid its focus to impart synergistic education in the field of Chemical Engineering between industry and academia. The institution has thus been able to contribute a large pool of talented Chemical engineers to the industry and also for research.

ABOUT THE WORKSHOP PROGRAM

Process engineering technology has become increasingly more difficult to design or optimize in chemical processes without any efficient software tools. Process simulation software, such as ASPEN PLUS, UNISIM, MATLAB, DoE CHEMCAD or PRO/II, now play a major role in a variety of chemical engineering areas. Many industrial process companies now license at least one of these simulation programs. The workshop aims at providing a detail hands on training on UNISIM MATLAB, DoE software used for design of steady & dynamic systems and also simulate the dynamic systems to get optimum results.

OBJECTIVES AND OUTCOMES OF THE VALUE-ADDED COURSE

Students will learn:

- to understand UNISIM, MATLAB, and DoE while learning multi-engineering courses
- to apply these tools to build process flow diagrams using simulation methods in engineering applications
- to use collaborative working skills with other students

CHIEF PATRONS

Dr. B. S. Ragini Narayan, Donor Trustee, BMSET

Dr. P. Dayanand Pai, Chairman, BMSCE

PATRONS

Dr. S. Muralidhara, Principal

Dr. Suresh R. Reddy, Vice Principal (Acad.)

Dr. Bheemsha A, Vice Principal, (Admin.)

ADVISORS:

Dr. Sheshachala., Dean (Academic)

Dr Rathanraj K. J., Dean (Student Affairs)

Dr Mamatha M. N., Dean (First Year Students)

Dr. Suma H. N., Dean (Innovation)

ORGANISING CHAIR

Dr. Y. K. Suneetha

Associate Professor

Head, Dept. of Chemical Engineering, BMSCE

CONVENER

Dr. G. N. Rameshaiah,

Professor

Dept. of Chemical Engineering, BMSCE

COORDINATOR

Dr Sanjay Kumar

Assistant Dept. of Chemical Engineering, BMSCE

WHO CAN ATTEND

All engineering scholars can attend this course.

Registration:

Last date and Time for registering Course: 26th Dec 2022, 8.30 am

Registration Fee: Rs 500/-

The payment of the fee needs to be made in favour of “**HoD Chemical Engineering**”, BMSCE payable at Bangalore. Duly filled scanned copy of

the application need to be sent to the coordinator mail id or by postal mail before the last date.

NEFT Details:

Bank Name: Indian Bank

Branch: Hanumanthnagar

Account No.: 20274185466

IFSC Code: IDIB000B607

HOW TO APPLY

Online URL: <https://tinyurl.com/2zxfbzea>

Offline filled in application form

CERTIFICATE: On successful completion of the value added course, we will be issuing certificate.

COURSE CONTENT

- UNISIM Simulation tool steady state simulations
- MATLAB
- Design of Experiments using Minitab
- Engineering program specific example and activity using above simulation tools

RESOURCE PERSONS:

Dr R Shivakumar

Dr Chetan A Nayak

Prof. Souman Panda

Dr. Hari prasad Uppara

Assistant Professor's, Dept. of Chemical, BMSCE

Contact for Correspondence

Dr. G. N. Rameshaiah

Professor, Department of Chemical Engineering

B.M.S. College of Engineering, Basavanagudi,

Bengaluru-560019

Phone: +91-8277126901

E-mail: gnameshaiah.che@bmsce.ac.in

APPLICATION FORM
Two Weeks
Value Added Course
on
Hands on Training on Computational tools in
Chemical Engineering
26th Dec. 2022 to 7th Jan. 2022
Organized by:
Department of Chemical Engineering

1. Name:
2. Date of birth:
3. Branch:
4. Institution:
5. Address for communication:
6. Contact No:
7. E-mail ID:
8. Educational qualifications:
9. Area of interest:

DECLARATION

The information furnished above is true to the best of my knowledge. I agree to abide by the rules and regulations governing the course. If selected, I shall attend the course for the entire duration.

