



NEWS LETTER

2017- 2018



**BABA BANDA SINGH BAHADUR
ENGINEERING COLLEGE
FATEHGARH SAHIB**

President's Message



Bhai Gobind Singh Longowal

President, SGPC & Trust

To support the cause of technical education in the state of Punjab, the SGPC – a religious body, known as the mini parliament of the Sikh community, established its 2nd Engineering College at Fatehgarh Sahib in the year 1993 in the name of Baba Banda Singh Bahadur - the great warrior, who laid to rest the tyranny of the Mughals uprooting their empire. The institute is being run by Baba Banda Singh Bahadur Education Trust, Fatehgarh Sahib under the patronage of the SGPC. In a period of 24 years the college has fully developed into a well-known engineering institute and now it is considered as one of the leading institutes in the country for imparting high quality technical education and providing top class amenities & facilities. It has the honour of being the first institute affiliated with PTU to get its courses accredited by the NBA - the hallmark of quality education, infrastructure, facilities, amenities etc. The college has state-of-the-art infrastructure highly qualified, experienced and dedicated faculty. It is the first college in PTU to start B.Tech. Agriculture Engineering. To cater to the need of diploma-level technical education in the area, Baba Banda Singh Bahadur Polytechnic College was set up at Fatehgarh Sahib in 2006. The college provides modern infrastructural and technological support to facilitate teaching, learning and overall development of students. The college education system looks beyond employment and concentrates on individual development by imparting them skills for life time relevance. Academic excellence and holistic education define learning at the college. Within a period of 10 years, it has become one of the most sought-after institutes for admission. Considering the need and demand of the area, Baba Banda Singh Armed Forces Preparatory Academy was established at Fatehgarh Sahib in April 2016 for training the selected young boys and girls from Punjab for permanent commission into the armed forces through the National Defence Academy. From 2017 session, a graduate plus integrated course is commencing for girls preparing them for Women Entry Scheme into Defence Forces as Officers through SSCW (NT) scheme. The students joining these prestigious institutions would get quality education & training with topclass facilities & amenities and, I am sure, they would become good citizens and contribute to the welfare of humanity

Principal's Message



In today's world, globalization is rapidly increasing, bringing with it expanded personal mobility; access to knowledge across borders; increased demand for higher education, growing worldwide investment; and increased needs for continuing education. The twenty first century undoubtedly belongs to the men and women of strength and excellence in professional fields. We staunchly believe that freedom of individual development is the basis of democracy. Intellectual progress demands the maintenance of the spirit of free inquiry. The pursuit & practice of truth regardless of consequences

Major General (Dr.) Gurcharan Singh Lamba, VSM (Retd), Principal

should be the only ambition of institutions of higher education. Education, one of the human resource development strategies, is a powerful tool for peaceful social transformation, overall development and prosperity of any nation. It should be free from the shackles of ignorance, prejudice and unfounded belief. Education is an important index of human development. Higher Education is indeed a vital tool for intellectual, cultural, aesthetic development and a means for achieving wider social aspirations. Baba Banda Singh Bahadur Engineering College is a premier institution of higher education. We endeavor to nurture our biggest asset; our students as holistic world citizens driven by human values and wisely equipped to excel on a global stage. We focus on each student, to bring out their full potential and empower them with a winning attitude.

OUR MISSION

To evolve as an eminent Centre of Learning with total commitment to provide career focused technical training aimed at excellence in interdisciplinary education, research and innovation in order to produce socially responsible and synergetic leaders with a global profile.

OUR VISION

The Baba Banda Singh Bahadur Engineering College seeks to enrich the academic experience of students to help them meet the evolving needs of society. We aspire to realize our vision as follows:

- Conduct UG programs that integrate global awareness, communication skills and team building across the curriculum.

- Run Graduate education programs to prepare students for interdisciplinary engineering research and advanced problem solving with focus on career advancement.

- Provide an atmosphere to facilitate personal commitment to the educational success of students in an environment that values diversity and community.

