Annual Quality Assurance Report (AQAR)

(For Autonomous Colleges)

2017-2018

By

SHAHEED BHAGAT SINGH STATE TECHNICAL CAMPUS

Moga Road (NH-95), Ferozepur-152004 (Punjab), India

राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद

विश्वविद्यालय अनुदान आयोग का स्वायत्त संस्थान

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL
An Autonomous Institution of the University Grants Commission
P. O. Box. No. 1075, Opp: NLSIU, Nagarbhavi, Bengaluru - 560 072 India

<h1 style="text-align:center">The Annual Quality Assurance Report (AQAR) of the IQAC</h1>
<h2 style="text-align:center">(For Autonomous Colleges)</h2>

Institutions Accredited by NAAC need to submit an Annual self-reviewed progress report i.e. Annual Quality Assurance Report (AQAR) to NAAC, through its IQAC. The report is to detail the tangible results achieved in key areas, specifically identified by the IQAC at the beginning of the Academic year. The AQAR period would be the Academic Year 1st June 2017- 31st May 2018.

<h2 style="text-align:center">Part – A</h2>

Data of the Institution
(data may be captured from IIQA)

1. Name of the Institution :   Shaheed Bhagat Singh State Technical Campus, Ferozepur

- Name of the Head of the institution   :   Dr. T. S. Sidhu
- Designation   :   Director
- Does the institution function from own campus :   Yes
- Phone no. /Alternate phone no.   : 01632-242138
- Mobile no.   : 8288012001
- Registered Email   : director@sbsstc.ac.in
- Alternate Email   : deanacademics@sbsstc.ac.in
- Address   : Moga Road, NH- 95
- City/Town   : Ferozepur
- State/UT   : Punjab
- Pin Code   : 152004

2. Institutional status:

- Autonomous Status (provide the date of Conformant of Autonomous Status): 9/07/2015
- Type of Institution: Co-education/Men/Women : Coeducation
- Location : Rural/Semi-urban/Urban   : Rural
- Financial Status   : State Funded
- Name of the IQAC Co-ordinator/Director   : Dr. T. S. Sidhu
- Phone no. /Alternate phone no.   : 01632-242138
- Mobile   : 8288012001
- IQAC e-mail address   : deanacademics@sbsstc.ac.in
- Alternate Email address   : sbs.academics@gmail.com

3. Website address: www.sbsstc.ac.in
   Web-link of the AQAR: (Previous Academic Year):
https://www.sbsstc.ac.in/IQAC/AQAR2019-20.pdf

 4. Whether Academic Calendar prepared during the year?

Yes/No....., if yes, whether it is uploaded in the Institutional website : Yes

Weblink: https://www.sbsstc.ac.in/PDFs/2017.pdf
https://www.sbsstc.ac.in/PDFs/Jan-June%202018.pdf

5. Accreditation Details

Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1st	B	2.75	2015	from: 25 – 06-2015 to: 24-06-2020

6. Date of Establishment of IQAC: 28-08-2015 in 3rd Academic Council

7. Internal Quality Assurance System

7.1 Quality initiatives by IQAC during the year for promoting quality culture		
Item /Title of the quality initiative by IQAC	Date & duration	Number of participants/beneficiaries
HODs of all the departments to ensure the quality of the end semester question papers.	23/06/2017 (4th IQAC)	2075
Minor projects will be done in each Lab	23/06/2017 (4th IQAC)	550
Shifting of affiliation from MSPTU, Bathinda to IKGPTU, Jalandhar	30/01/2018 (5th IQAC)	425
Adoption of Modern Syllabus proposed by AICTE w.e.f 2018 batch	30/01/2018 (5th IQAC)	335
Minimum classes should be planned and delivered by each teacher	30/01/2018 (5th IQAC)	1800

Note: Some Quality Assurance initiatives of the institution are:
   (Indicative list)
* *Regular meeting of Internal Quality Assurance Cell (IQAC); timely submission of Annual Quality Assurance Report (AQAR) to NAAC; Feedback from all stakeholders collected, analysed and used for improvements*
* *Academic Administrative Audit (AAA) conducted and its follow up action*
* *Participation in NIRF*
* *ISO Certification*
* *NBA etc.*
* *Any other Quality Audit*

8. Provide the list of Special Status conferred by Central/ State Government-

UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.

Institution/ Department/Faculty	Scheme	Funding agency	Year of award with duration	Amount
Institution	TEQIP-II	Centre Govt.	2012 (5 Year) (1825 Days)	10.0 Crores

9. Whether composition of IQAC as per latest NAAC guidelines: Yes/No: Yes (upload in the website)

10. No. of IQAC meetings held during the year   : 02

The minutes of IQAC meeting and compliance to the decisions have been uploaded on the institutional website. Yes/No   Yes

https://www.sbsstc.ac.in/policyIQAC.php

11. Whether IQAC received funding from any of the funding agency to support its activities during the year?   Yes/No   :   No

      If yes, mention the amount: Year:

12. Significant contributions made by IQAC during the current year (maximum five bullets)

IQAC's objective has always been to improve the academic performance of the institution and promote measures for institutional functioning towards quality enhancement.

- Shifting of affiliation from MSPTU, Bathinda to IKGPTU, Jalandhar.
- Adoption of Syllabus proposed by AICTE w.e.f 2018 batch.
- Minimum classes should be planned and delivered by each teacher.
- Timely Evaluation of the courses/subjects to be done.

13. Plan of action chalked out by the IQAC in the beginning of the Academic year towards

Quality Enhancement and the outcome achieved by the end of the Academic year

Plan of Action	Achievements/Outcomes
Approval of academic calendar	Approved in IQAC
Responsibility of the teacher regarding the result of the students taught	Approved in IQAC

14. Whether the AQAR was placed before statutory body?   Yes /No: Yes

  Name of the statutory body: Academic Council   Date of meeting(s): 07/02/2018

15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning?

  Yes/No: No   Date:

16. Whether institutional data submitted to AISHE: Yes/No   : Yes

      Year: 2017-18   Date of Submission: 01/03/2018

17. Does the Institution have Management Information System?

   Yes /**No**   :   Yes

If yes, give a brief description and a list of modules currently operational. (Maximum 500 words)

The Institute has adopted a Management Information System for Academics, HRMS, Finance & Accounts and for grading students in examinations. The MIS has been used in practice to store student data such as personal data, Fee, Exam records and library details. There is an online system of filling examination forms by students in their logins and viewing of their results. Continuous Internal and external assessment is uploaded by faculty in MIS through their logins based upon which the performance of student's performance is analyzed. It also helps to view fee category wise student data,

admission status for all classes, cast category wise statistical report, admission fee summary report, library status details etc. Apart from this it let you know exact status of admitted and vacant seats of any class. Details of fee collected, class wise, and fee category wise analysis.

The faculty and staff mark their attendance on Biometric system, their data, payroll and leaves are managed by MIS. The institute also promotes online system of fee management through payments of fee of students and receipt directly through their Institute logins.

The institute used the following modules of ERP

ACADEMICS:
Student data management
HRMS
Employee data management
Biometric attendance, Leave Management
Payroll
FINANCE AND ACCOUNTS
Fee Management
Receipts and Payments
EXAM AND GRADING
Exam form filling,
Conduct of exam
Declaration of Result

CRITERION I – CURRICULAR ASPECTS

1.1 Curriculum Design and Development

1.1.1 Programmes for which syllabus revision was carried out during the Academic year

Name of Programme	Programme Code	Date of Revision
UG	CSE	13/06/2017
PG	CSE	13/06/2017
UG	ECE	12/ 06/ 2017
UG	CE	15/06/2017 & 07/12/2017
UG	CHE	30/05/2017
UG	Architecture	15/06/2017 and 07/12/2017
UG	ME	07/02/2018

1.1.2 Programmes/ courses focussed on employability/ entrepreneurship/ skill development during the Academic year

Programme with Code	Date of Introduction	Course with Code	Date of Introduction
B.Tech-ECE	12/06/2017	Professional Skills (BTHU-501A, BTHU-601A)	12/06/2017
B.Tech-ECE	12/06/2017	Python Programming (BTEC-511A)	12/06/2017
B.Tech-ECE	12/06/2017	PIC & ARM Processor (BTEC-614A)	12/06/2017
B.Tech-CE	15/06/2017	Fluid Mechanics Lab (BTCE-305A) Strength of Material Lab (BTCE-306A) Survey Lab (BTCE 307A) Training –I (BTCE-308A) Professional Skills –I (BTHU-301A)	15/06/2017
B.Tech-CE	07/12/2017	Structural Analysis Lab (BTCE-405A) Professional Skills Lab (BTCE-401A)	07/12/2017

B.Tech-CE	15/06/2017	Concrete Technology Lab (BTCE 505A) Transportation Engineering Lab (BTCE-506A) Training-II (BTCE507A) Professional Skills-III (BTHU-501A)	15/06/2017
B.Tech-CE	7/12/2017	Computer Aided Structural Drawing II (BTCE-605A) Geotechnical Engineering Lab (BTCE-606A) Professional Skills-IV (BTHU-601A	7/12/2017
B.Tech-CE	15/06/2017	Software Training (BTCE-701) Industrial Training (BTCE701)	15/06/2017
B.Tech-CE	07/12/2017	Project (BTCE-805)	7/12/2017

1.2 Academic Flexibility

1.2.1 New programmes/courses introduced during the Academic year

Programme/Course	Date of introduction
Professional Skills (BTHU-501A, BTHU-601A)	12/06/2017
Python Programming (BTEC-511A)	12/06/2017
PIC & ARM Processor BTEC-614A	12/06/2017
Renewable Energy Sources	15/6/2017
Industrial Engineering & Management	07/12/2017

1.2.2 Programmes in which Choice Based Credit System (CBCS)/Elective Course System implemented at the College level during the Academic year.

Name of Programme adopting CBCS	UG	PG	Date of implementation of CBCS / Elective Course System	UG	PG
All B.Tech,M.Tech,BCA,MCA and B.Arch	08	05	15/06/2015	08	05

1.3 Curriculum Enrichment

1.3.1Value-added courses imparting transferable and life skills offered during the year

Value added courses	Date of introduction	Number of students enrolled

Professional Skills-1	02/01/2017	134
Professional Skills-II	06/08/2017	134
PIC & ARM	12/06/2017	33
Display Technologies	03/01/2017	29
Soft Skill	23/01/2018	114
Professional Skills	15/07/2017	218
Professional Development	01//01/2018	185
NSS	01/06/2017	200

1.3.2 Field Projects / Internships under taken during the year

Project/Programme Title	No. of students enrolled for Field Projects / Internships
Industrial Training	558
Survey Camp	119
Major Project	18

1.4 Feedback System

1.4.1 Whether structured feedback received from all the stakeholders.

1) Students	2) Teachers	3) Employers	4) Alumni	5)Parents
Yes	Yes	Yes	Yes	Yes

1.4.2 How the feedback obtained is being analyzed and utilized for overall development of the institution? (maximum 500 words)

The feedback is collected at various levels viz. Students, Parents, Teachers and Alumni. This feedback is analyzed at higher level of management and steps are taken to improve the functioning. Feedback of stakeholders is sought regularly about infrastructure and learning resources for ensuring their constant satisfaction. Accordingly, continuous review of infrastructure and learning resources is carried out by respective committees and the recommendations are integrated for upgrading, maintaining and utilizing, physical, academic and support facilities. Feedback is also taken from faculties, stakeholders and experts regarding industry trends and feedback to identify new demands of industry. Structured feedback is taken from students, alumni, employers and experts from academia, industry and research through course/programme review feedback. Feedback from students is also taken through class preventative meetings, and corrective measures are taken accordingly to improve the teaching-learning process. The teachers are apprised of the same and are advised to make the appropriate changes in their teaching method if required. Further, the overall academic, administrative,

professional development and research contributions of every teacher are analyzed by the HoD and the Director once in a year and feedback from the teacher is obtained about difficulties and suggestions with regard to academic assignments /self growth. The feedback from alumni is also collected to get their suggestions for improvement of overall working of the department. Further, the feedback from designated faculty members, Industry persons and alumni is obtained for revision of curriculum to keep the study scheme updated with new emerging technologies. The feedback is collected at various levels during the academia session. The academic feedback taken twicely in one semester. The academic & behaviour feedback from the students are analysed and the essential corrective measures recommended to faculty members. One hundred % syllabus coverage feedback is also likewise gathered from the individual subject teacher.