Place:

Signature of the applicant

Date:

B.M.S. COLLEGE OF ENGINEERING
Autonomous College, Affiliated to VTU
DEPARTMENT OF CHEMICAL ENGINEERING
SCHEDULE OF ACTIVITY
OFFLINE

Day	Lecture & Hands on	Program details	Speakers
1	1.	Introduction to MATLAB	Prof. Souman Panda BMSCE
	2.	Hands training in on MATLAB	Prof. Souman Panda BMSCE
	3.	Hands training in on MATLAB	Prof. Souman Panda BMSCE
2	4.	Chemical Engineering Application Using MATLAB	Prof. Souman Panda BMSCE
	5.	Hands training in on MATLAB	Prof. Souman Panda BMSCE
	6.	Hands training in on MATLAB	Prof. Souman Panda BMSCE
3	7.	Basics of simulation tools with their importance	Dr. Shivakumar R, BMSCE
	8.	Development of Process flow diagram for different unit operations: Hands on Session	Dr.Chetan A Nayak, BMSCE
	9.	Separating CO ₂ from Synthesis Gas :Development of flow diagram and Simulation	Dr. Shivakumar R, BMSCE
4	10.	Production of Vinyl Chloride	Dr. Chetan A Nayak, BMSCE
	11.	Hydroalkylation of Toluene to Benzene Using Hydrogen: Development of flow diagram and Simulation	Dr. Shivakumar R, BMSCE
	12.	Simulation of Separation Column for Propylene-Propane Mixture: Development of flow diagram and Simulation	Dr. Chetan A Nayak, BMSCE
5	13.	Introduction of DOE	Dr.Hari Prasad Uppara, BMSCE
	14.	Designing the experiments with simple comparative examples	Dr.Hari Prasad Uppara, BMSCE
	15.	2 ^k factorial design with examples	Dr.Hari Prasad Uppara, BMSCE
6	16.	Analysis of response surface methods and design	Dr.Hari Prasad Uppara, BMSCE
	17.	Interpreting the results of surface and counter plots obtained from DOE	Dr.Hari Prasad Uppara, BMSCE
	18.	Solving and interpreting the one or two journal research articles	Dr.Hari Prasad Uppara, BMSCE

SCHEDULE OF ACTIVITY ONLINE

Day	Online Meeting	Program details	Speakers
7	1.	Online guidance & training in on MATLAB	Prof. Souman Panda BMSCE
	2.	Online guidance & training in on MATLAB	Prof. Souman Panda BMSCE
	3.	Online guidance & training in on MATLAB	Prof. Souman Panda BMSCE
8	4.	Chemical Engineering Application Using MATLAB	Prof. Souman Panda BMSCE
	5.	Hands training in on MATLAB	Prof. Souman Panda BMSCE
	6.	Hands training in on MATLAB	Prof. Souman Panda BMSCE
9	7.	Development of Process flow diagram for different unit operations: Hands on Session	Dr. Shivakumar R, BMSCE
	8.	Development of Process flow diagram for different unit operations: Hands on Session	Dr.Chetan A Nayak, BMSCE
	9.	Separating CO ₂ from Synthesis Gas :Development of flow diagram and Simulation	Dr. Shivakumar R, BMSCE
10	10.	Production of Vinyl Chloride	Dr.Chetan A Nayak, BMSCE
	11.	Hydroalkylation of Toluene to Benzene Using Hydrogen: Development of flow diagram and Simulation	Dr. Shivakumar R, BMSCE
	12.	Simulation of Separation Column for Propylene-Propane Mixture: Development of flow diagram and Simulation	Dr.Chetan A Nayak, BMSCE
11	13.	Designing the experiments with simple comparative examples	Dr.Hari Prasad Uppara, BMSCE
	14.	Designing the experiments with simple comparative examples	Dr.Hari Prasad Uppara, BMSCE
	15.	2 ^k factorial design with examples	Dr.Hari Prasad Uppara, BMSCE
12	16.	Analysis of response surface methods and design	Dr.Hari Prasad Uppara, BMSCE
	17.	Interpreting the results of surface and counter plots obtained from DOE	Dr.Hari Prasad Uppara, BMSCE
	18.	Solving and interpreting the one or two journal research articles	Dr.Hari Prasad Uppara, BMSCE

