

FOR 2nd CYCLE OF ACCREDITATION

SIES GRADUATE SCHOOL OF TECHNOLOGY

SRI CHANDRASEKARENDRA SARASWATHY VIDYAPURAM, SECTOR-V, NERUL, NAVI MUMBAI 400706 www.siesgst.edu.in

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL BANGALORE

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

The South Indian Education Society (SIES) established in 1932 at Matunga, is a pioneer in the field of education, in this metropolis. The Society has been serving the cause of education and has carved for itself a niche, as a provider of quality and value based education from Nursery to Doctoral level in a wide variety of fields. The institute seeks to achieve the educational mission by focusing on the modes of inquiry, which strengthens thinking skills and provides extensive field experiences, to bring together theory and practices.

"This society should sincerely serve the cause of education and the educational needs of the common man of this cosmopolitan city"

-SIES Mission set by our founder Shri M. V . Venkateshwaran in 1932

SIES Graduate School of Technology, an integral part of this well-established Community, started in the year 2002 is located in the list of an educational hub in Navi Mumbai imparting quality based technical education, offering four year Bachelor of Engineering courses in Electronics and Telecommunication Engineering, Electronics & Computer Science, Computer Engineering, Artificial Intelligence & Data Science, Artificial Intelligence & Machine Learning, Information Technology, Mechanical Engineering, Undergraduate Program Computer Science and Engineering (Internet of Things and Cyber Security Including BlockChain Technology), Post graduate programs in Information security and Artificial Intelligence and Data Science.

The SIESGST is approved by the AICTE and affiliated to the Mumbai University, for conduction of its courses and recruitment policies as per the requirement of AICTE and the University. The institute is twice accredited by National Board of Accreditaton. Three undergraduate courses namely Electronics and telecommunication, Computer Engineering and Information technology from 2012-14 and four undergraduate courses Electronics and Telecommunication, Computer Engineering, Information Technology, Mechanical Engineering from 2021-24. Institute been accredited by Tata Consultancy services (TCS) and certified by ISO 9001:2008 Quality Management System (2005-2017). The institute is NAAC Accreditated with B++ in the year 2018-19 for the duration of 2017-22. The institute regularly partificate in NIRF. The institute conduct activities under MHRD IIC also recieved MHRD IIC score ranging from 2-4 from 2018-22. The institute has the reputation of being known for its discipline and integrity.

Vision

"To be a centre of excellence in Education and Technology committed towards Socio-Economic advancement of the country"

Mission

Mission

1. To impart advanced knowledge in Engineering and Technology.

Page 2/99 24-06-2023 01:43:51

- 2. To transform young minds towards professional competence by inculcating values and developing skills.
- 3. To promote research and ensure continuous value addition among students and employees
- 4. To strengthen association with industry, research organizations and alumni to enhance knowledge on current technologies.
- 5. To promote next generation technocracy and nurture entrepreneurial culture for social-economic growth.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- 1. Institution has a progressive view and provides holistic development of its students and staff in academically conducive ambience.
- 2. Blend of young and experienced qualified and dedicated faculty members.
- 3. Very good infrastucture including state of art laboratories, learner centric and ICT enabled teaching-learning Process.
- 4. Strong alumni connect.
- 5. Institute has proven social responsibility by providing skill based training to the weaker sections of the society.

Institutional Weakness

- 1. International engagement in terms of student and faculty exchange programs.
- 2. Limited research grants, consultancy.
- 3. Limited curriculum flexibility because of Non-autonomous status

Institutional Opportunity

- 1. Contemplating autonomous status by starting SIES University.
- 2. Opportunity for collaborations with Institutes of repute like IITs and foreign universities in emerging areas like geoinformatics.
- 3. Increase in Industry Institute Interaction through MoU with reputed agencies and premiere industries.
- 4. Strengthening innovation and incubation ecosystem and having opportunities for research oriented patents.

Institutional Challenge

- 1. Changing admission scenario in Engineering and Technology.
- 2. Getting qualified and competent experienced faculty in the emerging areas.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

The South Indian Education Society's Graduate School of Technology affiliated to the University of Mumbai (UoM) takes adequate and timely measures to ensure effective curriculum delivery. A well-planned and documented process is in place and followed throughout the semester.

As per the academic schedule given by the University, a well-structured academic calendar is proposed by the principal of the institute and is approved by the academic council in the review meeting. The academic calendar provides the date of commencement of the academic session, the schedule of internal assessments schedule, Parent Teacher's meetings, mid-term and final submissions, practical/oral exams, preparation holidays, end-semester examinations, etc. The academic calendar is distributed to the faculty members prior to the commencement of the semester.