The alumni of the college who've moved on to industry or for higher studies additionally give a feedback on how their years in the institution have helped them perform of their places of work/study. The alumni additionally supply constructive tips on helping the students gain extra recognition and improving themselves.

CRITERION II -TEACHING-LEARNING AND EVALUATION

2.1 Student Enrolment and Profile

2.1.1 Demand Ratio during the year

Name of the Programme	Number of seats available	Number of applications Received	Students Enrolled
B.Tech-CSE	126	125	125
M.Tech-CSE	18	---	----
B.Tech-ECE	63	14	14
M.Tech-ECE	18	---	----
B.Tech-EE	63	31	21
B.Tech-CE	126	39	39
MCA	63	10	10
BCA	63	35	33
B.Tech-CHE	32	10	08
B.Arch	30	10	10
B.Tech-ME	189	61	61

2.2 Catering to Student Diversity

2.2.1. Student - Full time teacher ratio (current year data)

Year	Number of	Number of	Number of full	Number of full	Number of

	students enrolled in the institution (UG)	students enrolled in the institution (PG)	time teachers available in the institution teaching only UG courses	time teachers available in the institution teaching only PG courses	teachers teaching both UG and PG courses
2017-2018	1585	12	102	04	07

2.3 Teaching –Learning Process

2.3.1Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc. (current year data)

Number of teachers on roll	Number of teachers using ICT (LMS, e-Resources)	ICT tools and resources available	Number of ICT enabled classrooms	Number of smart classrooms	E-resources and techniques used
113	110	LCD Projectors, Internet, Laptop, NPTEL Video Lectures, LCD Projectors, mobile/web learning	35	37	PPTs, NPTEL Video Lectures, E-Library, E-Books Software's, online data bases, e-reference books, e-thesis, Swayam, PPTs, Video Lectures, Softwares, Lectures through PPT, Using ICT enabled classroom for teaching, Using online LMS Platforms Google classroom, Zoom, Google meet for teaching.

2.3.2 Students mentoring system available in the institution? Give details. (maximum 500 words)

Students are supported through remedial coaching classes and mentoring. Final Year students are provided with mentoring from passed out students/ Alumni to help them analyse job profiles and career options after the completion of their graduation. Visiting and guest lectures also mentor students regarding overall development and further educational courses after graduation. Alumni committee is established to bridge the gap between current batch students and pass out for employability skills enhancement required in industry. Students are encouraged to participate in various Seminars & Workshops.

Mentoring System has emerged as a strong response to the plight of students at-risk. All Departments at Shaheed Bhagat Singh State Technical Campus, Ferozepur offers a highly-efficient Mentoring system through which a group of students consisting of 12-15 students are assigned to a faculty member at the commencement of the program. Mentors meet their students and guide them with their studies and extra-curricular activities. They also provide advice relating to selection of major, career guidance and personal problems. The mentors act as guides to the students during their summer and final projects.The mentoring system of all departments ensures that the students adapt to the dynamic learning environment and lead their ways into highly successful careers.

Department has an integrated mentoring system where the faculty acts as a link between the students and the institution and perform the following functions-

- Mentors are assigned to monitor and guide students all through the four years.
- Mentors coordinate with the parents regarding the progress of the students.
- Mentors also keep track of the mentees' performance during the Summer internship by continuous interaction with the industry guide designated to the student by the company.
- Mentors communicate with fellow faculty and promote mentees at the time of difficulty / opportunity to help them develop further in their areas of interest.

Head of the Department also act as a mentor and monitor different activities of the assigned mentors and the students. The Academic Committee of the Institute discusses the mentoring related issues at least twice in a semester and revises or upgrade the system if necessary.

All the faculty members of the department are assigned as Mentors of one of the batch of the department. The mentors deal with the complaints/ grievances of students and ask suggestions about the departmental activities. Female faculty members are also assigned task as mentors to take care about the difficulties faced by girl students. The most senior and experienced faculty member is Chief Mentor. He is involved in periodic meetings with Mentors of department to optimal solution to problems being faced by students.

Number of students enrolled in the institution	Number of fulltime teachers	Mentor: Mentor Ratio
1597	113	01:14

2.4 Teacher Profile and Quality

2.4.1 Number of full time teachers appointed during the year

No. of sanctioned positions	No. of filled positions	Vacant positions	Positions filled during the current year	No. of faculty with Ph.D

161	113	48	23	23

2.4.2 Honours and recognitions received by teachers

(received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the year)

Year of award	Name of fulltime teachers receiving awards from state level, national level, international level	Designation	Name of the award, fellowship, received from Government or recognized bodies
2017-18	Dr. Rajni (International level)	Professor	Appreciation letter received from Editor-in-Chief for reviewing paper submitted to Journal of Engineering Science and Technology (JESTEC, Malaysia(Scopus indexed)(International level)
2017	Dr Rajni (International level)	Professor	Appreciation letter for organizing One week NITTTR, Chandigarh sponsored National level STC on "Optimization using MATLAB" through ICT (17th -21st July 2017)
2017	Dr. Rajni (National Level)	Associate Professor	Appreciation letter for the successful conduct of National Conference NCCCES-2017 as Coordinator on December 13, 2017.
2017	Dr. Sanjeev Dewra (National Level)	Assistant Professor	Appreciation letter for the successful conduct of National Conference NCCCES-2017 as Convenor on December 13, 2017.
2017-18	Dr. Sanjeev Dewra (National Level)	Assistant Professor	Editorial Board Member of different Journals like RTECS,IJCRCE,JTSSN
2017-18	Dr. Sanjeev Dewra (National Level)	Assistant Professor	Editorial Board Member of Enriched Publications Pvt. Ltd. From 12/08/2016.
2017-18	Dr. Sanjeev Dewra (International Level)	Assistant Professor	Editorial Board Member of American Journal of Optics & Photonics from 22/02/2018.
2017	Dr. Vikram Mutneja (National Level)	Assistant Professor	Received Certificate of Appreciation for organizing national level one week Faculty Development Program on "Optimization using MATLAB" through ICT as Co-coordinator, in Department of Electronics & Communication Engineering, SBSSTC, Ferozepur, Sponsored by NITTTR, Chandigarh, during 17-21 July, 2017
2018	Dr. Vikram Mutneja (Institute Level)	Assistant Professor	Received Certificate of Appreciation for organizing the annual fest "ELECKTRA 2K18" as Faculty In-charge, Society of Electronics & Communication Engineers (SELCOME), in Department of Electronics

			& Communication Engineering, SBSSTC, Ferozepur, during 27-28 March, 2018
2017	Inderjeet Singh Gill (National Level)	Assistant Professor	Got letter of appreciation for organizing NCCCES 2017 as co-coordinator at SBSSTC, Ferozepur and also for session chair
2017-18	Amit Grover (International)	Assistant Professor	Editorial Board Member of different Journals like IJRET, IJSER
2018	Amit Grover (State)	Assistant Professor	Got letter of appreciation from Director, SBSSTC, Ferozepur for organizing 2nd State Level Mega Job fair from 20th Feb to 08th March 2018 under Punjab Government initiative of "Ghar - Ghar Rozgar" Scheme.
2017	Ms Anupam Mittal (National level)	Assistant Professor	Appreciation letter received from Director fo organizing National conference o Communication, Computing and Contro System (NCCCES-17) on 13th Dec 2017 a SBSSTC, Ferozepur (as Session chair an Co-ordinator of conference)
2017	Ms Anupam Mittal (National level)	Assistant Professor	Appreciation letter received from Director for presenting Best paper in National conference on Communication, Computing and Control System (NCCCES-17) on 13th Dec 2017 at SBSSTC, Ferozepur.
2017	Mrs.Navneet Kaur (state Level)	Assistant Professor	Appreciation letter received from Director for assisting in organizing ICT based FDP of 1 week (24-7-17 to 28-7-17)
2017	Dr. Amit Arora (state Level)	Assistant Professor	Appreciation Award by Deputy Commissioner cum District Election Officer, Ferozepur for Contributing under Systematic Voter's Education and Electoral Participation (SVEEP Basant Mela-2017) for Legislative Assembly Elections 2017, Punjab.
2017	Dr Lalit Sharma (International Level)	Professor	The 2017 Albert Nelson Marquis Lifetime Achievement Award by Marquis Who's Who Publications, USA

2.5 Evaluation Process and Reforms

2.5.1 Number of days from the date of semester-end/ year- end examination till the declaration of results during the year

Programme Name	Programme Code	Examination Session	Semester/ Year	Last date of the last semester-end/ year-end examination	Date of declaration of results of semester-end/ year- end examination
B. Tech.	ME	Nov./ Dec. - 2017	1st Semester	04/01/2018	25/01/2018
			3rd Semester	19/12/2017	09/03/2018
			5th Semester	19/12/2017	07/03/2018
			7th Semester	13/12/2017	09/03/2018
		May/June - 2018	2nd Semester	30/05/2018	05/07/2018
			4th Semester	21/05/2018	11/07/2018
			6th Semester	22/05/2018	25/07/2018
			8th Semester	05/01/2018	15/06/2018
B. Tech.	EE	Nov./ Dec. - 2017	1st Semester	04/01/2018	25/01/2018
			3rd Semester	19/12/2017	09/03/2018
			5th Semester	19/12/2017	07/03/2018
			7th Semester	22/07/2017	12/01/2018
		May/June - 2018	2nd Semester	30/05/2018	05/07/2018
			4th Semester	21/05/2018	11/07/2018
			6th Semester	22/05/2018	25/07/2018
			8th Semester	19/05/2018	13/06/2018
B. Tech.	CE	Nov./ Dec. - 2017	1st Semester	04/01/2018	25/01/2018
			3rd Semester	19/12/2017	09/03/2018
			5th Semester	19/12/2017	07/03/2018
			7th Semester	13/12/2017	29/01/2018
		May/ June - 2018	2nd Semester	30/05/2018	05/07/2018
			4th Semester	21/05/2018	17/07/2018
			6th Semester	22/05/2018	25/07/2018

			8th Semester	05/01/2018	11/06/2018
B. Tech.	ECE	Nov./ Dec. - 2017	1st Semester	04/01/2018	25/01/2018
			3rd Semester	19/12/2017	09/03/2018
			5th Semester	19/12/2017	07/03/2018
			7th Semester	13/12/2017	16/01/2018
		May/ June - 2018	2nd Semester	30/05/2018	05/07/2018
			4th Semester	23/05/2018	11/07/2018
			6th Semester	22/05/2018	25/07/2018
			8th Semester	05/01/2018	05/06/2018
B. Tech.	CHE	Nov./ Dec. - 2017	1st Semester	04/01/2018	25/01/2018
			3rd Semester	19/12/2017	09/03/2018
			5th Semester	19/12/2017	07/03/2018
			7th Semester	05/01/2017	18/01/2018
		May/ June - 2018	2nd Semester	30/05/2018	05/07/2018
			4th Semester	23/05/2018	11/07/2018
			6th Semester	22/05/2018	25/07/2018
			8th Semester	19/05/2018	11/06/2018
B. Tech.	CSE	Nov./ Dec. - 2017	1st Semester	04/01/2018	25/01/2018
			3rd Semester	19/12/2017	09/03/2018
			5th Semester	19/12/2017	07/03/2018
			7th Semester	15/07/2017	12/01/2018
		May/June - 2018	2nd Semester	30/05/2018	17/07/2018
			4th Semester	21/05/2018	17/07/2018
			6th Semester	22/05/2018	25/07/2018
			8th Semester	19/05/2018	11/06/2018
BCA	BCA	Nov./ Dec. - 2017	1st Semester	14/12/2017	12/01/2018
			3rd Semester	19/12/2017	24/01/2018
			5th Semester	11/12/2017	23/01/2018