- Inculcate a high regard for ethical principles and an understanding of human and environmental realities.

- Provide state-of-the-art facilities and effective delivery of high quality content by qualified faculty members to build the notion of lifelong learning.

- Conduct scholarly activities that create and transfer cutting-edge knowledge in the area of engineering and technology.

- Create a highly successful alumni base that contributes to global society.

CONTENTS

Alumni Meet
College Activities
Convocation-2018
Cultural Activity
Sports
Guru Gobind Singh Study Circle
Faculty Achievements
Industrial visits
FDPs
NSS activities
Society College Interactions
Research & Development

Alumni Meet - BBSBEC

Baba Banda Singh Bahadur Engineering College, Fatehgarh Sahib organized the alumni meet REVISITING NOSTALGIA-2017 on 11th November 2017. About 100 alumni of different streams from batches 1993 to 2013 attended the reunion of their alma mater. The alumni interacted with faculty and students and shared their expertise and experiences. The Principal, Dr. G. S. Lamba inaugurated the alumni meet and acquainted them with the various achievements of the college. Dr. Manpreet Kaur, Convener, Alumni meet delivered the welcome speech and appreciated the participation of alumni. The alumni cherished the pleasant and memorable experiences they had while being students at BBSBEC, Fatehgarh Sahib. The institute also invited and collected feedback from the alumni regarding the changes in the curriculum taught to students.

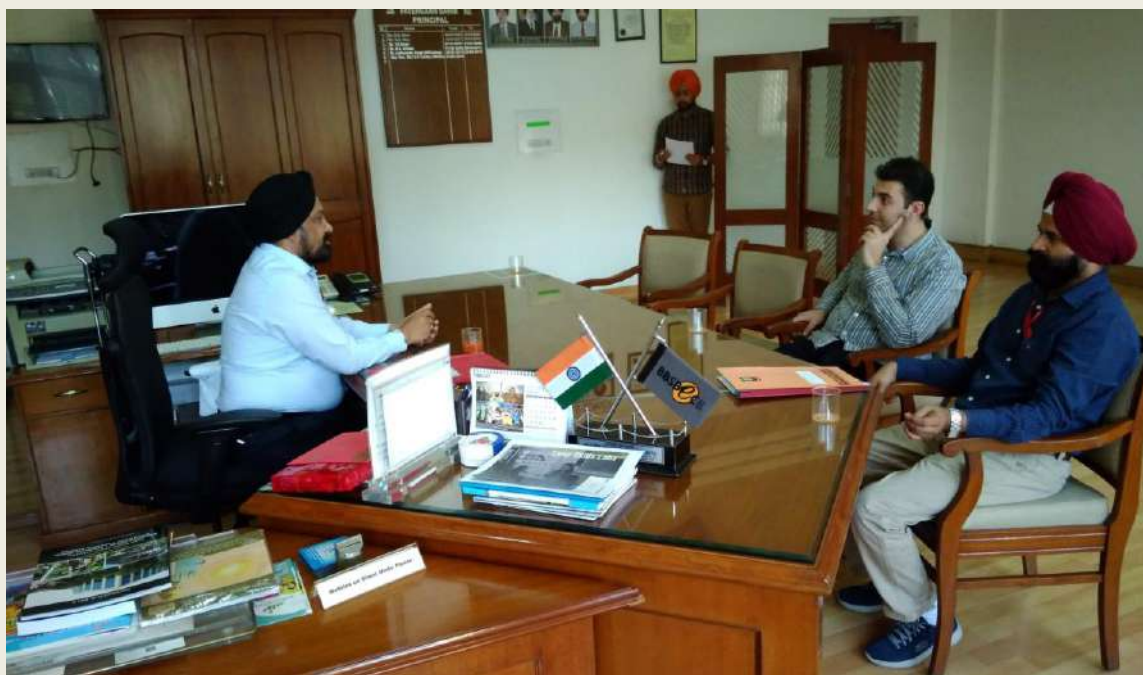


Institution of Engineers (India) Chandigarh jointly organized a seminar on Research