The Institute follows the syllabus prescribed by the UoM. The gap analysis is done for all the courses belonging to the program. The gap may be a prerequisite gap, course gap, semester gap, or program gap. Discussion on the course gaps is done in the departmental advisory board meeting to bridge them with relevant guest lectures, seminars, workshops, value-added courses, industrial visits, implementing projects etc.

At SIESGST, we believe in the overall development of the students to improve their life skills and make them a good citizen. Cross Cutting issues related to Professional Ethics, Gender, Human Values, Environment and Sustainability are addressed through different courses and activities throughout their graduation programme.

Regular feedback is taken about the curriculum, academic performance, ambiance and canteen etc. The analysis is done and action is taken accordingly.

Teaching-learning and Evaluation

The South Indian Education Society's Graduate School of Technology ensures a smooth and transparent

admission process that follows norms set by the Maharashtra state government for Undergraduate (UG) engineering admissions. The admissions are based on the entrance examination conducted by the state government (MHCET) as well as at the national level (JEE). Being a minority institution, 51% are admitted at the institute level under the minority quota, 29% percent of students are admitted through a centralized admission process by DTE, and the remaining 20% are admitted at the institute level quota on a merit basis.

The college supports students from various categories: financial and academic assistance for weaker and brighter students, and differently-abled students. The teaching-learning process is effectively followed to ensure knowledge and skill development across all cognitive levels. The teaching plan is prepared at the beginning of the semester to ensure the effective integration of active learning strategies and ICT tools. The students are mentored by teachers in all aspects to address academic and non-academic related issues. Mentor-mentee scheme where every teacher is allotted a group of 15-20 students is implemented to address issues at the individual student level.

The well-qualified and experienced teachers are recruited based on the requirement set by AICTE norms. The teachers are encouraged to improve their qualifications and enhance their knowledge by attending various workshops, seminars, and STTPs. The good management policies and academic environment have resulted in a high retention ratio. Regular student feedback on improving the quality of the teaching-learning process is taken twice a semester for timely corrections.

The internal and external assessment is transparent and time-bound. The students are well-informed in advance about their assessment schedule in the academic calendar. The rubrics of various assessments are known to students and the related grievances are handled effectively. The student pass percentage is above 80% and students are satisfied with the teaching-learning process and evaluation.

Research, Innovations and Extension

SIESGST has well defined research policy and environment, which encourages teaching fraternity for research and also promotes various extension activities. The college management encourages its teachers to submit research proposals, and conduct research for which a research committee has been in place to facilitate the research and extension activities. The committee organizes workshops and sensitization programs to create research spirit among teachers and students. Some faculty members at individual level from the various Departments have got research projects sanctioned from university, some of which have been successfully completed and a few in progress. Many teachers in the College have published their research papers in reputed National and international journals with good impact factors, also many have created intellectual property through patents and copy rights.

The institution is also actively involved in extension activities to help society by its services. The college has units of NSS and an ISR (institute social responsibility unit) through which college renders social and community services. Besides organizing blood donation camps, environmental awareness programs and helping in disaster management, the college has adopted a village namely XYZ near Asangaon, district Thane, where under various extension activities are performed for Adivasi students such as construction of school building to computer facilities. Under ISR SIESGST also conducts training programmes such as Tailoring, plumbing, refrigeration and air conditioning maintenance, computer operator etc. for under privileged peoples.

Infrastructure and Learning Resources

At SIESGST, efficient teaching and learning is achieved through traditional classroom teaching, practical training though state of art laboratories. The Institute has adequate infrastructure as per the AICTE norms. SIESGST ensures safety and security by monitoring the campus locality, covered under CCTV surveillance. The infrastructural facilities include Lecture Halls, Tutorial rooms, Drawing Halls, Seminar Halls, Laboratory, Library, TPO Office, First Aid Room, Counseling Centre, Office, Exam Cell, Assessment Rooms, Workshops, Seminar Hall, Auditorium, Photocopy Centre, Canteens, Gymkhana, Open Amphitheatre, Faculty Rooms etc.

SIES GST Library is fully automated, and uses the Library Management software for all library automation activities. The software has various functions of the library including configuration of branches, circulation modules, branch wise membership registration of users, access rights, facility to convert legacy data, online public access catalog (Web OPAC), book reservation, book bank management etc. Library has also the set up for Dspace e-repository and NPTEL video lectures which can be accessed within the campus. Library has a separate portal providing useful information which can be accessed: https://librarygst.wixsite.com/library.