		May/June 2018	2nd Semester	23/05/2018	14/06/2018
			4th Semester	23/05/2018	12/12/2018
			6th Semester	22/05/2018	11/06/2018
MCA	MCA	Nov./ Dec. - 2017	3rd Semester	13/12/2017	23/01/2018
			5th Semester	13/12/2017	29/01/2018
		May/June 2018	4th Semester	21/05/2018	11/07/2018
			6th Semester	18/05/2018	11/06/2018
MBA	MBA	Nov./ Dec. - 2017	3rd Semester	16/12/2017	02/02/2018
		May/June 2018	4th Semester	23/05/2018	11/06/2018
B. Arch	B. Arch	Nov./ Dec. - 2017	1st Semester	16/12/2017	10/01/2018
			3rd Semester	23/12/2017	07/03/2018
			5th Semester	19/12/2017	07/03/2018
		May/June 2018	2nd Semester	26/05/2018	14/06/2018
			4th Semester	31/05/2018	11/07/2018
			6th Semester	01/06/2018	11/07/2018

2.5.2 Average percentage of Student complaints/grievances about evaluation against total number appeared in the examinations during the year   *Do not include re-evaluation/ re-totalling*

Number of complaints or grievances about evaluation	Total number of students appeared in the examination	Percentage
18	1597	1.1

2.6 Student Performance and Learning Outcomes

2.6.1 Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed in website of the institution (to provide the weblink)

CSE	https://www.sbsstc.ac.in/dptCSengg.php?dept=%27CSE%27
ECE	https://www.sbsstc.ac.in/dptECengg.php
EE	http://sbsstc.ac.in/dptEEengg.php

Programme Code	Programme Name	URL
CE		https://www.sbsstc.ac.in/dptCEengg.php
CHE		https://www.sbsstc.ac.in/dptCHengg.php
ME		https://www.sbsstc.ac.in/dptMEengg.php
Architecture		https://www.sbsstc.ac.in/dptArch.php
CA		https://www.sbsstc.ac.in/CO.php

2.6.2 Pass percentage of students

Programme Code	Programme Name	Number of students appeared in the final year examination	Number of students passed in final Semester /year examination	Pass Percentage
CSE	B. Tech-CSE	105	93	88.57
ECE	B.Tech-ECE	36	26	72
ECE	M.Tech-ECE	02	02	100
EE	B.Tech-EE	64	46	71.88
CE	B.Tech-CE	60	52	87
MCA	MCA	21	21	100
MCA	BCA	22	11	50
MBA	MBA	08	07	87.5
CHE	B.Tech-CHE	33	32	97
B.Arch	B.Arch	33	24	73
ME	B.Tech-ME	180	98	54.4

2.7 Student Stastification Survey

2.7.1 Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the questionnaire) (results and details be provided as weblink)

Survey from students is done in each semester using feedback forms and performance of teacher is evaluated. Advisory is issued to concerned teacher in DQAC meeting. Feedback forms are also filled by

the students of pass out batches to do student satisfaction survey.

A feedback survey to assess the students' satisfaction on the curriculum, teaching learning processes and infrastructure is made. Opinion of all the students is collected using a questionnaire of structured feedback forms. Students' feedback is rated on 5-point scale from 1 to 5. There are a number of closed and open-ended questions in the feedback questionnaire. Most of the students are satisfied with the syllabus covered and the teaching style of the teachers. Students also find teachers fair in internal evaluation process. The teaching, mentoring process, Academics, placement and library facilitates, social and emotional growth is shown satisfactory. Students are satisfied with the illustrations of teachers for explaining concepts through examples and applications. Most of the students are fully satisfied with the teachers' identification of students' strengths and weaknesses to encourage them with providing right level of challenges. The students' feedback also shows that they also agree that the institution makes effort to engage them in the monitoring, review and continuous quality improvement of the teaching learning process.

https://docs.google.com/forms/d/e/1FAIpQLSd9IcfRHSqUZxNpk3teYnwR5w5488L1B4CwSFQWvpcR5pi7SA/viewform

CRITERION III- RESEAECH, INNOVATIONS AND EXTENSION

3.1 Promotion of Research and Facilities

3.1.1 The institution provides seed money to its teachers for research,

YES (if yes give details) The institution provides seed money to its teachers for research but none of the faculty members have availed it during 1st June 2017-31st May 2018.

Name of the teacher getting seed money	The amount of seed Money	Year of receiving grant	Duration of the grant
---	---	---	---

3.1.2 Teachers awarded National/International fellowship for advanced studies/ research during the year

	Name of the teacher awarded the fellowship	Name of the Award	Date of Award	Awarding Agency
National	-	-	-	-
International	-	-	-	-

3.2 Resource Mobilization for Research

3.2.1 Research funds sanctioned and received from various agencies, industry and other organizations

Nature of the Project	Duration	Name of the funding	Total grant	Amount received during the Year

		Agency	sanctioned	
Major projects	2 years	AICTE New Delhi	4.5 lac	4.5 lac
Minor Projects	-	-	-	-
Interdisciplinary Projects	-	-	-	-
Industry sponsored Projects	-	-	-	-
Projects sponsored by the University/ College	-	-	-	-
Students Research Projects *(other than compulsory by the College)*	-	-	-	-
International Projects TEQIP-II	2012-17 05 Yrs	MHRD	World bank	10 Crore
Any Other (Specify)	-	-	-	-
Total	-	-	-	10.045 Crore

3.2.2 Number of ongoing research projects per teacher funded by government and non-government agencies during the years

-Rs. 23.69Lacs sanctioned to PhD Research Scholar Ms. Navjot Kaur under the guidance of Dr. Monika Sachdeva in 2015

-One project by Dr Kultardeep Singh under Unnat Bharat Abhiyan

3.3 Innovation System

3.3.1 Workshops/Seminars Conducted on Intellectual Property Rights (IPR) and Industry Academia Innovative practices during the year

Title of Workshop/Seminar	Name of Dept.	Dates
Technical seminar on "Robotics" be expert from industry "Harison Photo Products Manufacturing Unit, Amritsar"	ECE	18/09/2017
Technical webinar on "RTL design & Functional verification" by expert from company "Maven Silicon Softech Pvt Ltd., Bangalore, Karnataka.	ECE	16/02/2018
Workshop on "ARM Microcontroller" by experts from industry "i3indya	ECE	03/04/2018

Technologies", G-85, Vikas Marg, Preet Vihar, New Delhi"		
AICTE sponsored Seminar on "Clean Energy Technologies"	CHE	07/11/ 2017
National Conference- Frontiers in Materials Research & Applications-2017	CHE	21/12/2017

3.3.2 Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year

Title of the innovation	Name of the Awardee	Awarding Agency	Date of Award	Category
ECE	Rupali and Dr Rajni	Convenor, NCCCES-2017	13/12/2017	National Conference
CE	SBSSTC, Ferozepur	Nirmaan 2K18	15/02/2018, 16/02/2018	Technical Events
CHE	Dr. Amit Arora, Associate Professor	Deputy Commissioner cum District Election Officer, Ferozepur	6/12/2016 to 31/01/2017	Appreciation Award Contributing under SVEEP Basant Mela-2017 for Legislative Assembly Elections 2017, Punjab.
CHE	Ms. Sheetal Sharma (student)	Indo-Global Education Summit & Expo - 2017	18/08/2017	Award for Academic excellence

3.3.3 No. of incubation centre created, start-ups incubated on campus during the year

Incubation Centre	Name	Sponsored By
—	—	—
Name of the Start -up	Nature of Start-Up	Date of Commencement
—	—	—

3.4 Research Publications and Awards

3.4.1 Ph.Ds awarded during the Year

Name of Department	No. of Ph.Ds awarded
ECE	01
CHE	02

DASH		02	

3.4.2 Research Publications in the Journals notified on UGC website during the year

	Department	No. of Publication	Average impact factor, if any
National	ECE	01	—
International	ECE	22	1.62
National	EE	02	—
International	EE	03	—
International	MCA	02	1
International	CHE	05	0.125
National	B.ARCH	03	—
International	DASH	05	2.0
International	ME	23	0.525

3.4.3 Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year

Department	No. of Publication
CSE	16
ECE	11
EE	03
CE	25
CHE	06
DASH	01

3.4.4 Patents published/awarded during the year

Patent Detail	Patent Status/Published Filed	Patent Number	Date of Award
—	—	—	—

3.4.5 Bibliometrics of the publications during the last Academic year based on average citation index in Scopus/ Web of Science or Pub Med/ Indian Citation Index

Title of Paper	Name of the Author	Title of the journal	Year of Publication	Citation Index	Institutional affiliation as mentioned	Number of citations

					in the publication	excluding selfcitations
Influence of Climatic parameter on shelter for Hot and Dry Shelter: A Sustainable Approach.	Ar. Avinash Singh	TEQIP-II Sponsored National Conference on Latest Development on Civil Engg and Environment Engineering.	2016	—	—	—
Multi-storey Buildings: Sustainability is the only answer.	Ar. Avinash Singh	TEQIP-II Sponsored National Conference on Latest Development on Civil Engg and Environment Engineering	2016	—	—	—
Study of methods of removal of colour from Agro-based Pulp and Paper Industries.	Amandeep Kaur and Sangeeta Sharma	International journal of Engineering and Applied Sciences	2017	—	SBSSTC, Ferozepur	—
Assessment of Inorganic impurities of Ground water in South Western Districts of Punjab-India	Sangeeta Sharma, Manwinder Singh & Umesh K Garg.	International journal of Theoretical & Applied Sciences	2017	—	SBSSTC, Ferozepur	—
Assessment of heavy metal contents in vegetables grown in the vicinity of Sirsa and their effects on human health	Sangeeta Sharma , Davender Kumar and	Pollution Research	2017	18	SBSSTC, Ferozepur	—

	Jitender Pal					
Influence of pH Variation on Structural and Magnetic Properties of Ni-Zn Ferrite Nanoparticles Synthesized by Auto Combustion Method	Richa, Anand K Tyagi, D.S. Ahlawat	Oriental Journal of Chemistry	2017	0.43	SBSSTC, Ferozepur	—
Performance Analysis of ½ Code Rate Convolution Encoded DWT-OFDM System with Different Modulation Schemes	Simmi, Anuj Sharma Anand K Tyagi	Int. Journal of Innovative Res. in Science & Engg.,	2017	2.03	SBSSTC, Ferozepur	—
FTIR Studies of Temperature Dependent Nickel Zinc Ferrites Synthesized by Solution Auto Combustion Method, (DOI: 10.5281/ zenodo.843942)	Richa, Anand K. Tyagi, D.S. Ahlawat & Amrik Singh	Global Journal of Engineering Science & Researches	2017	4.022	SBSSTC, Ferozepur	—
Influence of heat treatment conditions on structural and magnetic properties of nickel zinc ferrite nanoparticles synthesized (pH=8) by solution auto combustion method	Richa, A. K. Tyagi, D.S. Ahlawat, A. Singh	J. Mater. Environ. Science	2017	0.654	SBSSTC, Ferozepur	—
Consumer Motives and Influencing Factors in Life Insurance buying decisions: A Study in Punjab & Chg. Region	Neha Shrivastava, Raminder Pal Singh	International Journal of Research in Commerce, IT & Mgt.	2017	-	SBSSTC, Ferozepur	—
Employees' Attitude towards Changing Face of HRM Function in Indian Banking Industry	Ramanpreet Kaur, Raminder Pal Singh	Indian Journal of Economics & Business	2017	ABDC Indexed	SBSSTC, Ferozepur	—
Employees' Satisfaction towards Human Resource Management Practices in Public & Private Sector Banks of Punjab Vol-7,	Ramanpreet Kaur, Raminder Pal Singh	International Journal of Research in IT and Manageme	2017	—	SBSSTC, Ferozepur	—

Issue: 2, pp:28-35		nt				
Electrochemical analysis of an anode supported axially symmetrical one dimensional tubular solid oxide fuel cell	P. Kalra, R. Garg, Ajay Kumar	Indian Journal of Science and Technology	2017	—	SBSSTC, Ferozepur	—
Enhancement in solubility of Glibenclamide and Clofibrate drugs using carbohydrate based non-ionic surfactants by micellization	Lalit Sharma	Indo American Journal of Pharmaceutical Sciences	2017	0.437	SBSSTC, Ferozepur	—
Detection of DDoS attacks and Flash Events using Information Theory metric An empirical investigation	Sunny Behal, Krishan Kumar	Elsevier Computer Communications	2017	-	SBSSTC, Ferozepur	20
Detection of DDoS attacks and Flash Events using Novel Information Theory metrics	Sunny Behal, Krishan Kumar	Elsevier Computer Communications	2017		SBSSTC, Ferozepur	58
DDoS attack detection on wireless sensor network: a review	Kaur Daljeet	International journal of innovative research in science, engineering and technology	2017	-	SBSSTC, Ferozepur	-
A robust automatic vascular and non-vascular based retina recognition system using pso	Kaur Rupinder, Jindal Sonika	International journal of advanced research in computer science	2017	-	SBSSTC, Ferozepur	-
Characterizing ddos attacks and flash events: review, research gaps and future directions	Behal Sunny, Kumar Krishan, Sachdeva	Computer science review	2017	-	SBSSTC, Ferozepur	20