Value Added Course on "Hands on Training on Computational Tools in Chemical Engineering"		26th Dec 2022 to 7th jan 2023		List of Participants Registered for the Course		Name of the institution		Department		Signature	
Sr. No.	Name of the participant	Email Id	Mobile number	Name of the institution	Department	Signature					
1	N Liphathree jain	lipthashree.ch20@bmsce.ac.in	8088834774	BMSCE	Chemical Engineering						
2	Varsha Relekar	varsha.ch20@bmsce.ac.in	9740216614	BMSCE	Chemical Engineering						
3	Priyanka	priyanka.ch20@bmsce.ac.in	9620890254	BMSCE	Chemical Engineering						
4	Saraswathi vijapur	saraswathi.ch20@bmsce.ac.in	7204561769	BMSCE	Chemical Engineering						
5	PRASHANTH	Prashanth.ch21@bmsce.ac.in	8197690636	BMSCE	Chemical engineering						
6	Ojaswini A Sastry	ojaswinisastry@gmail.com	9900174544	BMSCE	Chemical engineering						
7	Alaka Aitrey	alakaatrey.ch19@bmsce.ac.in	8088106478	BMSCE	Chemical engineering						
8	N DIVYA REDDY	reddydivya947@gmail.com	8147399331	DSCE	Chemical engineering						
9	Deepthi. M	deepthideeps1528@gmail.com	9743463574	DSCE	Chemical engineering						
10	Kishore	kishore.ch20@bmsce.ac.in	9380588028	BMSCE	Chemical Engineering						
11	Sumaiya Tahsina S	sumaiya.ts02@gmail.com	9113837232	DSCE	Chemical Engineering						
12	Chaitanya V	chaitanyav.ch20@bmsce.ac.in	9743354055	BMSCE	Chemical engineering						
13	Diksha kartik	dikshak.ch19@bmsce.ac.in	8197756026	BMSCE	Chemical engineering						
14	Shakainah Jerusha	shakainahjerusha2520@gmail.com	7338298778	DSCE	Chemical engineering						
15	Vaishnavi Sudarsan Perumbully	vaishnavi.ch20@bmsce.ac.in	9036232777	BMSCE	Chemical engineering						
16	Anushka Goud	anuskatg.ch19@bmsce.ac.in	9880742197	BMSCE	Chemical Engineering						
17	Mamatha.L	Mamathalokesh900@gmail.com	7619122953	BMSCE	Chemical Engineering						
18	Prakyath T P	prakyatht.ch20@bmsce.ac.in	7676032632	BMSCE	Chemical Engineering						
19	VENU GOPAL GOWDA B M	venugopal.ch20@bmsce.ac.in	9606172575	BMSCE	Chemical Engineering						
20	Rao Jagannmaya Jayaprakash	jaganmaya.ch20@bmsce.ac.in	9538956699	BMSCE	Chemical engineering						
21	AMAN PARVEZ	amanparvez.ch20@bmsce.ac.in	7022850391	BMSCE	Chemical Engineering						
22	Pramod S	pramods.ch20@bmsce.ac.in	6362417311	BMSCE	Chemical Engineering						
23	S KATHIR SHANKAR	kathirshankar.ch20@bmsce.ac.in	7899305659	BMSCE	Chemical engineering						
24	Gowtham K P	gowthamkp1551@gmail.com	8867189286	BMSCE	Chemical engineering						
25	Anirudha Pai H N	anirudhapai.ch20@bmsce.ac.in	8310786805	BMSCE	Chemical Engineering						
26	Prathyusha N.D	prathyushand.ch20@bmsce.ac.in	8310258979	BMSCE	Chemical engineering						
27	Chinmayee P B	chinmayee.ch20@bmsce.ac.in	8970802920	BMSCE	Chemical engineering						
28	dhanush h	dhanushh.ch20@bmsce.ac.in	6363991501	BMSCE	Chemical Engineering						
29	Jaahnavi Urs	jaahnaviurs.ch19@bmsce.ac.in	9632412193	BMSCE	Chemical engineering						
30	Shravani M.	1520ch028@sit.ac.in	9019853879	SIT	Chemical engineering						
31	Harshitha H. Y.	harshithahu06@gmail.com	8867546088	SIT	Chemical engineering						
32	Nagadarshan S S	1512ch020@sit.ac.in	853115472	SIT	Chemical engineering						

Value Added Course on "Hands on Training on Computational Tools in Chemical Engineering "