A one day workshop on “*Mathematical modelling and Optimisation of systems*” was organized jointly by IE(I) Chandigarh section and Department of ECE, Baba Banda Singh Bahadur Engineering College, Fatehgarh Sahib. Dr. Kavita, Post Doctorate, Belgium was the resource person. She shared her research experience of Belgium. Dr. T S kamal was the Chief Guest and S. S S Mundi was the chief organizer. S. Jagdeep Singh, District Coordinator of Maths, Fatehgarh Sahib was the Guest of Honor. Maj.Gen (Dr.) Gurcharan Singh Lamba (VSM) ,Principal of the college , said that Mathemodelling is necessary for every research problem and to publish research papers in reputed SCI journals. Dr. Amrinder Singh, AP spoke about the need of latex platform and its ease of use. Dr. R S Uppal, Dr. T S Panag, Dr. Supreet Singh Prof. Kiranpreet Kaur also spoke in the seminar. Mr. S S Mundi presented the vote of thanks. Seminar was sponsored by IE(I) Chandigarh.



Visit of foreign faculty Dr.Burak from Germany



Fire Safety Week was celebrated at the campus of Baba Banda Singh Bahadur Engineering College, whereby the Fire Officers of Mandi Gobindgarh and Fatehgarh Sahib reached the college campus to demonstrate and give detailed information about reasons of outbreak of fire and methods to control & extinguish fire to the college students, security personnel and staff members. Fire Safety Literature was also distributed by the team of fire officers. On this occasion the college's said that this live demo was organized keeping in view the security of the students and staff. The Principal of the college, Major General (Dr.) Gurcharan Singh Lamba(VSM), thanked the Chief Fire Safety Officer., S.Harbans Singh and his staff for demonstrating the fire safety drill. He also congratulated college's Chief Security Officer, Dr. Virinder Singh and his team for organizing this drill in college.





Alumni's enjoying during the event

College Activities

Students' Achievements / College Activities



Our All Round Achievers

Students' Achievements / College Activities



Our All Round Achievers



Students performing Bhangra during the Alumni meet 2017



Organizing committee of Alumni 2017

Convocation 2018



Convocation Glimpse 2018

Cultural Activity



Miss Fresher 2017 awarded by Principal Mam and Fraternity



Mr. Fresher Jagdeep Singh and Miss Fresher Jassimran Kaur & Mr. Talented Amandeep Singh and Miss Talented Jaskiran Kaur

Jassimran Kaur and Jagdeep Singh were selected as Miss Freshers' and Mr. Freshers' 2017 respectively. Jaskiran Kaur and Amandeep Singh were adjusted as Miss Talented and Mr. talented 2017 during Freshers Party held on 8th September, 2017. Lovepreet Kaur, roll no. 1402239 bagged 'Best Giddha girl' award in youth festival 2017 held at MRSPTU, Bathinda



Gold Medalist College Giddha team at youth festival at MRSPTU Bathinda

Sports

The Institute understands the vital role of sports in the grooming and development of students and thus gives equal importance to academic and sports alike, encouraging them to participate and excel, in whichever sports of game they like. May it be cricket, basketball, football, hockey, table tennis, badminton, lawn tennis. Well-kept courts, training under professional coaches, funds and necessary psychological support are imparted to the budding sportsperson for the betterment of their performance. Our students also have not disappointed us. They have been winning titles from intercollegiate to interuniversity level making the whole institute stand up with pride and appreciation. Institute has its full-fledged Sports Department. To manage the various Sports activities, faculty & staff members have been assigned duties.