	Monika					
A review on content based image retrieval", in International journal of computers & technology	Sethi Nitika, Jindal Sonika	International journal of computers & technology	2017	-	SBSSTC, Ferozepur	-
Characterization and comparison of DDoS attack tools and traffic generators- a review	Behal, Sunny, Kumar Krishan	International journal of network security	2017	-	SBSSTC, Ferozepur	38
A review on general self-organized tree-based energy-balance routing protocol for wireless senso network	Chabra Shikha, Arora vishal Kumar	International journal of computers & technology	2017	-	SBSSTC, Ferozepur	-
Discrimination of flash events from ddos attacks - a comprehensive review	Behal, Sunny, Kumar Krishan, Sachdeva Monika	International journal of network security	2017	-	SBSSTC, Ferozepur	15
Multimodel local terenary patterns for content based image retrieval	Jindal Sonika, Palvi	International journal of advanced research in computer science	2017	-	SBSSTC, Ferozepur	-
Study of ddos attacks and their effects using genitestbed	Mehto Rinkel, Kaur Daljeet	International journal of innovations & advancement in computer science	2017	-	SBSSTC, Ferozepur	-
Cbir system using color moment and color auto-correlogram with block truncation coding	Vinayak, Vandana, Jindal Sonika	International journal of computer applications	2017	-	SBSSTC, Ferozepur	-
Content based image retrieval system using shape texture and color	Jindal Sonika, Nangia	International journal of advanced	2017	-	SBSSTC, Ferozepur	-

features	Parul	research in computer science					
Comparison based performance analysis of aodv routing protocol under black hole, selfish node and rushing attack using ns2	Vasu Sharma, Pawan Kumar , Gagandeep	International journal of advanced research in computer engineering & technology	2017	-		SBSSTC, Ferozepur	-
Face recognition under variation in illumination using hybrid of pca and dcp	Jindal Sonika, Saurabh	International journal of advanced research in computer science	2017	-		SBSSTC, Ferozepur	-
Analysis of different reactive, proactive & hybrid routing protocols: a review	Kirandeep Kaur , Pawan Luthra , Gagandeep	International journal of advanced technology in engineering and science	2017	-		SBSSTC, Ferozepur	-
Comprehensive observation of different underwater sensor network protocols	Shaveta , PawanLuthra , Gagandeep	International journal of advanced research in science and engineering	2017	-		SBSSTC, Ferozepur	-
Ddos attack detection on wireless sensor network: a review	Amandeep Kaur , Daljeet Kaur , Gagandeep	International journal of innovative research in science, engineering and	2017	-		SBSSTC, Ferozepur	-

		technology,				
Ddos attack detection on wireless sensor network using DSR algorithm with cryptography	Amandeep Kaur , Daljeet Kaur , Gagandeep	International journal of computer applications	2017	-	SBSSTC, Ferozepur	-
Software Defined Networking: An Advantage to Environment	Sumit Badotra, Japinder Singh	International Journal of Advanced Technology in Engineering and Science	2017	-	SBSSTC, Ferozepur	-
Introduction to Load Balancing and Strategies Used in Software Defined Networking	Sumit Badotra and Japinder Singh	International Journal of Advance Research in Science And Engineering	2017	-	SBSSTC, Ferozepur	-
A Review Paper on Software Defined Networking	Sumit Badotra and Japinder Singh	International Journal of Advanced Research in Computer Science	2017	-	SBSSTC, Ferozepur	-
Open Daylight as a Controller in Software Defined Networking	Sumit Badotra and Japinder Singh	International Journal of Advanced Research in Computer Science	2017	-	SBSSTC, Ferozepur	-

A Review on various levels of NLP	Swati Garg, Sonika Jindal	International Journal of Innovative Research in Science and Engineering	2017	-	SBSSTC, Ferozepur	-
Improved Accuracy in NLP translation using IPSO	Swati Garg, Sonika Jindal	International Journal of Research in Electronics and Computer Engineering	2017	-	SBSSTC, Ferozepur	-
Comparative performance o modulation formats using RAMAN-EDFA hybrid optical amplifier in fiber optic communication system	Garima Arora, Sanjeev Dewra	Journal of Optical Communications	2017	02	Shaheed Bhagat Singh State Technical Campus-Ferozepur	02
A power compensated novel architecture of RM-OXC based on T-FBG and OC: a high-speed and cost-effective system	Manpreet Singh, Sanjeev Dewra	Journal of Optical Communications	2017	02	Shaheed Bhagat Singh State Technical Campus-Ferozepur.	01
Simulative Analysis of Optical OFDM System Using EDFA-RAMAN Hybrid Optical Amplifier	Aruna Rani, Manjit Singh Bhamrah, Sanjeev Dewra, Kulwinder Singh	International Journal of Research in Engineering, Technology And Science	2017	02	Shaheed Bhagat Singh State Technical Campus-Ferozepur	01
Impact of Various Parameters on the	Rani Sumita,	Journal of optical	2017	01	Shaheed Bhagat	01

Performance of Optical Directional Coupler	Dewra Sanjeev	communications			Singh State Technical Campus-Ferozepur	
A 3 dB Optical Directional Coupler Based on Surface Plasmon Polaritons	Sumita Rani, Sanjeev Dewra	Advanced Science, Engineering and Medicine	2017	01	Shaheed Bhagat Singh State Technical Campus-Ferozepur	01
Modified Viola–Jones algorithm with GPU accelerated training and parallelized skin color filtering-based face detection	Vikram Mutneja, Dr. Satvir Singh	Journal of Real Time Image Processing, Springer	2017	06	I.K. Gujral Punjab Technical University, Kapurthala	04
Face Detection and Extraction from Low Resolution Surveillance Video Using Motion Segmentation	Vikram Mutneja, Dr. Satvir Singh	International Journal on Computer Science and Engineering	2017	Google Scholar (04)	I.K. Gujral Punjab Technical University, Kapurthala	04
Optimal Duty Cycling with Sleep-wake Schedule between Paired Nodes and Flexible Routing across Pairs	Amit Grover	International Journal of Computer Applications	2017	01	SBSSTC, Ferozepur	01
Performance Analysis of Zigbee Mesh Topology by Varying Trajectory	Amit Grover	International Journal of Computer Applications	2017	02	SBSSTC, Ferozepur	02
Performance Evaluation of Network Aggregation Techniques in VANET	Chakshu Goel	International Journal of Innovative Research in Electrical, Electronics, Instrument	2017	3	SBSSTC, Ferozepur	3

		ation and Control Engineering				
MCA Recognition and Handling of Insider and Outsider DDOS Attacks in WSN	Gulshan Kumar	Indian Journal of Science and Technology	2017	---	SBSSTC, Ferozepur	---
cybercrimes: A Proposed Taxonomy and Challenges	Gulshan Kumar	Journal of Computer Networks and Communications	2018	9	SBSSTC, Ferozepur	9
Removal of Heavy metals from waste water by using various adsorbents- A review	Amandeep Kaur and Sangeeta Sharma	Indian Journal of Science & Technology,	2017	0.68	SBSSTC, Ferozepur	---
Removal of Cr(VI) from industrial waste water by Iron Nanowires synthesized via Porous Anodic Aluminium Oxide Template	Prabhjot Kaur, Sangeeta Sharma &M.K. Kushawaha	Journal of the Electro-chemical society	2017	3.39	SBSSTC, Ferozepur	---
Efficient Micellar extraction of Ternary Mixture of cationic Dyes from aqueous medium	Narinderjit Kaur, Sangeeta Sharma and Ekta Khosla	Journal of surface science technology	2017	12	SBSSTC, Ferozepur	---
Environmental Analysis and Treatment of Effluents From Agro-Based Paper Mills	Sangeeta Sharma, , Sarabjit Singh and Harleen Kaur	Pollution Research	2017	18	SBSSTC, Ferozepur	---

Comparison of Iron Nanowires Fabricated via Porous Anodic Aluminium Oxide Template by a.c. and d.c. Electrodeposition.	Prabhjot Kaur, Sangeeta Sharma , M.K. Kushwaha	IOSR-Journal of Applied Chemistry	2017	UGC	SBSSTC, Ferozepur	---
Gender Differences in Self-efficacy and Perceived Competence among Engineering Students	Kiranjeet Kaur and Suninder Tung	Pedagogy of Learning	2017		SBSSTC, Ferozepur	
Mechanical Application of Lubricated Nano Porous Anodized Aluminium	Lalit Sharma	Journal of Nanostructures	2017,	---	SBSSTC , Ferozepur	---
Bifurcation analysis of a stage Structured Innovation diffusion model with evaluation period	Dr. Rakesh Kumar	Journal of Advanced Research in Dynamical and Control Systems	2017	---	SBSSTC, Ferozepur	---
Dynamics of an Innovation Diffusion Model with Time Delay	Rakesh Kumar	East Asian Journal on Applied Mathematics	2017	---	SBSSTC, Ferozepur	---
Factors affecting consumers' attitude towards purchasing green packaged food products: an integrated conceptual frame work	Priya Sodhi, Raminder Pal Singh	Int. Journal of Business Excellence	2017	---	SBSSTC, Ferozepur	---
Impact of Promotion Mix Strategies on Consumer Purchase Intention towards Life Insurance	Neha Shrivastava, Raminder Pal Singh	Scholarly Research Journal for Interdisciplinary Studies	2017		SBSSTC, Ferozepur	
Effect of Consumer	Neha	Scholarly	2017	---	SBSSTC,	---

Characteristics on Purchase Motives and Attitude towards Life Insurance: Study in Punjab Region	Shrivastava, Raminder Pal Singh	Research Journal for Interdisciplinary Studies			Ferozepur	
Design of a high temperature solid oxide fuel cell: A review	P. Kalra, R.K.Garg, Ajay Kumar	International Journal for Research in Applied Science & Engineering Technology	2017	---	SBSSTC, Ferozepur	---
Modelling of a one dimensional Anode supported high temperature tubular SOFC	P. Kalra, R.K.Garg, Ajay Kumar	International Journal of Chem Tech Research	2017	---	SBSSTC, Ferozepur	---
Effect of temperature and specific humidity of the air on Performance of Celdek Packed Liquid Desiccant Regenerator	Rakesh Kumar & Arun Kumar Asati	Research Journal of Engineering and Technology	2017	---	SBSSTC Ferozepur	---
Study on the Performance of Celdek Packed Counter Flow Liquid Desiccant Regenerator	Rakesh Kumar & Arun Kumar Asati	Journal of Mechanical Science and Technology,	2017	---	SBSSTC Ferozepur	---
Temperature difference findings from Earth Air Heat Exchanger System in Hot-Dry Climate	Balit Singh, Arun Kumar Asati & Rakesh Kumar	Indian Journal of Science and Technology	2017	---	SBSSTC Ferozepur	---
Analysis of Velocity for Earth Air Heat Exchanger in Hot-Humid Climate	Balit Singh, Arun Kumar Asati & Rakesh Kumar	Research Cell: An International Journal of Engineering Sciences	2017	---	SBSSTC Ferozepur	---