26th Dec 2022 to 7th Jan 2023

List of Participants Registered for the Course

Sr. No.	Name of the participant	Email id	Mobile number	Name of the institution	Department	Signature
1	N Lipthashree jain	lipthashree.ch20@bmsce.ac.in	8088834774	BMSCE	Chemical Engineering	<i>[Signature]</i>
2	Varsha Relekar	varsha.ch20@bmsce.ac.in	9740216614	BMSCE	Chemical Engineering	<i>[Signature]</i>
3	Priyanka	priyanka.ch20@bmsce.ac.in	9620890254	BMSCE	Chemical Engineering	<i>[Signature]</i>
4	Saraswathi vijapur	saraswathi.ch20@bmsce.ac.in	7204561769	BMSCE	Chemical Engineering	<i>[Signature]</i>
5	PRASHANTH	Prashanth.ch21@bmsce.ac.in	8197690636	BMSCE	Chemical Engineering	<i>[Signature]</i>
6	Ojaswini A Sastry	ojaswinisastry@gmail.com	9900174544	BMSCE	Chemical engineering	<i>[Signature]</i>
7	Alaka Atrey	alakaatrey.ch19@bmsce.ac.in	8088106478	BMSCE	Chemical engineering	<i>[Signature]</i>
8	N DIVYA REDDY	reddydivya947@gmail.com	8147399331	DSCCE	Chemical engineering	<i>[Signature]</i>
9	Deepthi. M	deepthideeps1528@gmail.com	9743463574	DSCCE	Chemical engineering	<i>[Signature]</i>
10	Kishore	kishore.ch20@bmsce.ac.in	9380588028	BMSCE	Chemical Engineering	<i>[Signature]</i>
11	Sumaiya Tahsina S	sumaiya.ts02@gmail.com	9113837232	DSCCE	Chemical Engineering	<i>[Signature]</i>
12	Chaitanya V	chaitanyav.ch20@bmsce.ac.in	9743354055	BMSCE	Chemical Engineering	<i>[Signature]</i>
13	Diksha kartik	dikshak.ch19@bmsce.ac.in	8197756026	BMSCE	Chemical engineering	<i>[Signature]</i>
14	Shakainah Jerusha	shakainahjerusha2520@gmail.com	7338298778	DSCCE	Chemical engineering	<i>[Signature]</i>
15	Vaishnavi Sudarsan Perumbully	vaishnavi.ch20@bmsce.ac.in	9036232777	BMSCE	Chemical engineering	<i>[Signature]</i>
16	Anushka Goud	anuskatg.ch19@bmsce.ac.in	9880742197	BMSCE	Chemical Engineering	<i>[Signature]</i>
17	Mamatha.L	Mamathalokesh900@gmail.com	7619122953	BMSCE	Chemical Engineering	<i>[Signature]</i>
18	Prakayath T P	prakayath.ch20@bmsce.ac.in	7676032632	BMSCE	Chemical Engineering	<i>[Signature]</i>
19	VENU GOPAL GOWDA B M	venugopal.ch20@bmsce.ac.in	9606172575	BMSCE	Chemical Engineering	<i>[Signature]</i>
20	Rao Jaganmaya Jayaprakash	jaganmaya.ch20@bmsce.ac.in	9538956699	BMSCE	Chemical engineering	<i>[Signature]</i>
21	AMAN PARVEZ	amanparvez.ch20@bmsce.ac.in	7022850391	BMSCE	Chemical Engineering	<i>[Signature]</i>
22	Pramod S	pramods.ch20@bmsce.ac.in	6362417311	BMSCE	Chemical Engineering	<i>[Signature]</i>
23	S KATHIR SHANKAR	kathirshankar.ch20@bmsce.ac.in	7899305659	BMSCE	Chemical engineering	<i>[Signature]</i>
24	Gowtham K P	gowthamkp1551@gmail.com	8867189286	BMSCE	Chemical engineering	<i>[Signature]</i>
25	Anrudha Pai H N	anrudhapai.ch20@bmsce.ac.in	8310768805	BMSCE	Chemical Engineering	<i>[Signature]</i>
26	Prathyusha N.D	prathyushand.ch20@bmsce.ac.in	8310258979	BMSCE	Chemical engineering	<i>[Signature]</i>
27	Chinmayee P B	chinmayee.ch20@bmsce.ac.in	8970802920	BMSCE	Chemical engineering	<i>[Signature]</i>
28	dhanush h	dhanushh.ch20@bmsce.ac.in	6363991501	BMSCE	Chemical Engineering	<i>[Signature]</i>
29	Jaahnavi Urs	jaahnaviurs.ch19@bmsce.ac.in	9632412193	BMSCE	Chemical engineering	<i>[Signature]</i>
30	Shravani M.	1520ch028@sit.ac.in	9019853879	SIT	Chemical engineering	<i>[Signature]</i>
31	Harshitha H. Y.	harshithahu06@gmail.com	8867546088	SIT	Chemical engineering	<i>[Signature]</i>
32	Nagadarshan S S	1512ch020@sit.ac.in	853115472	SIT	Chemical engineering	<i>[Signature]</i>