Khalsai khed utsav 2018



Students participating in March Past during KHALSAI games



Principal Maj. Gen. G.S. Lamba honoring chief guests International Hockey Player Indian team S. Inderjit Singh Chadda on the occasion of annual sports meet prize distribution



Student's participation in Athletics & Cricket completion between Faculty and student on Annual Sports meet 2018

Guru Gobind Singh Study Circle

Guru Gobind Singh Study Circle has been constituted in the college with an aim to inculcate moral, spiritual and universal values in the budding engineers. The moral values are essential to make the students responsible citizens. The students participated in different events organized by SGPC. Our students Harminder Singh and Gursimran Singh should second in Dumala Tying competition held during *Sikh Yuva Chetna* March organized by SGPC on 10th Jan, 2017 at Anandpur Sahib. Guru Gobind Singh Study Circle organized “Most Aware Singh and Kaur” of the college competition on 20th Sept, 2017 which comprised of quiz and buzzer rounds. The competition consists of various rounds of questionnaire, audio-visual and general awareness about Sikh religion. S. Jatinder pal Singh, Secretary General, Guru Gobind Singh Study Circle was the chief guest of the event. He talked to the students and advised to aim high in the life, to work hard, make the full use of technology.



Students reciting the divine Shabad Kirtan during “Most Aware Singh and Kaur”



Jassimran Kaur was awarded as the Miss Sikh personality & Inderjit Singh was awarded as the Mr. Sikh personality

Jassimran Kaur and Inderjit Singh were selected as Miss Sikh Personality and Mr. Sikh Personality respectively during Most Aware Singh and Kaur, held on 6th October 2017.



Students performing gatka during the event of Most Aware Singh and Kaur



Whole team of Guru Gobind Singh Study Circle

Sehaj Path was organized for the passed-out students on March 8, 2017. Bhai Rai Singh ji from Sri Harmandir Sahib, Amritsar Sahib recited the Gurbani Kirtan.



Sehaj path

GGSS organized Student Personality Development Camp on 23-25Feb in which session on "Students' Personality Traits & Academic Performance" organised on 23 February 2018 in the GianiDitt Singh Auditorium. Mr Jaideep Grewal, a Senior Corporate Executive, having a vast experience of over 23 years in the field of Management, Manufacturing, Business Excellence and People Skills Enhancement has consented to be the speaker for the workshop.



Principal Dr. G.S.Lamba addressing the students during the personality development programme organized by Guru Gobind Singh Study Circle

Faculty Achievement



Dr. Harpreet Kaur Uppal, Asstt. Professor, Department of Applied Sciences has successfully completed her Ph.D. titled "Receptors Based on Diphenyl ether and its Aza Analogues for Ion Recognition using Potentiometry" from Thapar University, Patiala in 2017.



Dr. Harleen Kaur, Asstt. Professor, Department of Applied Sciences has successfully completed her Ph.D. titled Lattice Dynamics of Silicates in Various Phases at Different depths of Earth's Mantle in March 2017.



Dr. Navneet Kaur- Paper Titled "Optimized cost effective and energy efficient routing protocol for wireless body area networks", Ad Hoc Networks was published in Elsevier, 61 (2017) 65-84. doi:10.1016/j.adhoc.2017.03.008, Impact Factor: 1.667



HOD ECE Dr. Raminder Singh Uppal completed Ph.D intitled "New Deployment & Dynamic Shortest Path Routing in Wireless Sensor Network" from IKG Punjab Technical University, Jalandhar



Dr. Tripatjot Singh Panag successfully completed Ph.D entitled Wireless Sensor Networks using Hybrid Optimization Techniques from SLIET (Deemed University), Sangrur.



Dr. Supreet Singh completed Ph.D entitled Performance Evaluation of Spectrum Sensing and RF Energy Harvesting for Cognitive Radios Based on SDR (Supported by Three SCI Publications) from Thapar University, Patiala. Their research has been published in various reputed National/International journals.



Dr. N.P Singh Deo completed Ph.D entitled (Experimental investigations on heat transfer enhancement in solar air heater) ed with staggered ribs.



S. Jaspreet Singh Randhawa, Computer Programmer (Mechanical Engg. Department) completing his Ph.D. titled **"Role of Manufacturing Informatics in Smart Manufacturing"** from IKG Punjab Technical University, Kapurthala.