Temperature analysis for earth air heat exchanger system in hot-dry climate	Balit Singh, Arun Kumar Asati & Rakesh Kumar	International Journal of Engineering and Technology	2017	---	SBSSTC Ferozepur	---
Optimal Configuration Assignment Plans of Multi Flow-Line RMS Using NSGA-II	Gazal Preet Arneja, Rakesh Kumar and N K Grover	Journal of Advanced Research in Dynamical and Control Systems	2017	---	SBSSTC Ferozepur	---
Performance based optimal capacity utilization in RMS, Vol. 9, No. 8 (2017), pp.142-150	Gazal Preet Arneja, Rakesh Kumar and N K Grover	Journal of Advanced Research in Dynamical and Control Systems	2017	---	SBSSTC Ferozepur	---
RMS Cell formation using Block Diagonalized Matrix, Vol. 10, No. 16 (2017), pp.1-8	Gazal Preet Arneja, Rakesh Kumar and N K Grover	Indian Journal of Science and Technology	2017	---	SBSSTC Ferozepur	---
Part family formation for reconfigurable manufacturing system considering alternative operation sequences, Vol. 4, No. 9 (2017), pp.49-58	Gazal Preet Arneja, Rakesh Kumar and N K Grover	Global Journal of Engineering Science and Research Management	2017	---	SBSSTC Ferozepur	---
Empirical investigation of part family formation in Reconfigurable Manufacturing System, Vol. 117, No. 7 (2017), pp.231-254	Gazal Preet Arneja, Rakesh Kumar and N K Grover	International Journal of Pure and Applied Mathematics	2017	---	SBSSTC Ferozepur	---

Removal of Cr (VI) from industrial waste water by iron Nanowires Synthesized via porous anodic aluminium oxide template	Prabhjot Kaur, Sangeeta Sharma, MK Kushwaha	Journal of the electrochemical society	2017	---	SBSSTC Ferozepur	---
Comparison of Iron Nanowires Fabricated via Anodic Aluminium Oxide Template by a.c. and d.c. Electrodeposition.	Prabhjot kaur,Sangeeta Sharma,M.K.Kushwaha.	IOSR Journal of Applied Chemistry.	2017	---	SBSSTC Ferozepur	---
Mechanical Application of lubricated Nano porous anodized aluminium	Harleen, Lalit Sharma, MK Kushwha	Journal of nanostructure	2017	---	SBSSTC Ferozepur	---
Effect of Fibre Type, Weight Percentage Loading and Fibre Size on Impact Strength and Hardness of Wood and Rice Husk Hybrid Composite.	Kumar R., Singh, Tejeet. and Singh H.	International J of Material Science	2017	---	SBSSTC Ferozepur	---
Solid Waste Natural Fiber Polymeric Composite Mechanical Properties	Kumar R., Singh, Tejeet and Singh H	International J of Engineering Science and Technology	2017	---	SBSSTC Ferozepur	---
Optimization of Selected Process Parameters of PMEDM of En 31 Steel by Taguchi Method for Surface Roughness and Material Removal Rate	Mr. Gurnam Singh, Er. Harmanjeet Pal Sharma	International Journal of Engineering & Scientific Research	2017	---	SBSSTC Ferozepur	---
Impact of Average Grain Size & Concentration of Powder In PMEDM on Surface Roughness of Inconel	Mr. Gurnam Singh	International Journal of Engineering, Science and Mathematic	2017	---	SBSSTC Ferozepur	---

		s					
Calculation of Thermo Physical Properties of a mixture using Vapour Liquid Equilibrium	Mr. Gurnam Singh, Dr. Neel Kanth Grover	International Journal of Management, IT & Engineering	2017	---		SBSSTC Ferozepur	---
Fuzzy Modeling to calculate component failure criticality index for forging industry	Munish Kumar, Sunatya Kumar, Dipender Kumar	International Journal of Engineering, Technology, Management & Applied Sciences	2017	---		SBSSTC Ferozepur	---
Design and analysis of satisfaction at work in selected financial institution of Punjab-A case study	Munish Kumar,Sunatya Kumar,Dipender Kumar	International Journal of Engineering, Technology, Science & Research	2017	---		SBSSTC Ferozepur	---
Study of Mechanical Properties of rice husk and PP Based composites using injection moulding process	Yogita Sharma	International Organisation of Scientific Research	2017	---		SBSSTC Ferozepur	---
Electrochemical Analysis of an Anode-Supported Axially Symmetrical one Dimensional Tubular Solid Oxide Fuel Cell	Pankaj Kalra,Rajeev Gargand Ajay Kumar	Journal of Science and Technology	2017	---		SBSSTC, Ferozepur	---
Design of a high temperature solid oxide fuel cell: a review	Pankaj Kalra,Rajeev Gargand Ajay Kumar	International Journal for Research in Applied Science and Engineering Technology	2017	---		SBSSTC, Ferozepur	---
Modelling of a one dimensional Anode supported high temperature tubular SOFC	Pankaj Kalra, Rajeev Kumar, Ajay	International Journal of Chem Tech Research	2017	---		SBSSTC, Ferozepur	---

		Kumar				

3.4.6 h-index of the Institutional Publications during the year. (based on Scopus/ Web of science)

Title of Paper	Name of the Author	Title of the journal	Year of Publication	h-index	Number of citations excluding self citations	Institutional affiliation as mentioned in the publication
Detection of DDoS attacks and Flash Events using Information Theory metrics – An empirical investigation	Sunny Behal, Krishan Kumar	Elsevier Computer Communications	2017	---	20	SBSSTC, Ferozepur
Detection of DDoS attacks and Flash Events using Novel Information Theory metrics	Sunny Behal, Krishan Kumar	Elsevier Computer Communications	2017	---	58	SBSSTC, Ferozepur
DDoS attack detection on wireless sensor network: a review	Kaur Daljeet	International journal of innovative research in science, engineering and technology	2017	---	---	SBSSTC, Ferozepur
A robust automatic vascular and non-vascular based retina recognition system using pso	Kaur, Rupinder; Jindal, Sonika	International journal of advanced research in computer science	2017	---	---	SBSSTC, Ferozepur
Characterizing ddos attacks and flash events: review,	Behal Sunny, Kumar Krishan, Sachdeva	Computer science review	2017	---	20	SBSSTC, Ferozepur

research gaps and future directions	Monika					
A review on content based image retrieval", in International journal of computers & technology	Sethi Nitika, Jindal Sonika	International journal of computers & technology	2017	---	---	SBSSTC, Ferozepur
Characterizatio n and comparison of ddos attack tools and traffic generators- a review	Behal Sunny, Kumar Krishan	International journal of network security	2017	---	38	SBSSTC, Ferozepur
A robust automatic vascular and non-vascular based retina recognition system using pso	Kaur Rupinder, Jindal Sonika	International journal of advanced research in computer science	2017	---	---	SBSSTC, Ferozepur
Characterizin g ddos attacks and flash events: review, research gaps and future directions	Behal, Sunny, Kumar Krishan, Sachdeva Monika	Computer science review	2017	---	20	SBSSTC, Ferozepur
A review on content based image retrieval", in International journal of computers & technology	Seth, Nitika; Jindal, Sonika	International journal of computers & technology	2017	---	---	SBSSTC, Ferozepur
Characterizati on and comparison	Behal, Sunny, Kumar	International journal of network security	2017	---	38	SBSSTC, Ferozepur

of ddos attack tools and traffic generators- a review	Krishan					
Study of ddos attacks and their effects using genitestbed	Mehto Rinkel, Kaur Daljeet	International journal of innovations & advancement in computer science	2017	---	---	SBSSTC, Ferozepur
Cbir system using color moment and color auto-correlogram with block truncation coding	Vinayak, Vandana; Jindal, Sonika	International journal of computer applications	2017	---	---	SBSSTC, Ferozepur
Content based image retrieval system using shape texture and color features	Jindal Sonika, NangiaParul	International journal of advanced research in computer science	2017	---	---	SBSSTC, Ferozepur
Comparison based performance analysis of aodv routing protocol under black hole, selfish node and rushing attack using ns2	Vasu Sharma, Pawan Kumar , Gagandeep	International journal of advanced research in computer engineering & technology	2017	---	---	SBSSTC, Ferozepur
Face recognition under variation in illumination using hybrid of pca and dcp	Jindal Sonika, Saurabh	International journal of advanced research in computer science	2017	---	---	SBSSTC, Ferozepur
Analysis of	Kirandeep	International	2017	---	---	SBSSTC,

different reactive, proactive & hybrid routing protocols: a review	Kaur , PawanLuthra , Gagandeep	journal of advanced technology in engineering and science				Ferozepur
Comprehensive observation of different underwater sensor network protocols	Shaveta , Pawan Luthra , Gagandeep	International journal of advanced research in science and engineering	2017	---	---	SBSSTC, Ferozepur
Ddos attack detection on wireless sensor network: a review	Amandeep Kaur , Daljeet Kaur , Gagandeep	International journal of innovative research in science, engineering and technology,	2017	---	---	SBSSTC, Ferozepur
Ddos attack detection on wireless sensor network using dsr algorithm with cryptography	Amandeep Kaur , Daljeet Kaur , Gagandeep	International journal of computer applications	2017	---	---	SBSSTC, Ferozepur
Software Defined Networking: An Advantage to Environment	SumitBadotra and Japinder Singh	International Journal of Advanced Technology in Engineering and Science	2017	---	---	SBSSTC, Ferozepur
Introduction to Load Balancing and Strategies Used in Software Defined Networking	Sumit Badotra and Japinder Singh	International Journal of Advance Research in Science And Engineering	2017	---	---	SBSSTC, Ferozepur
A Review Paper on	SumitBadotra and	International Journal of	2017	---	---	SBSSTC, Ferozepur

Software Defined Networking	Japinder Singh	Advanced Research in Computer Science				
Open Daylight as a Controller in Software Defined Networking	Sumit Badotra and Japinder Singh	International Journal of Advanced Research in Computer Science	2017	---	---	SBSSTC, Ferozepur
A Review on various levels of NLP	Swati Garg, Sonika Jindal	International Journal of Innovative Research in Science and Engineering	2017	---	---	SBSSTC, Ferozepur
Improved Accuracy in NLP translation using IPSO	Swati Garg, Sonika Jindal	International Journal of Research in Electronics and Computer Engineering	2017	---	---	SBSSTC, Ferozepur
Electrically Small Microstrip Patch Antenna Loaded with Spiral Resonator for Wireless Applications	Rajni, R., Marwaha, A.	Wireless Personal Communications	2017	4	1	SBSSTC, Ferozepur
On the detection of Cardiac Arrhythmia with Principal Component Analysis	Kaur, H., Rajni, R.	Wireless Personal Communications	2017	4	6	SBSSTC, Ferozepur
Electrocardiogram signal analysis for R-peak detection and denoising with hybrid linearization and principal component	Kaur, H., Rajni, R.	Turkish Journal of Electrical Engineering and Computer Sciences	2017	4	7	SBSSTC, Ferozepur

analysis						
Distinctive approach to design tree in Wavelet Packet based OFDM system	Rajni	Journal of Engineering Science and Technology Review	2017	4	2	SBSSTC, Ferozepur
A Novel Approach For Denoising Electrocardiogram Signal Using Hybrid Technique	Rajni	Journal of Engineering Science and Technology	2017	4	1	SBSSTC, Ferozepur
Determination of electromagnetic parameters of a new meta surface comprising of square loop	Rajni	Journal of Engineering Science and Technology	2018	4	---	SBSSTC, Ferozepur
GPU accelerated face detection from low resolution surveillance videos using motion and skin color segmentation	Vikram Mutneja, Satvir Singh	Optik	2018	1	3	I.K. Gujral Punjab Techncial University, India
Treatment of Waste Water Through	Amit Arora, Rajwant Kaur,	Pollution Research	2018	---	22	SBSSTC, Ferozepur

Electro Coagulation	AmandeepKaur, Narendra Singh and Sangeeta Sharma					
Kinetics analysis of reactions at the triple phase boundaries of an anode supported Tubular SOFC	Pankaj Kalra,Rajeev Gargand Ajay Kumar	Asian Journal of Chemistry	2018	-----	-----	SBSSTC Ferozepur
Modelling of a one dimensional Anode supported high temperature tubular SOFC	Pankaj Kalra,Rajeev Gargand Ajay Kumar	International Journal of Chem Tech Research	2017	3	-----	SBSSTC Ferozepur
Design of a high temperature solid oxide fuel cell: a review	Pankaj Kalra, Rajeev Kumar, Ajay Kumar	International Journal for Research in Applied Science and Engineering Technology	2017	-----	-----	SBSSTC Ferozepur
Electrochemical Analysis of an Anode-Supported Axially Symmetrical one Dimensional Tubular Solid Oxide Fuel Cell	Pankaj Kalra, Rajeev Kumar, Ajay Kumar	Indian Journal of Science and Technology	2017	-----	-----	SBSSTC Ferozepur
3.4.7 Faculty participation in Seminars/Conferences and Symposia during the year :						