Value Added Course on "Hands on Training on Computational Tools in Chemical Engineering "		26th Dec 2022 to 7th Jan 2023		List of Participants Registered for the Course			
Sr. No.	Name of the participant	Email id	Mobile number	Name of the institution	Department	Signature	
1	N Lipthashree Jain	lipthashree.ch20@bmsce.ac.in	8088834774	BMSCE	Chemical Engineering		
2	Varsha Relekar	varsha.ch20@bmsce.ac.in	9740216614	BMSCE	Chemical Engineering		
3	Privanka	privanka.ch20@bmsce.ac.in	9620890254	BMSCE	Chemical Engineering		
4	Saraswathi vijapur	saraswathi.ch20@bmsce.ac.in	7204561769	BMSCE	Chemical Engineering		
5	PRASHANTH	Prashanth.ch21@bmsce.ac.in	8197690636	BMSCE	Chemical Engineering		
6	Ojaswini A Sastry	ojaswisasstry@gmail.com	9900174544	BMSCE	Chemical engineering		
7	Alaka Atray	alakaatrey.ch19@bmsce.ac.in	8088106478	BMSCE	Chemical engineering		
8	N DIVYA REDDY	reddydivya947@gmail.com	8147399331	DSCE	Chemical engineering		
9	Deepthi. M	deepthideeps1528@gmail.com	9743463574	DSCE	Chemical engineering		
10	Kishore	kishore.ch20@bmsce.ac.in	9380588028	BMSCE	Chemical Engineering		
11	Sumaiya Tahsina S	sumaiya.ts02@gmail.com	9113837232	DSCE	Chemical Engineering		
12	Chaitanya V	chaitanyav.ch20@bmsce.ac.in	9743354055	BMSCE	Chemical Engineering		
13	Diksha kartik	dikshak.ch19@bmsce.ac.in	8197756026	BMSCE	Chemical engineering		
14	Shakainah Jerusha	shakainahjerusha2520@gmail.com	7338298778	DSCE	Chemical engineering		
15	Vaishnavi Sudarsan Perumbully	vaishnavi.ch20@bmsce.ac.in	9036232777	BMSCE	Chemical engineering		
16	Anushka Goud	anuskatg.ch19@bmsce.ac.in	9880742197	BMSCE	Chemical Engineering		
17	Mamatha.L	Mamathalokesh900@gmail.com	76191222953	BMSCE	Chemical Engineering		
18	Prakyath T P	praktyath.ch20@bmsce.ac.in	7676032632	BMSCE	Chemical Engineering		
19	VENU GOPAL GOWDA B M	venugopal.ch20@bmsce.ac.in	9606172575	BMSCE	Chemical Engineering		
20	Rao Jagannmaya Jayaprakash	jaganmaya.ch20@bmsce.ac.in	9538956699	BMSCE	Chemical Engineering		
21	AMAN PARVEZ	amanparvez.ch20@bmsce.ac.in	7022850391	BMSCE	Chemical engineering		
22	Pramod S	pramods.ch20@bmsce.ac.in	6362417311	BMSCE	Chemical Engineering		
23	S KATHIR SHANKAR	kathirshankar.ch20@bmsce.ac.in	7899305659	BMSCE	Chemical engineering		
24	Gowtham K P	gowthamkp1551@gmail.com	8867189286	BMSCE	Chemical engineering		
25	Anirudha Pai H N	anirudhapai.ch20@bmsce.ac.in	8310786805	BMSCE	Chemical engineering		
26	Prathyusha N.D	prathyushand.ch20@bmsce.ac.in	8310258979	BMSCE	Chemical Engineering		
27	Chinmayee P B	chinmayee.ch20@bmsce.ac.in	8970802920	BMSCE	Chemical engineering		
28	dhanush h	dhanush.ch20@bmsce.ac.in	6363991501	BMSCE	Chemical engineering		
29	Jaahnavi Urs	jaahnaviurs.ch19@bmsce.ac.in	9632412193	BMSCE	Chemical Engineering		
30	Shraveri M.	1520ch028@sit.ac.in	9019853879	SIT	Chemical engineering		
31	Harshitha H. Y.	harshithahu06@gmail.com	8867546088	SIT	Chemical engineering		
32	Nagadarshan S S	1512ch020@sit.ac.in	853115472	SIT	Chemical engineering		

Value Added Course on "Hands on Computational Tools in Chemical Engineering "

