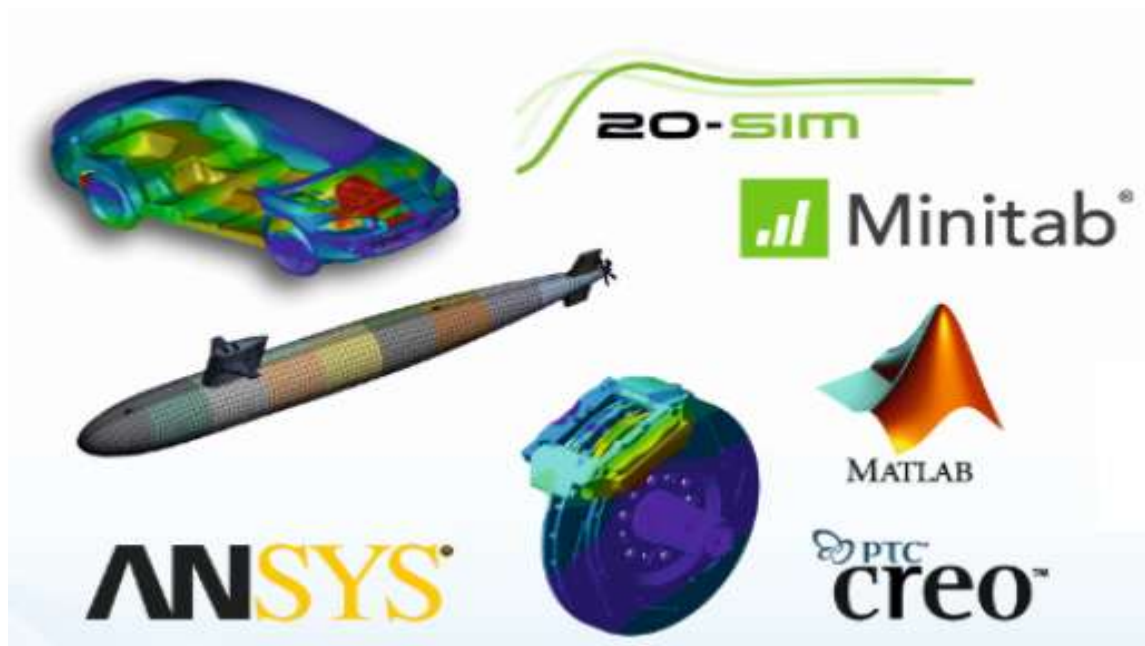




A Report on
ISTE approved Two week Short Term training program on
“Applications of softwares in Mechanical Engineering (Matlab,
Creo 4.0, Ansys 18.0, 20-Sim, Minitab) ”
during 18th – 30th December,2017



organized by
Gujarat Technological University
Ahmedabad
In collaboration with
Mechanical Engineering Department,
Birla Vishvakarma Mahavidyalaya (Engineering College)
(An Autonomous Institution)
Managed by Charutar Vidya Mandal
Vallabhvidyanagar – 388120, Gujarat
Website: www.bvmengineering.ac.in



About BVM and Vallabh Vidyanagar

In 1948, Shri Sardar Vallabhbhai Patel kindled a lamp of rural knowledge center-'Vallabh Vidyanagar' in Gujarat, and today this centre is a 'Bodhigaya' for over fourty thousand young Buddha's studying in varied disciplines at Sardar Patel University & Gujarat Technological University. A branch shooted out, from this Bodhigaya tree for engineering education as Birla Vishvakarma Mahavidyala (BVM Engineering college exactly 101 years after the engineering education in India was initiated. This branch was nurtured by two true Gandhians Er. Bhailalbhai Patel and Shri Bhikhabhai Patel which has an allumni base of 18000 students. A few of distinguished alumnus who have done exemplary work in engineering profession are Mr. Anil Naik, Ex CMD, L&T, Mr. Niranjn Shah, CEO , Globetrotters, USA, Dr. Bharatan Patel, Founder, Fluent Software And Prof. S. K. Khanna, Former AICTE Chairman . Vallabh Vidyanagar located 6 km from Milk City- Anand is situated along the Ahmedabad-Mumbai Railway Line and is well connected to all major cities and town by rail as well as road. This educational township has over 46 Institutes managed by the Charutar Vidya Mandal.