No. of Faculty	International level	National Level	Sate Level	Local Level
Presented papers	36	28	----	----
Attended Seminars/Workshops	06	46	----	----
Resource Persons	06	03	----	----

3.5 Consultancy

3.5.1 Revenue generated from consultancy during the year

Name of the consultant(s) department	Name of the consultancy Project	Consulting/Sponsoring Agency	Revenue generated (in Rs.)
Department of Civil Engineering	Geotechnical Investigations, Material Testing and Structural Design	Various Government, Semi-Government and Private Organisations	Rs. 57,47,980/-

3.5.2 Revenue generated from Corporate Training by the institution during the year

Name of the consultant(s) department	Title of Programme	Agency Seeking Training	Revenue generated (in Rs.)	No. of Trainees
___	___	___	___	___

3.6 Extension Activities

3.6.1 Number of extension and outreach programmes conducted in collaboration with industry, community and Non-Government Organisations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc., during the year

Title of the Activities	Organising unit/ agency/collaborating agency	Number of teachers co-ordinated in such activities	Number of students participate in such activities
International Yoga Day 2017	5 Pb Girls BN NCC Moga	01	10
National Youth	5 Pb girls BN NCC Moga	01	25

Day			
International Yoga Day celebrated	NSS, Distt. Administration, NCC	02	50
Swachhta Pakhwada	NSS, RRC, EFG	04	100
Independence Day celebrated	NSS, SECA	04	50
Sadhbhawana Rally	NSS, Nehru Yuva Kendra	04	50
Tree plantation Camp	NSS, EFG, RRC	04	60
Eassy Writing Competition	NSS, Nehru Yuva Kendra	03	80
Drawing , Painting & Slogan writing competition.	NSS, RRC, Youth Services Department	05	60
Vigilance Awareness week	NSS, Vigilance bureau	05	150
AIDS Awareness Day Seminar & Rally	NSS, RRC, Youth Services Department	02	50
National Youth Day (Declamation Contest)	NSS, RRC, Youth Services Department	04	60
National voter Day (Declamation & Debate Contest	NSS, RRC, Youth Services Department	05	50
Seminar as Positive Thinking	NSS, RRC	02	50
International Yoga Day	5PB Girls BN NCC Moga	01	25
International Yoga Day celebrated	NSS, Distt. Administration, NCC	02	50
SwachhtaPakhwad	NSS, RRC, EFG	04	100

a			
Independence Day celebrated	NSS, SECA	04	50
Sadhbhawana Rally	NSS, Nehru Yuva Kendra	04	50
Tree plantation Camp	NSS, EFG, RRC	04	60
Eassy Writing Competition	NSS, Nehru Yuva Kendra	03	80
Drawing , Painting & Slogan writing competition.	NSS, RRC, Youth Services Department	05	60
Vigilance Awareness week	NSS, Vigilance bureau	05	150
AIDS Awareness Day Seminar & Rally	NSS, RRC, Youth Services Department	02	50
National Youth Day (Declamation Contest)	NSS, RRC, Youth Services Department	04	60
National voter Day (Declamation & Debate Contest	NSS, RRC, Youth Services Department	05	50
Seminar as Positive Thinking	NSS, RRC	02	50
Blood Donation Camp	Red Cross Club	01	07
Expert Lecture of Mr. Avinash Chander from TIET, Patiala	CHESS	02	40
Expert Lecture by Dr.Rajkumar Arya (From Chemical Engg. Deptt. Thapar	CHESS	02	40

University, Patiala)			
Industrial tour on 11/4/18 at M D Biocoal Ltd. at Mansa	CHESS	02	38
BARCH Blood Donation Camp	Red Cross Club	01	07
DASH International Yoga Day 2017	13 Pb Bn. NCC Ferozepur	09	155

3.6.2 Awards and recognition received for extension activities from Government and other recognized bodies during the year

Name of The Activity	Award/recognition	Awarding Bodies	No. of Students benefited
Conducting various social activities such as drug de-addiction, blood donation camps and AIDS awareness rallies	Award of Appreciation	Youth Service department, Ferozepur	25

3.6.3 Students participating in extension activities with Government Organisations, Non Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year

Name of the Scheme	Organising unit/agency/ Collaborating Agency	Name of the activity	Number of teachers co-ordinated such activities	Number of students participated in such Activities
Swachh Bharat abhiyaan rally 2017	5 PB Girls BN NCC Moga	Swachh Bharat abhiyaan rally 2017	01	35
Swachh Bharat Abhiyan	SBSSTC, Ferozepur	Cleanliness of Institute	02	30

550th Prakash Purab of honourable Shri Guru Nanak Dev Ji	Youth Services and Sports, Government of Punjab	550th Prakash Purab of honourable Shri Guru Nanak Dev Ji on 8th Feb 2019 for arranging a Mega Blood Donation Camp of 550 units and plantation of 550 Trees	02	09
Social Activities like Rallies and Drug De addiction Seminar ,Poster Making Competition	Department of Youth Services, Government of Punjab	Social Activities like Rallies and Drug De addiction Seminar ,Poster Making Competition on AIDS Awareness, Regularly Conducting Blood Donation Camps.	2	12

3.7 Collaborations

3.7.1 Number of Collaborative activities for research, faculty exchange, student exchange during the year

Nature of Activity	Participant	Source of Financial Support	Duration
STC on "Optimization using MATLAB" through ICT	65	NITTTR Chandigarh	01 week (17/07/17 to 21/07/17)
STC on Energy, Environment and sustainable development through ICT	60	NITTTR Chandigarh	01 week
Joint M.S. Thesis with Poland	8 participants with Dr. Amit Arora Joint publication	__	Across the Year

3.7.2 Linkages with institutions/industries for internship, on-the-job training, project work, sharing of research facilities etc. during the year

Nature of Linkage	Title of Linkage	Name of the partnering institution/ industry/research lab with contact details	Duration (From-to)	Participant
Use of laboratory MATLAB	Ph.D. thesis work	Punjabi University, Patiala	2017-18	Aruna Rani

| Use of laboratory HFSS software for thesis work | Sharing of Research facilities | MRSPTU, Bathinda YCOE, Punjabi University, Talwandi Sabo | 2017-18 | Ravi Verma, Manpreet Kaur, Sunita Rani |

3.7.3 MoUs signed with institutions of national, international importance, other institutions, industries, corporate houses etc. during the year

Organization	Date of MoU Chandigarh signed	Purpose and Activites	Number of students/teachers participated under MoUs
Infosys	03-06-2016 to 02-06-2020	Campus Connect Program to impart Industry oriented subjects in the curriculum	Teachers - 08
MoU signed between SBSSTC, Ferozepur and NHL Univ. Of Applied Sciences, Leeuwarden, The Netherlands for a period of three years	18-06-2015 (for Three Years)	Faculty and student exchange programme	----
Bhagwati Lacto Vegetarian Pvt. Ltd.	15-07-2017	Joint research related to rice Bran	01

CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES

4.1 Physical Facilities

4.1.1 Budget allocation, excluding salary for infrastructure augmentation during the year

Budget allocated for infrastructure augmentation	Budget utilized for infrastructure development
Rs. 275.00 lacs	-----

4.1.2 Details of augmentation in infrastructure facilities during the year

Facilities	Existing	Newly added
Campus area	98.4 Acre	___
Classrooms	77	___
Laboratories	94	___
Seminar Halls	05	___
Classrooms with LCD facilities	22	10

Classrooms with Wi-Fi/ LAN	77	–––
Seminar halls with ICT facilities	01	01
Video Centre	01	–––
No. of important equipments purchased (≥ 1-0 lakh) during the current year.	45	08
Value of the equipment purchased during the year (Rs. InLakhs)	47549925/-	1709641/-
Others	-----	-----

4.2 Library as a Learning Resource

4.2.1 Library is automated {Integrated Library Management System (ILMS)}

Name of the ILMS Software	Nature of automation (fully or partially)	Version	Year of automation
KOHA	Fully	39.50	2017-18

4.2.2 Library Services:

	Existing		Newly added		Total	
	No.	Value	No.	Value	No.	Value
Text Books	25968	2932691/-	4832	307951/-	30800	3240642/-
Reference Books	3190	--	300	--	3490	--
e-Books	--	--	--	--	--	--
Journals	54	--	--	--	--	--
e-Journals	586	664657/-	--	--	--	--
Digital Database	02	--	--	--	--	--
CD & Video	425	--	--	--	--	--
Library automation	Yes					
Weeding (Hard & Soft)	--	--	--	--	--	--
Others (specify)	--	--	--	--	--	--

4.2.3 E-content developed by teachers such as: e-PG-Pathshala, CEC (under e-PG-Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives

&Institutional (Learning Management System (LMS)) etc

Name of the Teacher	Name of the module	Platform on which module is developed	Date of launching e - content
--	--	--	--

4.3 IT Infrastructure

4.3.1 Technology Up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Departments	Available band width (MGBPS)	Others
Existing	100	4	2	100	1	3	9	155 MBPS(1:2) from BSNL+100 MBPS from NKN	
Added	----	----	----	----	----	----	----	----	----
Total	100	4	2	100	1	3	9	255	----

4.3.2 Bandwidth available of internet connection in the Institution (Leased line)

155 MBPS (1:2) from BSNL+100 MBPS from NKN   (255)

4.3.3 Facility for e-content

Name of the e-content development facility	Provide the link of the videos and media centre and recording facility
----	----

4.4 Maintenance of Campus Infrastructure

4.4.1 Expenditure incurred on maintenance of physical facilities and academic support facilities, excluding salary component, during the year

Assigned budget on academic facilities	Expenditure incurred on maintenance of academic facilities	Assigned budget on physical facilities	Expenditure incurred on maintenance of physical facilities
Rs.75.00 Lacs	Rs.1.49 Lacs	Rs.70.00 Lacs	Rs.51.18 Lacs

4.4.2 Procedures and policies for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc. (maximum 500 words)(information to be available in institutional Website)

For maintaining and utilizing physical, academic and support facilities -laboratory, library, sports complex, computers, classrooms etc can be carried out by following committee/Office

- Grievance Committee
- Anti Ragging Committee
- Discipline Committee
- Institutional Development Committee
- Student Affairs/Welfare Committee
- Library Committee
- Anti Sexual Harassment Committee
- Public Relation Department
- Public Information Cell
- Legal Cell
- Estate Office

CRITERION V - STUDENT SUPPORT AND PROGRESSION

5.1 Student Support

5.1.1 Scholarships and Financial Support

	Name/Title of the scheme	Number of Student	Amount of Rupee
Financial support from institution	Student Exigency Fund(SEF)	22	11,57,735/-
	Student Aid Fund(SAF)	100	4,54,000/-
Financial support from other sources			
National	PMSS Scholarship	143	1,21, 79820/-
	Bihar Govt. Scholarship	12	8,91,350/-
	J&K Govt. Scholarship	192	11520000/-
	E-Kalyan Welfare Deptt.,	15	900000/-

Govt. of Jharkhand			
UP Govt. Scholarship		92	11520000/-

5.1.2 Number of capability enhancement and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc.,

Name of the capability enhancement scheme	Date of implementation	Number of students enrolled	Agencies involved
International Yoga Day	21/06/17	45	Bharti Yog Sansthan, Ferozepur
Human Values and professional ethics	21/07/17	139	----
Professional Skills-I	20/07/17	59	----
Professional Skills-II	03/01/18	59	----
Professional Skills-III	21/07/17	131	----
Professional Skills-IV	05/01/18	119	----
Human Values and professional ethics	21/07/17	06	----
Professional Skills-I	22/07/17	08	----
Professional Skills-II	05/01/18	06	----
Professional Skills-IV	03/01/18	06	----
Soft Skill development	01/06/17-31/05/18	185	Central agency at institute level

5.1.3 Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year

Year	Name of the scheme	Number of benefited students by Guidance for Competitive examination	Number of benefited students by Career Counselling activities	Number of students who have passed in the competitive exam	Number of students placed
2017	Competitive examination and career counselling	40	45	01	30
2017	Career Counselling	----	03	----	03
201	Gate Coaching	69	----	07	24