26th Dec 2022 to 7th Jan 2023

List of Participants Registered for the Course

Sr. No.	Name of the participant	Email id	Mobile number	Name of the institution	Department	Signature
1	N Liphashree jain	liphashree.ch20@bmsce.ac.in	8088834774	BMSCE	Chemical Engineering	
2	Varsha Relekar	varsha.ch20@bmsce.ac.in	9740216614	BMSCE	Chemical Engineering	
3	Priyanka	pnryanka.ch20@bmsce.ac.in	9620890254	BMSCE	Chemical Engineering	
4	Saraswathi vijapur	saraswathi.ch20@bmsce.ac.in	7204561769	BMSCE	Chemical Engineering	
5	PRASHANTH	Prashanth.ch21@bmsce.ac.in	8197690636	BMSCE	Chemical Engineering	
6	Ojaswini A Sastry	ojaswinisastry@gmail.com	9900174544	BMSCE	Chemical engineering	
7	Alaka Aitrey	alakaatrey.ch19@bmsce.ac.in	8088106478	BMSCE	Chemical engineering	
8	N DIVYA REDDY	reddydivya947@gmail.com	8147399331	DSCe	Chemical engineering	
9	Deepthi. M	deepthideeps1528@gmail.com	9743463574	DSCe	Chemical engineering	
10	Kishore	kishore.ch20@bmsce.ac.in	9380588028	BMSCE	Chemical Engineering	
11	Sumaiya Tahsina S	sumaiya.ts02@gmail.com	9113837232	DSCe	Chemical Engineering	
12	Chaithanya V	chaithanyav.ch20@bmsce.ac.in	9743354055	BMSCE	Chemical Engineering	
13	Diksha kartik	dikshak.ch19@bmsce.ac.in	8197756026	BMSCE	Chemical engineering	
14	Shakainah Jerusha	shakainahjerusha2520@gmail.com	7338298778	DSCe	Chemical engineering	
15	Vaishnavi Sudarsan Perumbully	vaishnavi.ch20@bmsce.ac.in	9036232777	BMSCE	Chemical engineering	
16	Anushka Goud	anuskatg.ch19@bmsce.ac.in	9880742197	BMSCE	Chemical Engineering	
17	Mamatha.L	Mamathalokesh900@gmail.com	7619122953	BMSCE	Chemical Engineering	
18	Prakayath T P	prakayath.ch20@bmsce.ac.in	7676032632	BMSCE	Chemical Engineering	
19	VENU GOPAL GOWDA B M	venugopal.ch20@bmsce.ac.in	9606172575	BMSCE	Chemical Engineering	
20	Rao Jagannmaya Jayaprakash	jaganmaya.ch20@bmsce.ac.in	9538956699	BMSCE	Chemical engineering	
21	AMAN PARVEZ	amanparvez.ch20@bmsce.ac.in	7022850391	BMSCE	Chemical Engineering	
22	Pramod S	pramods.ch20@bmsce.ac.in	6362417311	BMSCE	Chemical Engineering	
23	S KATHIR SHANKAR	kathirshankar.ch20@bmsce.ac.in	7899305659	BMSCE	Chemical engineering	
24	Gowtham K P	gowthamkp1551@gmail.com	8867189286	BMSCE	Chemical engineering	
25	Anirudha Pai H N	anirudhapai.ch20@bmsce.ac.in	8310786805	BMSCE	Chemical Engineering	
26	Prathyusha N D	prathyushand.ch20@bmsce.ac.in	8310258979	BMSCE	Chemical engineering	
27	Chinmayee P B	chinmayee.ch20@bmsce.ac.in	8970802920	BMSCE	Chemical engineering	
28	dhanush h	dhanushh.ch20@bmsce.ac.in	6363991501	BMSCE	Chemical Engineering	
29	Jaahnavi Urs	jaahnaviurs.ch19@bmsce.ac.in	9632412193	BMSCE	Chemical engineering	
30	Shraverani M.	1520ch028@sit.ac.in	9019853879	SIT	Chemical engineering	
31	Harshitha H. Y.	harshithahu06@gmail.com	8867546088	SIT	Chemical engineering	
32	Nagadarshan S S	1512ch020@sit.ac.in	853115472	SIT	Chemical engineering	



B.M.S. College of Engineering

Autonomous Institute, Affiliated to VTU, Belagavi
Bull Temple road, Bengaluru-560 019

Two Week
Value-Added Course

Hands-on Training on Computational Tools in Chemical Engineering **Organised By** **Department of Chemical Engineering**

This is to certify that _____ has participated in the Value-Added Course on "**Hands on Training on Computational Tools in Chemical Engineering**" organized by the Department of Chemical Engineering, BMSCE, Bengaluru, during December 26, 2022 to January 7, 2023.