About Mechanical Department

Mechanical Engineering Department established in 1948, is offering B.E. Mechanical (both full time and part time) apart from M.E. (Machine Design). Department is accredited by NBA. The department has expertise area like Design,Dynamic Analysis, CAD tools like Creo, ANSYS, MiniTab, 20-Sim, Refrigeration & AC, Thermal Engineering, Geometrical Dimensioning and Tolerancing, Casting, Welding, Machining, etc.

About STTP

Mechanical Engineering Department, BVM had proposed STTP on “**Applications of softwares in Mechanical Engineering (Matlab, Creo 4.0, Ansys 18.0, 20-Sim, Minitab)**” from 18/12/2017 to 30/12/2017. This program was designed to train the participants to apply the knowledge in mechanical engineering, engineering analysis, product design and automated manufacturing using Computer Aided Engineering (CAE) Tools. To facilitate this, the participants were exposed to state of the art techniques for engineering design and analysis using well known commercial CAD/CAE software like PTC CREO, ANSYS, 20-Sim, MINITAB, AUTOCAST etc. through hands-on exercises. Two week training program was arranged by the department to strengthen the concepts of CAD/CAE softwares.



With the support of ISTE & Gujarat Technological University, Department of Mechanical Engineering, BVM engineering College had organized Two week Short Term Training Programme on **“Applications of softwares in Mechanical Engineering (Matlab, Creo 4.0, Ansys 18.0, 20-Sim, Minitab)”** during 18th -30th Dec, 2017 at BVM College, Vallabh Vidyanagar.

This type of program provides a platform to participants to know applications of different software through interaction with experts and eminent personalities of the field.

Inaugural Session



The STTP had inaugurated by esteemed Chief Guest Mr. Hasit Kaji, Centre Head, Tata Consultancy Services, President Er. M J Patel, Hon. Joint Secretary, CVM, Guest of Honour Dr. I. N. Patel, Principal-BVM College, Dr. P. M. George, Head-Mechanical Engineering Department & Program Convener Dr. V. J. Patel, Professor, Mechanical Engineering Department. 27 participants from various polytechnics, Engineering colleges and Industrial professionals across India, Heads of Different departments, Eminent expert speaker Mr. Rahul Athale, Faculty Members, PG Students, Prof. A. M. Thakkar & Prof. J. R. Koisha, Program Co-coordinator, Prof. V. A. Pandya, Prof. R. R. Patel, Prof. U. B. Chaudhari & Prof. C. P. Mazmudar, Team Members were remain present in the inaugural session. As per the Indian tradition, the STTP had inaugurated with Prayer and Lighting of the lamp.



Prof. (Dr.) Indrajit Patel, Principal–BVM College, had welcomed all. He briefed all about the STTP and its importance. He briefed about different activities of BVM. He motivated all the participants by explaining the importance of such kind of programs and their significance. He thanked CVM for always supporting for faculties and students development programs.

Dr. V. J. Patel, STTP Convener had briefed about outline of program. He explained various outcome of the program and requested all participants to enrich their knowledge from this STTP by effective participation.

Chief Guest Mr. Hasit Kaji, Centre Head, Tata Consultancy Services shared his views on recent trends in industries. He had shared case studies of various challenges during his service in TCS. He had talked about the actual problems that can be easily solved by using latest technology.

Er. M. J. Patel, President, Hon'ble Jt. Secretary, CVM shared his views for the program. He said that CVM always supports these kinds of faculty development programs through which the knowledge can be passed to students for their development in modern era. He congratulated Institute for organizing such a program which indirectly benefits to society.

Dr. P. M. George, Head-Mechanical Engineering Department thanked all dignitaries, Expert Speakers, invitees, organizing partners, Supporters and participants for their valuable inputs to the program. All the technical sessions had delivered by experts from industries, professional and academicians from relevant fields. The different experts had covered the following areas:



	Time	11:00 am to 1:00 pm	2:00 pm to 4:00 pm	4:15pm to 5:45 pm
Day1	18 th December 2017, Monday	Application of Software in Engineering - Mr. Rahul Athale	Basic Solid Modelling Mr. Anand Mistry	Hands-on Session of Solid Modelling using CREO Prof. A M Thakkar/Prof. J R Koisha
Day2	19 th December 2017, Tuesday	Advanced Solid Modelling Mr. Anand Mistry, Aspire Design	Assembly Modeling Mr. Anand Mistry, Aspire Design	Hands-on Session of Advance Solid Modelling using CREO Prof. A M Thakkar/Prof. J R Koisha
Day3	20 th December 2017,Wednesday	Mechanism Design Dr. Yashavant D. Patel, ADIT	Manufacturing Simulation Prof. Hitesh T Patel, DDIT	Surface Modeling Mr. Anand Mistry, Aspire Design
Day4	21 st December 2017, Thursday	FEA Static Structural Mr. Anand Mistry, Aspire Design	FEA Transient Structural Mr. Anand Mistry, Aspire Design	Proteus simulations for electronic system design using microcontroller, sensors, and actuators. Dr. D M Patel, BVM
Day5	22 nd December 2017, Friday	FEA Thermal Analysis Mr. Anand Mistry, Aspire Design	Design of Experiment Mr. Anand Mistry, Aspire Design	Minitab- DOE Dr. P M George,BVM
Day6	23 rd December 2017, Saturday	Analysis of Variance using MINITAB Prof. R S Barot, BVM	Design Optimization Mr. Anand Mistry, Aspire Design	Regration Analysis using MINITAB Dr. Hitesh Parmar, SPU
Day7	26 th December 2017, Tuesday	Regration Analysis using MINITAB Dr. Dhaval Maheta,VNSGU	Sensitivity Analysis Dr. Hitesh Parmar, SPU	Dynamic Simulation using MuPad Dr. V J Patel,BVM
Day8	27 th December 2017, Wednesday	Optimization Techniques in MATLAB Prof. Rajesh Sanghvi, GCET	Vibration Analysis using MATLAB Dr V. N. Patel,GCET	Initial Value problem using MATLAB Prof. V H Chaudhary,BVM
Day9	28 th December 2017, Thursday	Bond Graph-A Tool for dynamic Modelling Dr. Mehul Gor, GCET	Symbol 6.0 - A Software for Bond Graph Modelling Dr. Mehul Gor,GCET	Introduction to 20-Sim for Dynamic Modelling Dr. H P Patolia,BVM
Day10	29 th December 2017, Friday	Directional Solidification in Casting Prof. S P Joshi,BVM	Application of Computer Aided Tools in Metal Casting Prof. Mayur sutaria,CHARUSAT	Hands-on Session of Metal Casting Simulation using 'AutoCAST' Prof. Viral Panara,CHARUSAT
Day11	30 th December 2017, Saturday	Recent features in CREO 4.0 Mr. Anand Mistry, Aspire Design	Recent Applications of Software in Industries Mr. Jayanta Mukhopadhyay	Valedictory