7					

5.1.4 Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year

Total grievances received	No. of grievances redressed	Average number of days for grievance redressal
3	3	4

5.2 Student Progression

5.2.1 Details of campus placement during the year

On campus			**Off Campus**
Name of Organizations Visited	Number of Students participated	Number of Students Placed	Number of Students Placed
TCS	55	7	----
HP	40	2	----
Cogniter Pvt Ltd.	109	8	----
CETPA Infotech Pvt. Ltd.	41	5	----
Capital Via	52	6	----
Infosys	108	11	----
MIND Infotech	37	5	----
Cognixia, Noida	79	14	----
Tele-performance	69	8	----
MSP Contracts Pvt. Ltd.	4	1	----
Scope Telecom Pvt. Ltd.	64	15	----
Lead Group	25	2	----
OLA Cabs	68	4	----
Urban Ladder	12	1	----
Mega rubber Pvt Ltd.	4	1	----
F.B forgings Pvt Ltd	4	1	----
Truvic Engg. Pvt.Ltd	5	1	----

| Metro Tyres Ltd. | 64 | 2 | ---- |
| Total | 840 | 94 | ---- |

5.2.2 Student progression to higher education in percentage during the year

Year	Number of students enrolling into higher education	Programme graduated from	Department graduated from	Name of institution joined	Name of Programme admitted to
2017-18	01	B.Tech	ECE	University of Canada West Canada	MBA
2017-18	03	B.Tech	EE	Macewan University-2, Lcaat-1	M.Tech
2017-18	02	B.Tech.	CE	GNDEC, Ludhiana &	M.Tech & Graduate Diploma in Abroad
2017-18	24	B.Tech.	CE	Foreign Colleges/ Universities	M.Tech & Graduate Diploma in Abroad
2016-17	01	B.Tech	CHE	UICET, Panjab University, Chandigarh	ME
2017-18	01	B.Tech	ME	Chitkara university	M.Tech
2017-18	01	B.Tech	ME	Lovely Professional university	M.Tech
2017-18	06	B.Tech	ME	Fleming College Canada	M.Tech &MBA

5.2.3 Students qualifying in state/ national/ international level examinations during the year (eg: NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services)

Items	No. of Students selected/ qualifying	Registration number/roll number for the exam
NET	---	---
SET	---	---
SLET	---	---

GATE	08	CS18S38024100 CS18S38024036 CS18S38027102
GMAT	---	---
CAT	---	---
GRE	01	NA
TOFEL	---	---
Civil Services	01	---
State Government Services	05	---
Any Other	---	---

5.2.4 Sports and cultural activities / competitions organised at the institution level during the year

Activity	Level	Participants
Engineer's Day Celebration	Institute level	160 (Boys and Girls)
Nirmaan 2K16	Institute level	126 (Boys and Girls)
Lawn tennis	Inter-college	01 (Boys and Girls)
Cultural Events	Institute level	300 (Boys and Girls)
Fresher's Welcome Function	Institute level	300 (Boys and Girls)
Virsa 2018	Institute level	200 (Boys and Girls)
Fare Well Function	Institute level	150 (Boys and Girls)
Annual Athletic Meet /Inter Year College Tournament 1) Cricket 2) Football 3) Table Tennis 4) Basket Boll 5) Volley Boll 6) Chess 7) Lawn Tennis 8) Hockey	Institute level	370 (Boys and Girls)

5.3 Student Participation and Activities

5.3.1 Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one)

Year	Name of the award/ medal	National/ International	Sports	Cultural	Student ID Number	Name of the student
2017-18	Silver Medal	University Level	Relay Race 4*100	---	1250386 B.Tech-CSE	Avneet Kaur Sidhu
2017-18	Silver Medal	University Level	100 M Race	---	1250386 B.Tech-CSE	Avneet Kaur Sidhu
2017-18	Gold Medal	University level	100 m race	---	15110953 B.Tech-ME	Sudhir Kumar Singh
2017-18	Silver Medal	University level	200 m race	----	15110953 B.Tech-ME	Sudhir Kumar Singh (Best Athlete of Universitry)

5.3.2 Activity of Student Council & representation of students on academic & administrative bodies/committees of the institution (maximum 500 words)

Students are a part of anti-ragging committee for the prevention of ragging in the campus. Students Grievance redressal committee is also functioning properly in the campus for addressing and effectively resolving grievances of students and in this committee also, one of the member is from student committee. Every year College annual athlete meet is held in the month of February / March for B.Tech, Diploma, BCA, MBA Students including Events namely : 100m, 200m, 400m, 800m, 1500m, 5000m, race, Long jump, High jump, Discuss through, Javelin through, Shot put and tug of war etc.

5.4 Alumni Engagement

5.4.1 Whether the institution has registered Alumni Association? Yes/No, if yes give details (maximum 500 words):

Yes, The Alumni Association was registered under Registration No. FZR3585 on dated 08/10/2009.
- The college holds Alumni Meet of the passed out students annually.
- Department-wise Online Alumni Surveys are conducted for the passed out batches.
- A number of Groups on the Social Websites like Facebook [SBSSTC alumni page] etc. are used to disseminate the information to the Alumni.
- Alumni Registration is done through one online form published on college website www.sbsstc.ac.inand one LinkedIn account

5.4.2 No. of registered Alumni: 357 till date on web portal

700 on Linkedin

5.4.3 Alumni contribution during the year (in Rupees)

____

5.4.4 Meetings/activities organized by Alumni Association**:**

Sr No	Name of Alumni	Branch	Batch	Topic	Date

1	Ms. Disha Kohli	CSE	2004-2008	How to prepare yourself for the IT Industry	06/03/2019
2	Mr. Chandan Prashar	CSE	2002-2006	Entrepreneurship Skills and Recent Trends in IT	20/03/2019
3	Mr. Sudeep Saxena	CSE	2011-2015	Opportunities in IT	19/08/2019

CRITERION VI –GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 Institutional Vision and Leadership

6.1.1 Mention two practices of decentralization and participative management during the last year (maximum 500 words)

The college believes in decentralized governance and Participative management. Teaching and nonteaching staff members share the administrative responsibility of the college and contribute in smooth working of administrative machinery.

1) All of the class rooms are under CCTV.
2) Associate Director monitor the engagement of classes through CCTV.

6.1.2 Does the institution have a Management Information System (MIS)?

Yes/No/Partial:

Partial

6.2 Strategy Development and Deployment

6.2.1 Quality improvement strategies adopted by the institution for each of the following (with in 100 words each)**:**

Curriculum Development

- Keeping in mind the need to make students employable, a practical course of professional skills has been included in the various semesters for the development of their soft skills.
- The curriculum is strengthened through workshops and brainstorming sessions on developing research embedded syllabi to make students globally mobile and socially useful.
- An emphasis has been laid on providing the students flexibility in their learning by including a host of elective options to ensure that the student develops as a better professional, having wider exposure.
- Certain aptitude development courses has been introduced particularly for final year student.

Teaching and Learning

- Wide choice of elective courses, inclusion of e-books, courseware, tutorial modules for each course has been incorporated.
- Online Courseware, Webinars, Video lectures and intensive laboratory training have been introduced.
- Introduction of non-credit courses for Professional Development.
- Departmental meetings has been organized to discuss different aspects of the teaching & learning process, starting from curriculum to pedagogy, best practices, & latest trends in knowledge and industry.
- Departmental libraries have been developed and students are encouraged to visit library and other online resources for different assignments.

Examination and Evaluation

- To ensure a fool proof examination system, various committees were constituted such as a printing cell, and a result Publication Committee and a committee for deciding UMC cases consists of experts from outside the institute.
- The question papers for end-semester examinations will be in accordance with the Course outcomes defined in curriculum of each course which in turn are mapped with Programme outcomes.
- The question papers are in accordance with the Course outcomes defined in curriculum of each course which in turn are mapped with Programme outcomes.

Research and Development :

- Conferences, faculty development programmes/ short term courses and guest lectures are organised time to time for the researchers/ students.
- A research grant of Rs. 50,000/- per year for each faculty member of the institute for research related activities in an effort to train, motivate and reward faculty

The institute follows Ph. D. policies and regulations of affiliating technical university in all respect. The institute promotes research in the frontier areas of science, humanities and technology. The faculty are allowed to register for Ph. D. programme in various universities/ IITs/ NITs/ own institute under QIP, study leave, part time basis.

Library, ICT and Physical Infrastructure / Instrumentation:
- The Central library has ICT and Physical Infrastructure / Instrumentation, Barcode / RF Enabled Circulation and Surveillance in its premises.
- Institute has ICT enabled classrooms
- The Central library is a multimedia Enabled Digital Library with large number of e-books, e-journals and other online course material equipped with 10 computers, two laser printers and soul software. .
- The Computer centre has a number of working environments & Packages; Windows, Matlab, Statistica, Mathematica etc
- Campus wide networking through Optical Fibre Backbone Reading Rooms in Central Library and various hostels.

Human Resource Management
- Separate Establishment Branch for maintaining record, performance appraisal etc of available human resource Grievance redressal mechanism in place for faculty, staff, students,
- Transportation facility for faculty staffs and students.
- Reimbursement of TA/DA for official travel, attending conference, seminar, or any special training.
- On campus health centre with ambulance

Industry Interaction / Collaboration :
- Orientation Courses, Industrial Visits etc for faculty and students will be conducted regularly. Industrial exhibitions to highlight research facilities and expertise are offered within the Institution. This interaction also provides continuing education opportunities, short-term programmes and training needs of the industry, which the institution can provide.
- Institute has signed Memorandum of Understanding (MoU) with following industries for the purpose of enriching the technical education process:
  - Infosys Ltd
  - Metro Tyres Ltd., Ludhaiana
  - CETPA Infotech Pvt Ltd., Noida
  - P.P. Industries Pvt Ltd., Bathinda
  - Itenic Technology Pvt Ltd., Noida

Admission of Students
- The Institute follows a highly transparent admission process strictly adhering to the rules and regulations of the affiliated University IKGPTU, Kapurthala and Punjab State through

Centralized counselling conducted by the University.
- The vacant seats are then advertised and filled purely on merit basis.

Candidates are required to fill the online Registration form. Each application is processed and verified for their admission.

6.2.2   :   Implementation of e-governance in areas of operations:
- Planning and Development:-Student data management, Timetable, attendance modules are working.
- Administration:-Employee data management, Biometric attendance, Leave Management, and Payroll Modules are working.
- Finance and Accounts:-Fee Management, Receipt and Payments modules are working.
- Student Admission and Support:-Student admission is through centralized online counselling conducted by the affiliating University.
- Examination:-Examination department is completely computerized. Results are displayed Online individually in the Login of student. Exam form filling, Conduct of exam, Declaration of Result modules are working.