Dr. G. N. Rameshaiah
Convener
Chemical Engineering

Dr. Y. K. Suneetha
Head of Department
Chemical Engineering

Dr. Muralidhara S
Principal
BMSCE



GPS Map Camera

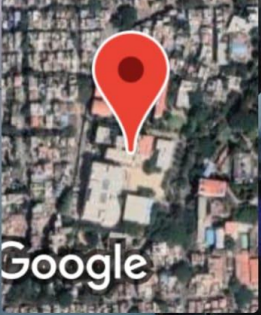


Bengaluru, Karnataka, India
BMS College of Engineering, Opp Bull Temple
Road, BMSCE PG Block, Basavanagudi,
Bengaluru, Karnataka 560019, India
Lat 12.941498° Long 77.565754°
31/12/22 12:33 PM GMT +05:30

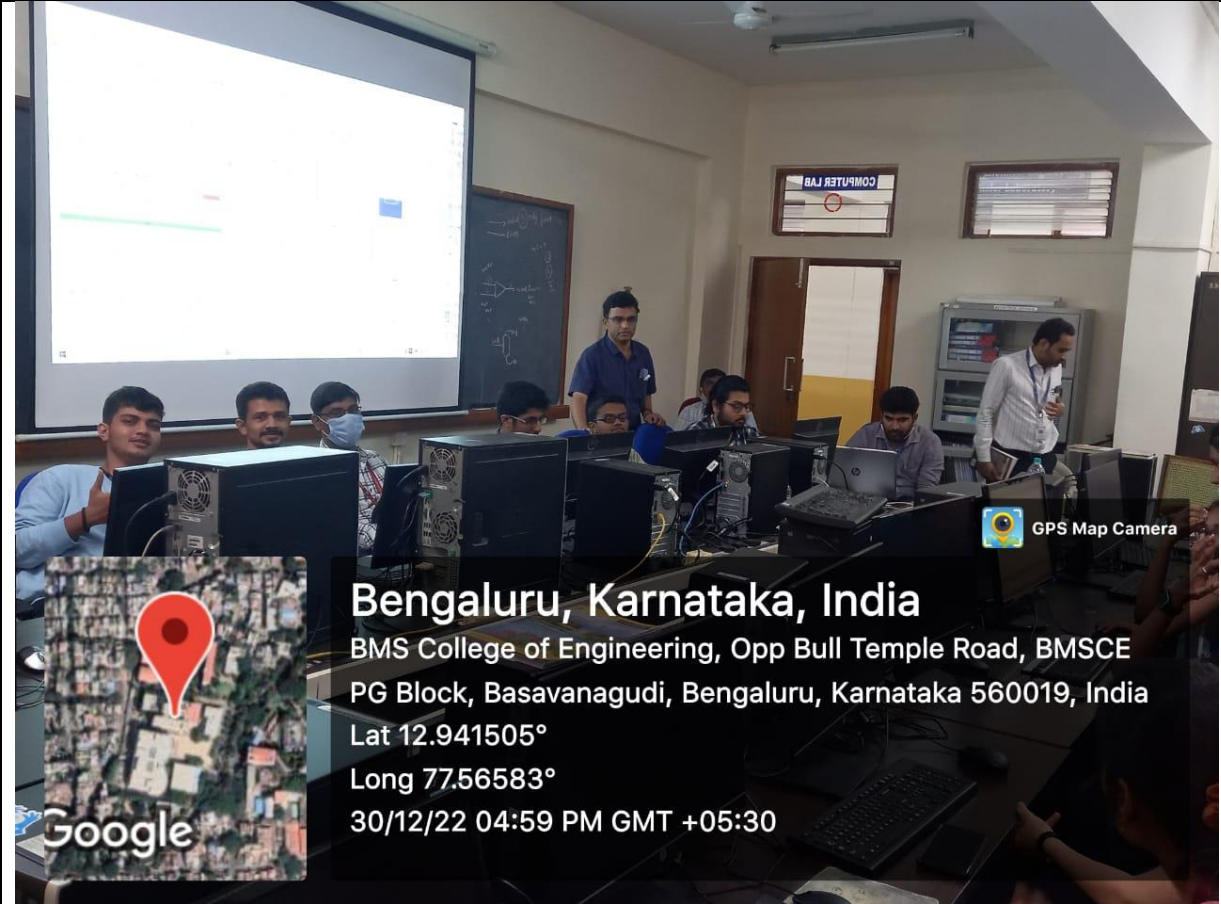
26.21° C



GPS Map Camera



Bengaluru, Karnataka, India
First floor ,New, BMS COLLEGE OF ENGINEERING,
Basavanagudi, Bengaluru, Karnataka 560019, India
Lat 12.941459°
Long 77.565864°
27/12/22 04:27 PM GMT +05:30