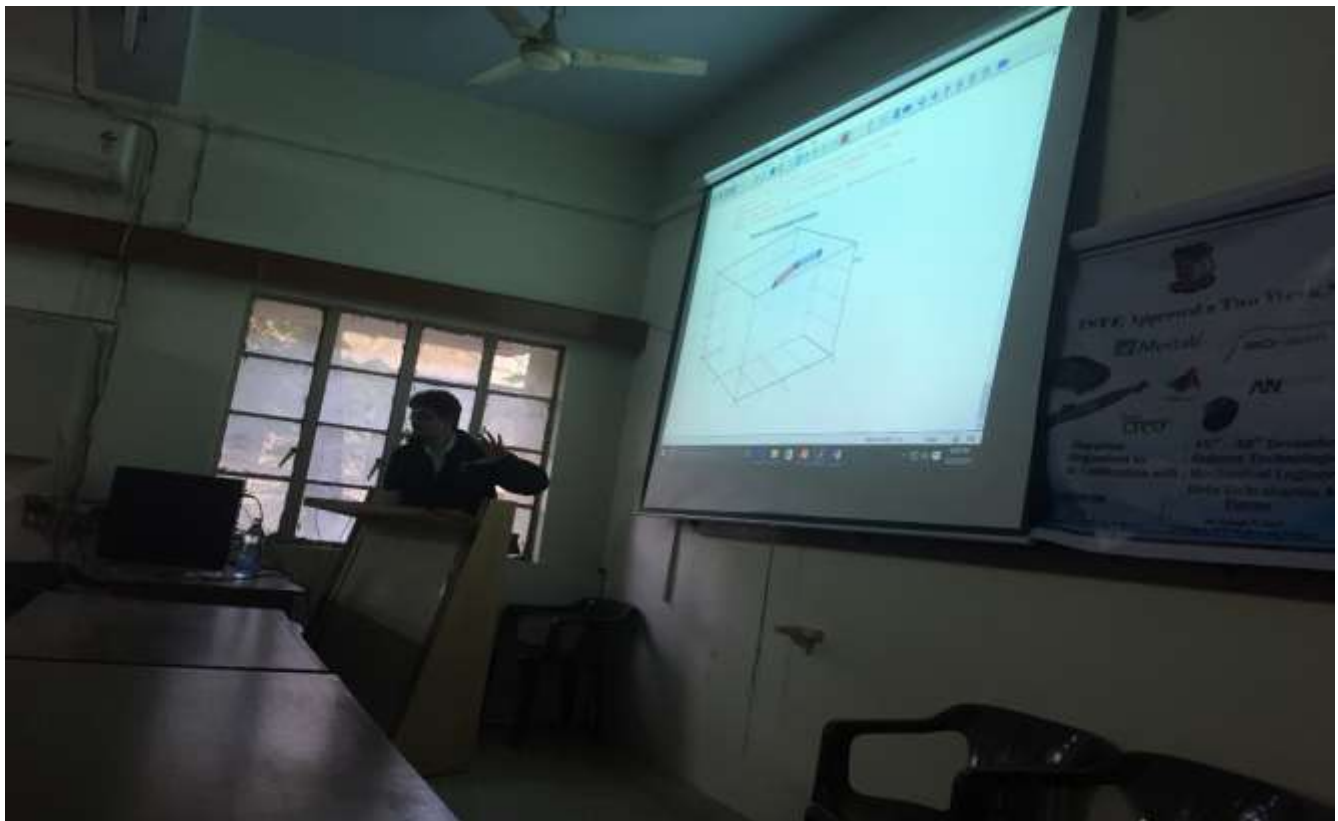
Glimpses of Technical Session



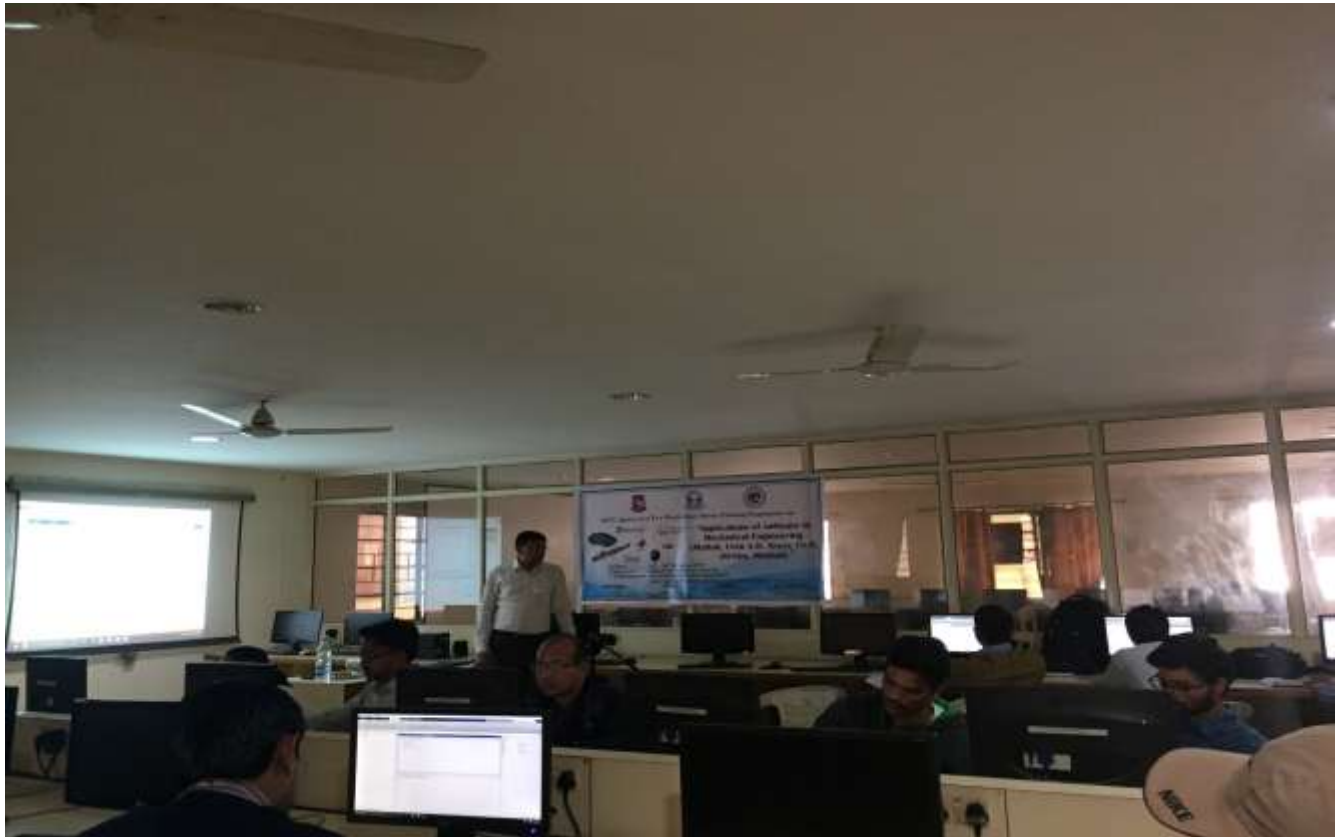
















Valedictory Session

The STTP was concluded with valedictory session with the Certificate distribution to all the participants. In the Valedictory session, Chief Guest Er. Jayanta Mukhopadhyay, Vice President and Head R&d, Elecon Engg. Co. Ltd, President Dr. I. N. Patel, Principal, BVM college, Dr. P. M. George, Head , Mechanical Engineering Department and Dr. V. J. Patel, Program Convener were remain present.

The concluding remarks were given by Dr. V. J. Patel, Program Convener. He highlighted the immense contribution of the various sponsors and organizers and special thanks to CVM for the massive support for the STTP. He shared his view for such STTPs which need to be taken more with great enthusiasm. Academicians and professionals also shared their feedback about the program.



Dr. P. M. George shared his views for the STTP and congratulated to the department and team for organizing the STTP successfully.

Hon'ble Chief Guest Er. Jayanta Mukhopadhyay shared about his experience and recent uses of CAD softwares in Elecon and other industries.

President Dr. I. N. Patel, Principal, BVM college congratulated all and mentioned that CVM is always supporting for the growth of students as well as faculties to build strong nation by enriching the education.