Prof. Raju Sharma, Asstt. Professor, Electronics & Communication Engineering Department for successfully completing her Ph.D. titled **"Efficient Routing Protocol in Wireless Body Area Networks"** from IKG Punjab Technical University, Kapurthala.



Prof. Siddhartha Saha, Asstt. Professor (Selection Grade), Department of Mechanical Engineering, for successfully completing his Ph.D. titled **"Study of Hand Arm Vibration Exposure of Indian Male Workers"** from PEC University of Technology, Chandigarh.



Dr Sukhmeet Kaur, Department of Management Studies, has completed her PhD entitled "An Empirical Study of Impulse Buying behaviour of Online and Offline Consumers in India. (A Study of Consumers in Punjab, Haryana, New Delhi and Chandigarh) from IKG PTU, Jalandhar in Dec, 2017. The research investigated the buying behaviour of online and offline impulse buyers and found that offline buyers act more impulsively towards product purchasing. The research suggests new insights into the field of impulse buying and helps marketers in devising strategies to tap the potential buyers.

Industrial visit

Industrial Visit to 'GNA' Mehtiana

The Mechanical Engineering Department of BBSBEC has organized industrial visit for Final and Pre-final year students of Mechanical Engineering to 'GNA' Mehtiana in October, 2017. Dr. Lakhvir Singh, Head of Department, has said the visit is aimed at giving students the technical exposure about various mechanical processes going in GNA. Maj. Gen. (Dr.) GS Lamba, Principal has said that such tailored visit develops the thought process of our students and helpful in relating their theoretical concepts with practical applications.



GNA Mehtiana

Visit to 'Diesel Loco Modernization Works' Patiala

The Mechanical Engineering Department of BBSBEC has organized industrial visit for Fourth semester students of Mechanical Engineering to 'Diesel Loco Modernization Works' Patiala from 7th to 9th March, 2017. Dr. Lakhvir Singh, Head of Department, said that the department will also provide to students such exposure in future also. Dr. Lakhvir further said that the college will provide students all kind of financial assistance for undergoing such kind of visits and training.



Students attending the workshop of Diesel loco Modernization

Visit to Diesel Loco Modernization Works, Patiala

The CSE department organized an industrial visit to see the various functional units of Diesel Loco Modernization Works, Patiala for the students of 3rd semester on 23-08-2017.



Student Visit to Diesel Loco Modernization Works, Patiala

A group of CSE 3rd semester students visited the National Institute of Pharmaceutical Education and Research, Mohali (NIPER) on 06-09-2017. .



Students during a visit to NIPER(Mohali)

Industrial visit of ACC Plant, Mohali:

Department of Civil Engineering of BBSBEC, Fatehgarh Sahib organized an Industrial visit of 5th Sem student. This Visit was designed to impart knowledge to students regarding advancement in concrete technology. A total of 12 students was accompanied by Prof Jagmohan Singh



Students visit to ACC Plant Mohali



Industrial visit at Bunge India Pvt.Ltd.



Industrial visit to Hero Cycle Ludhiana



Visit to Hero Cycle

With an initiative to provide employment opportunities to the students of management and technical programs, the Department of Management Studies planned and successfully executed "Job Fair 2017" on 3rd of March 2017. The main objective of the fest was to serve as a model of technology by innovative teaching methods and to maximize the student's potential by expanding the awareness of the educational career opportunities. More than 975 students were offered more than 150 vacancies spread across more than 15 companies in diverse portfolios.

Faculty Development Program



An Expert Talk on the topic 'Project Planning and Management using ORACLE PRIMAVERA Software' was organized for the students of CSE Department, on August 2, 2017.



An Expert Talk on "The Changing Face of Indian Society, Culture and Linguistics due to Computerization" was organized on August 9, 2017 by the Department of CSE under ACM student chapter.



The Department of CSE organized one day ICT based workshop on the title "How to Prepare Interviews " sponsored by NITTTR,Chandigarh on 11-08-2017.