6.3 Faculty Empowerment Strategies

6.3.1 Teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

Year	Name of teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support
2017	Dr. Rajiv Arora	5th Bio processing India, 2017 National Conference	----	Rs. 21,500/-
2017	Dr. Rajiv Arora	8th International Conference on Chemistry and Chemical Engineering (ICCCE 2017), Barcelona, Spain	----	Rs 1,15,000/-
2017	Dr. Amit Arora	5th Bio-processing India, 2017 (National Conference)	----	Rs. 21,500/-

6.3.2 Number of professional development / administrative training programmes organized by the Colleges for teaching and non teaching staff during the year

Year	Title of the professional development programme organised for teaching staff	Title of the administrative training programme organised for non-	Dates (from-to)	No. of participants (Teaching staff)	No. of participants (Non-teaching staff)

Year	Title	teaching staff	Date		
2017	Cloud Computing	--	04/12/2017 to 08/12/2017	3	---
2017	Optimization using MATLAB through ICT	--	17/07/2017 to 21/07/2017	8	---
2018	Android Apps Development	--	22/03/2018 to 23/03/2018	9	---
2017	One week NITTTR, Chandigarh sponsored STC on "Optimization using MATLAB" through ICT	--	17/07/2017 to 21/08/2017	65	2
2018	Organized technical webinar on " RTL design & Functional verification" by expert from company "Maven Silicon Softech Pvt Ltd, Bangalore, Karnataka "	--	16-02-2018	2	---
2017	National Conference Frontiers in Materials Research & Applications (FMRA 2017)	--	21-12-2017	56	---
2017	AICTE Sponsored one day workshop on "Clean Energy Technologies"	--	7/11/2017	52	---
2017	Energy, Environment and Sustainable Development through ICT	--	24/07/2017 to 28/07/2017	60	---
2017	Optimization using MATLAB through ICT	--	17/07/2017 to 21/07/2017	2	---

6.3.3 No. of teachers attending professional development programmes, viz., Orientation Programme,

Refresher Course, Short Term Course, Faculty Development Programmes during the year		
Title of the professional development programme	Number of teachers who attended	Date and Duration (from – to)
Cloud Computing	03	04/12/2017 to 08/12/2017
Optimization using MATLAB through ICT	08	17/07/2017 to 21/07/2017
Android Apps Development	09	22/03/2018 to 23/03/2018
Optimization using MATLAB on 17th - 21st July 2017 (1Week) Sponsored by NITTTR, Chandigarh and Organized at SBSSTC Ferozepur	10	17/07/2017 to 21/07/2017
Energy, environment and sustainable development on 24st -28th July 2017(1Week) Sponsored by NITTTR, Chandigarh and Organized at SBSSTC Ferozepur	10	24/07/2017 to 28/07/2017
Student Evaluation (Module III IPD through ICT) Organized at NITTTR Chandigarh	01	08/01/2018 to 12/01/2018
FPGA based Digital System Design, NITTTR Chandigarh	01	24/07/2017 to 28/07/2017
STC on "Instrumentation on Environment Engg"	01	07/05/2018 to 11/05/2018
Effective Technical Writing Using Latex	02	03/07/2017 to 07/07/2017)
Optimization using MATLAB	06	17/07/2017 to 21/07/2017
Energy, Environment and Sustainable Development	06	24/07/2017 to 28/07/2017
Facts and Smart Grid Technologies	01	25/09/2017 to 29/09/2017
Hands on practice on Lab VIEW	01	20/11/2017 to 24/11/2017
Effective Use of Instructional Material using Adobe	01	27/11/2017 to 01/12/2017
Planning, Execution and Evaluation of Project Work	01	23/04/2018 to 27/04/2018)
Instructional Delivery	01	04/06/2018 to 08/06/2018)
AICTE Sponsored Short Term Course on "Optimization using MAT LAB through ICT"	05	17/07/2017 to 21/07/2017)
AICTE Sponsored Short Term Course on Laboratory Practices in Environmental Engineering	02	07/05/2018 to 11/05/2018)
Short Term Course on "Energy, Environment & Sustainable Development through ICT"	02	24/07/2017 to 28/07/2017)

Energy, environment and sustainable development through ICT	02	24/01/2017 to 28/07/2017
Optimization using MATLAB		17/07/2017 to 21/07/2017
AICTE recognized NITTTR organized STC on "Optimization using MATLAB through ICT" organized by Dept. of Electronics Engg., SBSSTC, Ferozepur	02	17/07/2017 to 25/07/2017
Instructional Material Development using Latest Media Through ICT	01	17/07/2017 to 25/07/2017
AICTE recognized NITTTR organized STC on "Energy, Environment Sustainable Development through ICT" organized by Dept. of Mechanical Engg., SBSSTC, Ferozepur	04	24/07/2017 to 28/07/2017
NBA sponsored " Awareness Workshop on Outcome Based Education and Accreditation" organized by NBA team in collaboration with NITTTR Chandigarh, IKGPTU Kapurthala & MRSPTU Bathinda	01	21/01/ 2017
AICTE Sponsored one day workshop on "Clean Energy Technologies"	52	07/11/2017
Energy, Environment and Sustainable Development through ICT	04	24/07/2017 to 28/07/2017
Optimization using MATLAB through ICT	02	17/07/2017 to 21/07/2017

6.3.4   Faculty and Staff recruitment (no. for permanent recruitment):

Teaching		Non-teaching	
Permanent	Fulltime	Permanent	Fulltime
71	71	109	109

6.3.5 Welfare schemes for

Teaching	2
Non teaching	2
Students	6

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly (with in 100 words each)

The institute external financial audit is done by Punjab Government Accountant General office and internal audit is done by internal Audit Committee

6.4.2 Funds / Grants received from management, non-government bodies, individuals, philanthropies during the year(not covered in Criterion III)

Name of the non government funding agencies/ individuals	Funds/ Grants received in Rs.	Purpose

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6.4.2 Total corpus fund generated 25 Crore

6.5 Internal Quality Assurance System

6.5.1 Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	YES	PTU, Jalandhar	Yes	IQAC
Administrative	YES	Punjab Govt.	Yes	Internal Various Committee

6.5.2 Activities and support from the Parent – Teacher Association (at least three)

The PTA also aims at enhancing the interaction among the various stakeholders.
Providing valuable suggestion for development of the institution
Pointing out the weaknesses of the college & related Departments and suggesting rectification.
Communicating views which the students feel shy to communicate directly to the teachers about the college and the department.

6.5.3 Development programmes for support staff (at least three)

1.Computer Training

2.Yoga training & stress management

3.Soft skill training

6.5.4 Post Accreditation initiative(s) (mention at least three)

1. Various batches of alumni have been contacted for strengthening the alumni contribution.
2. Up gradation of present syllabus to suit the need of employability through board of studies is sought for.
3. Planning is underway to adopt nearby villages to enhance water conservation, social upliftment etc.
4.

6.5.5

a. Submission of Data for AISHE portal   : (Yes /No)   Yes
b. Participation in NIRF   : (Yes /No)   Yes
c. ISO Certification   : (Yes /No)   No
d. NBA or any other quality audit   : (Yes /No)   Yes

6.5.6 Number of Quality Initiatives undertaken during the year

Year	Name of quality initiative by IQAC	Date of conducting activity	Duration (from-----to------)	Number of participants
2018	Shifting of affiliation from MRSPTU, Bathinda to IKGPTU, Jalandhar	30/01/2018 (5th IQAC)	30/01/2018 (5th IQAC)	425

2018	Adoption of Syllabus proposed by AICTE w.e.f 2018 batch	30/01/2018 (5th IQAC)	30/01/2018 (5th IQAC)	335
2018	Minimum classes should be planned and delivered by each teacher	30/01/2018 (5th IQAC)	30/01/2018 (5th IQAC)	1800

CRITERION VII – INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 - Institutional Values and Social Responsibilities

7.1.1 Gender Equity (Number of gender equity promotion programmes organized by the institution during the year)

Title of the programme	Period (from-to)	Participants	
		Female	Male
Celebration of International Women's Day	8 March 2018	63	39

7.1.2 Environmental Consciousness and Sustainability/Alternate Energy initiatives such as:
Percentage of power requirement of the College met by the renewable energy sources

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7.1.3 Differently abled (Divyangjan) friendliness

Items Facilities	Yes/No	No. of Beneficiaries
Physical facilities	Yes	All Differently-abled students.
Provision for lift	Yes	All Differently-abled students.
Ramp/ Rails	Yes	All Differently-abled students.
Braille Software/facilities	No	---
Rest Rooms	Yes	All Differently-abled students.

Scribes for examination	Yes	All Differently-abled students.
Special skill development for differently abled students	Yes	All Differently-abled students.
Any other similar facility	Yes	All Differently-abled students.

7.1.4 Inclusion and Situatedness

Enlist most important initiatives taken to address locational advantages and disadvantages during the year

Year	Number of initiatives to address locational advantages and disadvantages	Number of initiatives taken to engage with and contribute to local community	Date and duration of the initiative	Name of the initiative	Issues addressed	Number of participating students and staff
2017	2	2	25/01/2017	Voter Awareness SVEEP	Voter Education,	70
2018	2	2	07/02/2018	Blood Donation	Blood Donation	60

7.1.5 Human Values and Professional Ethics

Code of conduct (handbooks) for various stakeholders

Title	Date of Publication	Follow up (maximum 100 words each)
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7.1.6 Activities conducted for promotion of universal Values and Ethics

Activity	Duration (from-------to-------)	Number of participants
Seminar under Vigilance awareness week by Vigilance Department, Ferozepur	03.11.2017	135
Drawing, Painting and Slogan Writing Competition on Blood Donation and Drug De-addiction	12.10.2017	60
Essay writing Competition on Blood Donation	05.09.2017	80
Rally on AIDS Awareness	02.12.2017	50

Celebration of National Youth Day	12.01.2018	45
Seminar on Positive thinking	27.02.2018	80

7.1.7 Initiatives taken by the institution to make the campus eco-friendly (at least five)

1. Tree Plantation on Regular Basis.
2. Swatch Bharat Abhiyan is going on .
3. Painting Competition on environment conservation on regular basis.
4. Seminar on Environmental Conservation on regular Basis.
5. Swachhata Pakhwadato clean campus for 15 days is going on regular basis.

7.2 Best Practices

Describe at least two institutional best practices
Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link

1. The institute is using computerized modules for managing activities related to Academics, Finance And Accounts and Grievances of student. https://forms.eduqfix.com/sbsstconlineform/add https://sbsstc.edugrievance.com/
2. The institute has automated EXAM AND GRADING module for Exam form filling conduct of exam and Declaration of Result.   http://10.11.11.11 (MySBSExam intranet website)
3. Institute has fully computerized Library through Koha Library Module.

7.3 Institutional Distinctiveness

Provide the details of the performance of the institution in one area distinctive to its vision, priority and thrust
Provide the weblink of the institution in not more than 500 words

- Education Quality Improvement through Propagation of Outcome Based Education (OBE)" as advocated by NBA.
- Biometric attendance of staff and faculty.

Weblink :- http://10.11.11.11 (MySBSExam intranet website)

Future Plans of action for next academic year (500 words)

The following are the future plans for the forthcoming Academic year 2018-19:
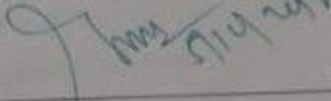- To strengthen the e-governance facilities.
- Effective involvement of Alumni in various College Activities.
- To conduct national seminar and workshop.
- To train the teachers with elementary for computer proficiency.
- To increase the knowledge and creativity of the students the subjects taught be changed after teaching the subject for maximum of five times.
- Timely submission of awards by the faculty for the smooth declaration of the result without any delay.
- To adopt Quality Improvement Strategies of every NAAC Criterion.
- To provide scholarship and other financial assistance.
- To conduct seminars, symposium and conferences in all the disciplines at International level.
- To arrange Guest lecture. Programme on different topic of current issues.
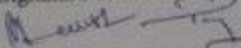- To Introduce new UG and PG Programmes

Name _Dr. Lalit sharma_

26/09/2018

Signature of the Coordinator, IQAC

Name _Dr. T. S. Sidhu_

Signature of the Chairperson, IQAC

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Abbreviations:

IQAC	-	Internal Quality Assurance Cell
SBSSTC	-	Shaheed Bhagat Singh State Technical Campus
CBCS	-	Choice Based Credit System
OBE	-	Outcome Based Education
NBA	-	National Board of Accreditation
ERP	-	Enterprise Resource planning
UG	-	Under Graduate
PG	-	Post Graduate
B.Tech	-	Bachelor of Technology
M.Tech	-	Master of Technology
B.Arch	-	Bachelor of Architecture
CSE	-	Computer Science and Engineering
ECE	-	Electronics and Communication Engineering
CE	-	Civil Engineering
EE	-	Electrical Engineering
CHE	-	Chemical Engineering
ME	-	Mechanical Engineering
CA	-	Computer Application
MBA	-	Master of Business Administration
MCA	-	Master of Computer Application
PGDCA	-	Post Graduate Diploma in Computer Application
B.Sc (IT)	-	Bachelor of Science in Information Technology
MHRD	-	Ministry Human Resource Development

TEQIP	-	Technical Education Quality Improvement Programme
ANOs	-	Associate NCC officer
MoU	-	Memorandum of Understanding
GATE	-	Graduate Aptitude Test
CCTV	-	Closed-circuit television
FDP	-	Faculty Development Programme
ISTE	-	Indian Society of Technical Education
EFG	-	Eco -Friendly Group
RRC	-	Red Ribbon Club
NSQF	-	National Skills Qualification Framework
SVEEP	-	Systematic Voter's Education and Electoral Participation
NHL	-	Noordelijke Hogeschool Leeuwarden