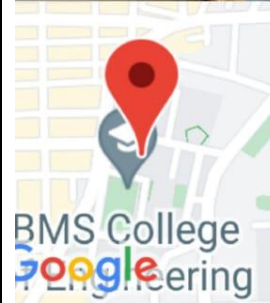
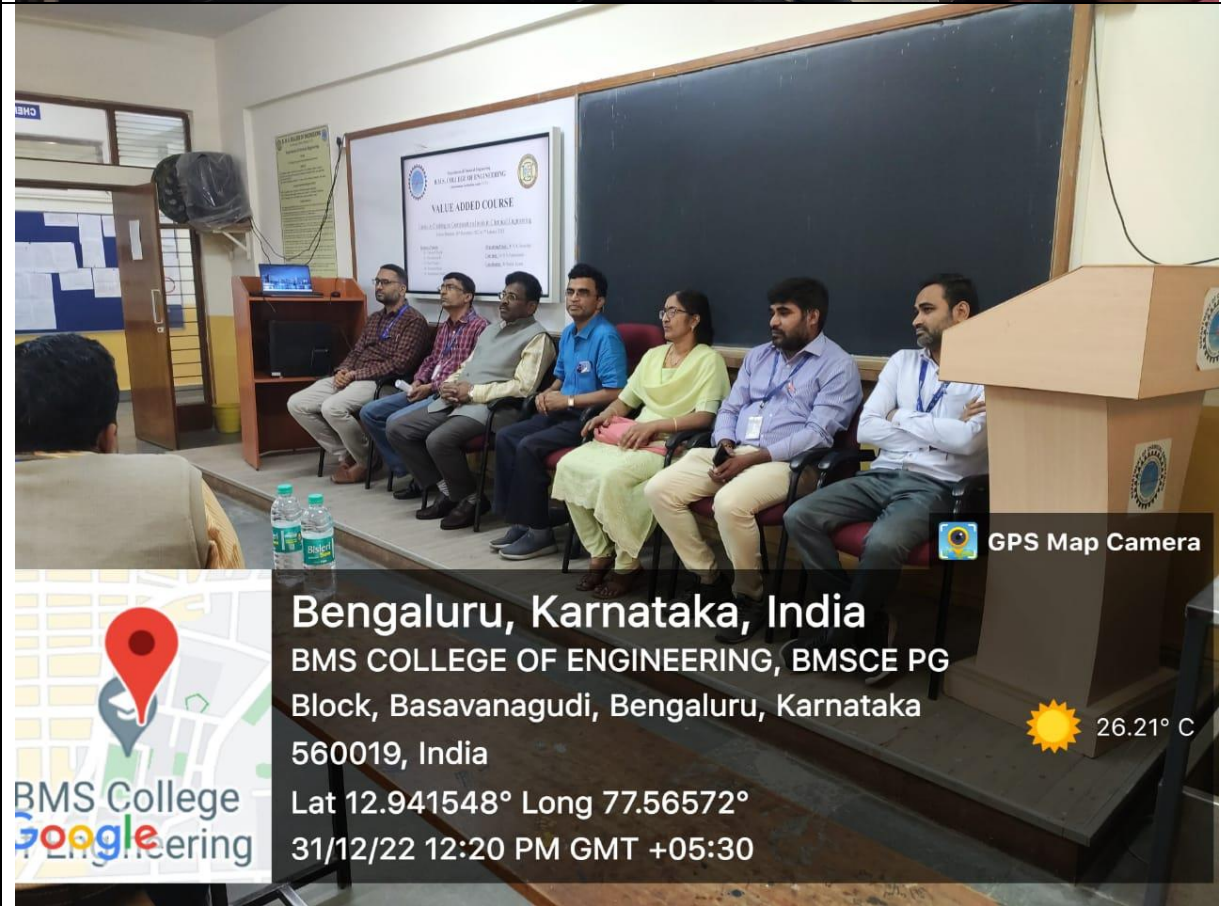
Bengaluru, Karnataka, India

BMS College of Engineering, Opp Bull Temple Road, BMSCE
PG Block, Basavanagudi, Bengaluru, Karnataka 560019, India

Lat 12.941505°

Long 77.56583°

30/12/22 04:59 PM GMT +05:30



Bengaluru, Karnataka, India

BMS COLLEGE OF ENGINEERING, BMSCE PG
Block, Basavanagudi, Bengaluru, Karnataka
560019, India

Lat 12.941548° Long 77.56572°

31/12/22 12:20 PM GMT +05:30

26.21° C