Workshop on Product Design Organized By Mechanical Department



Workshop Organized ByCSE Department On "Cyber Crime And Forensic Tools"



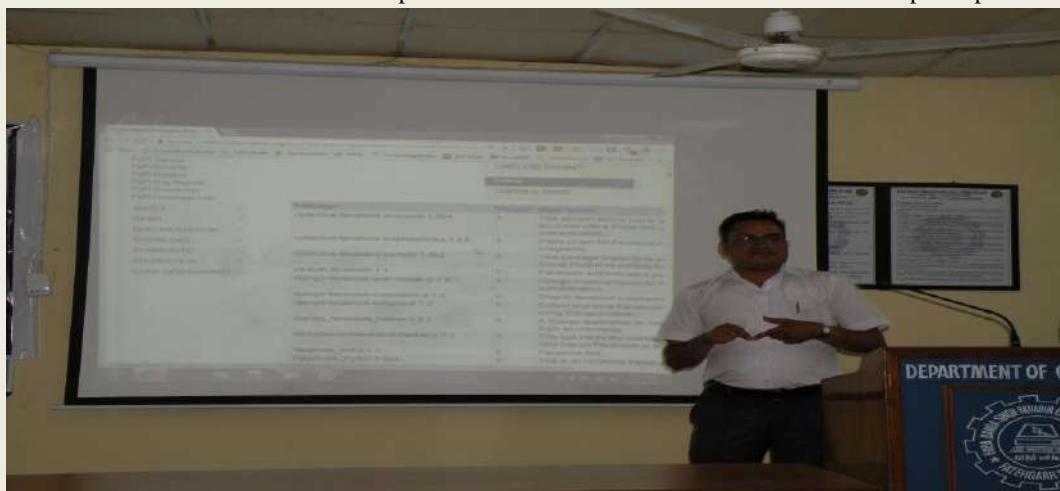
Workshop Organized ByCSE Department On Effective Technical Writing Using LATEX



Faculty Development Program In The Area Of “CYBER SECURITY AND BIG DATA ANALYTICS” Organized By The Department Of CSE &ECE





2 days Python Workshop at Baba Banda Singh Bahadur Engineering College, Fatehgarh sahib


Department of Computer Science Engineering and Department of Electronics & Communication Engineering, Baba Banda Singh Bahadur Engineering College, Fatehgarh sahib has organized a 2-days Python Quest workshop for Faculty and Research Scholar on March 22 to March 23, 2018. This workshop is sponsored by Institution of Engineers. The objective of the workshop is to provide basic knowledge of Python and give practical knowledge of its usage in the market. Dr. G. S. Lamba, Principal, BBSBEC, highlighted the need for Python Language in research and development and congratulated endeavor of the department in his welcome address. Dr. Baljit Singh Khehra, Head of CSE Department, spoke about the importance of the programme and also encouraged the participation of faculty in the workshop. Dr. R.S Uppal, Head of ECE Department threw light on importance of Python and said that the content which is being the part of the workshop will be beneficial for the students who are interested in doing the programming using python. Dr. Gaurav Kumar, Magma Research and Consultancy Pvt. Ltd. Ambala was the key speakers on the first day of the workshop. A total of 40 faculty members and research scholars from various engineering colleges have participated in the event. Lessons alternate with hands-on practical sessions were conducted for the participants on the first day.



Experts sharing their views with the students and faculty members during the workshop on Python