Prof. Ashish M Thakkar thanked all the participants, organizers, supporting partners, CVM, all the faculty members and all who directly or indirectly supported the STTP for successful completion. The valedictory session ended with the national anthem.



ISTE Approved Two Week STTP on
"Applications of software in Mechanical Engineering
(Matlab, Creo 4.0, Ansys 18.0, 20-Sim, Minitab)"
Organized by GTU in collaboration with Mechanical Engineering Department of
Birla Vishvakarma Mahavidyalaya from 16th to 30th December, 2017



1st Row: Dr. A.M.Trivedi, Dr.P.M.George, Principal Dr.I.N.Patel, Mr.Rahul Athale, Dr.V.J.Patel, Prof.B.S.Patel

2nd Row: Prof A.M.Thakkar, Prof.J.N.Jain, Prof.R.G.Jivani, Prof.R.R.Patel, Prof.J.P.Hadiya, Prof.A.B.Damor, Prof.N.S.Yagnik, Prof.S.Y.Prajapati, Prof.D.J.Jain,

3rd Row: Prof.H.S.Shukla, Prof.J.B.Solanki, Prof.P.G.Pithadiya, Prof.V.H.Chaudhari, Prof.A.H.Jariya, Prof.U.B.Chaudhari, Mr.Anand Mistry, Prof.V.A.Pandya, Prof.C.P.Mazmudar, Prof.V.R.Singh, Prof.H.A.Bhargav

4th Row: Mr.P.Nirupam Kumar, Mr.P.Hari Sai Srinivas, Mr.Ravikumar Shah, Prof.J.H.Khatri, Prof.B.N.Patel, Mr.B.R.Patel, Prof.M.S.Arora, Mr.Parimal Navik, Prof.J.R.Koisha

From

Depart of Mechanical Engineering,
B V M Engineering College