NSS Activities

S NO.	EVENTS ORGANISED DETAILS WITH REPORT	PHOTOGRAPHS
1	Feb.28th, 2017 (Fatehgarh Sahib), NSS Unit BBSB Engineering College has successfully organized a One-Day visit to CSIO, Chandigarh (formerly CSIR-CSIO Chandigarh) to celebrate National Science Day. A student Delegation of 30 students along with 3 faculty members visited this prestigious organization	
2	March 15th, 2017 (Fatehgarh Sahib), Baba Banda Singh Bahadur Engineering College has organized „One Day Educational-cum-industrial Visit“ for BBSBEC NSS Volunteers to Bakhra Dam, Kotla Power House and Gurudwara Tibbi Sahib (Ropar) on March 15th, 2017. Nearly 90 students who are active NSS volunteers of BBSBEC NSS Unit from different departments (Electrical, Mechanical, Electronics, Civil and MBA)	
3	April 3rd, 2017 (Fatehgarh Sahib), A Blood Donation Camp was organized by the NSS Unit of Baba Banda Singh Bahadur Engineering College in coordination with the Department of Transfusion, PGIMER (Post Graduate Institute of Medical Education and Research) on April 3rd, 2017. The Camp was organized in the campus on the occasion of „13th Death anniversary of Panth Rattan Gurcharan Singh Tohra“ who was the founding president of BBSB education Trust. The team of doctors from PGI, collected a total 120 units of blood which accompanied NSS volunteers, students and faculty members.	
4	To spread awareness on cleanliness as a part of Swachh Bharat Abhyan, NSS unit of Baba Banda Singh Bahadur Engineering College Fatehgarh Sahib observed Swachh Bharat Pakhwada from 1/08/2017 to 15/08/2017. During this period different activities were conducted that included awareness lecture on cleanliness by faculty and rally by the students to create awareness about cleanliness. The students took swachhta pledge. A cleanliness drive was organized by the NSS volunteers to make the	

	campus free from plastic waste.	
5.	A declamation contest was organized by NSS unit on 30/08/2017. The event was dedicated to 75 th anniversary of Quit India Movement.	

Society College Interactions



Faculty members during a visit to Govt.School

On 5th September, 2017, the Teachers' Day, a team of faculty and staff members of ECE department and CSE department under the leadership of Dr. R.S. Uppal visited GianiDitt Singh Memorial Government Senior Secondary Government School, NandpurKalaur, Distt. Fatehgarh Sahib. The purpose of the visit was to create awareness among the students about the "Digital India"- vision of the Prime Minister. The students were made aware of the ways in which *Electronics* and *Computers* were affecting every aspect of their lives. The team also held a meeting with the Sarpanches of villages Anandpur and Kalaur. The prominent people of the village were also addressed to spread the advantage of digital approaches in our day to day life. Trees were also planted in the school premises on this occasion.

Engineering Awareness Workshops

Various teams of faculty and staff members of ECE department interacted with 10+2 science students at almost 21 schools in different cities and villages. The students participated in the interaction and project work. The interaction focused on the importance of engineering. The design and working of some commonly used gadgets was also explained and hands on workshop was also conducted at different schools.



Faculty members interacting with students of various schools

Research & Development

BBSBEC has envisioned itself to become a well-known name in R&D activities. R&D activities are encouraged at both departmental as well as institute level. Research centers equipped with required infrastructure and other facilities have been established in all departments for achieving the goals. These R&D centers with inputs from industry and funding agencies would develop the vision of research. The performance of these R&D centers is measured in terms of funding received, industrial consultancy, publications, patents and conferences/seminars organized. The institute provides travel grant to the faculty and the students to attend International/National conferences and training courses. Cash rewards are given to the faculty and the students for research publications. The faculty members are sponsored to pursue their doctoral programs from IITs and other institutes of repute.



Dr. Niraj Bala

Dr. Niraj Bala, Dean Research & Development

With continual and visionary support from the college management and efforts of the faculty and the students, the R&D culture is really picking up day by day in the institute. Following are the achievements:

1. One patent titled PRINTED MONOPOLE FRACTAL ANTENNA WITH SWITCHABLE ATTENUATION BETWEEN WI-MAX AND WLAN BANDWIDTH” by Prof. Jaspal Khinda approved for filing.
2. Two final year students (Mr. Navdeep Bansal and Aman Joshi successfully fabricated Portable Solar Powered Thermoelectric Refrigerator cum Heater” under research grant by IEI R&D Cell, Technical Department the Institution of Engineers (INDIA), worth Rs. 50,000/- under the guidance of Dr. Niraj Bala and Prof. Bir Davinder Singh.