The institute has always given priority for up-gradation of IT facilities. The IT infrastructure of SIES GST meets all requirements and complies with all regulatory stipulations. All PCs in the institute are connected in LAN for internet access. In-addition WI-FI access points are installed at prominent locations, making internet access convenient for students and staff.

Institute follows transparent procedures in allocation of Budget and expenditure in all aspects and also conducts regular Audits for Budget, Library and IT facilities.

Student Support and Progression

Students are the core key strength of SIESGST. SIESGST's primary goal is to foster students' development in a variety of areas, including technical, sports, and cultural ones. The main goal is to uncover students' latent talents to prepare them for handling a variety of challenging situations in the workplace and in their professional lives. Many programme in various domains are arranged by faculties as well as students to explore and develop their talents. The student members play a vital role in various Institute level committees like the WDC, anti-ragging, IQAC, CDC and ISR. Every department has a professional student chapters like IETE, IEEE, CSI, SAT, ISHRAE. Variety types of program for soft skills, language and communication skills, life skills and computing skills are arranged through these students chapters. The students' participation in various administrative bodies has enhanced their managerial and leadership skills and increased their sense of responsibility. SIESGST has Code chef local chapter Arena for competitive programming. Various competitive programming competitions are held to enhance students logical ability. Every year Campus Recruitment Training was conducted by the Training and Placement department in order to prepare for placement in terms of aptitude, GD/PI, technical test, and interview. Sessions on competitive examinations and career counselling are arranged. Eligible students receive government scholarship. SIES Management gives Endowment awards for various categories. Alumni Reconnect event is held to create a network of support for community members on both a personal and professional level. Alumni are actively participating in events such as hands on session, guest lecture, Students Development Programme (SDP's)

Governance, Leadership and Management

The institute has a vision to be a center of excellence in Education and Technology committed towards Socio-Economic advancement of the country. The leadership of SIESGST is through participative management all the

way through a structured organizational system with the involvement of all the Stakeholders. Various stakeholders of the institute are members of different committees constituted by the institution. To achieve the goals, SIESGST has a well-defined perspective plan involving focus areas and the plan of action and also measures to verify their achievements. The institute has a very active student council catering to the varied student community. For the smooth and quick operation, the institute has implemented e-governance in various areas. Human resource planning including recruitment, performance appraisal and professional development programmes are core activities of SIESGST. Regular feedback from all the stakeholders is taken to form an invaluable input to planning. Proper strategies for mobilization of funds and the optimal utilization of resources are actively undertaken in SIESGST by encouraging faculty members and students. During 2005-17, SIESGST was ISO 9001:2008 Quality Management System (QMS) certified. The Institute has an active internal quality assurance cell (IQAC) formed in the year 2017. The institute also has TCS accreditation (since 2006), had NBA accreditation (2012-14) and has an active NBA accreditation from 2021-2024. The Institute has been applying regularly for NIRF since 2019. The Institute is actively involved in conducting workshops/seminars, advisory roles in Institute / departmental bodies and others.

Institutional Values and Best Practices

SIES,GST, is committed to gender justice in its true sense. Hence, sincere and conscientious efforts are taken to conduct various activities which are committed to Gender Sensitization. All such activities were an effort to increased gender sensitization and gender equality among all the stakeholders so that students can flourish to be empathetic, emotionally intelligent, genuinely happy technocrats.

Commitment towards society is taken to a new level by the NSS unit of SIES Graduate School of Technology which believes in the motto, "NOT ME BUT YOU". Many initiatives have been taken like solid Waste Management to achieve a healthy and conducive environment on our campus. We have set separate Dry and Wet waste bins throughout the campus. The compost pit is maintained by the NSS volunteers.

The institute is aware and respectful towards the rich cultural diversity of the Indian society. People of all cultural orientations work in harmony that is safe from abuse, harassment, or unfair criticism. Equal opportunities are provided to the students irrespective of their caste, creed, religion, and region while conducting various events and activities conducted throughout the session.

an elective is offered on Environment studies for all final year students which gives them insight into environment acts, wildlife protection acts etc. Seminars on topics like Right to Information, sexual harassment are conducted periodically.

Celebrating important days and commemorative events is necessary in order to pay tribute to some great people associated with them. We believe that our youth need such role models to emulate and get inspired to strive for excellence. Therefore, each day starts with the National Anthem.

7.2 and 7.3:

The SIESGST follows the innovations, excellence, reliability, responsibility, responsiveness at each of its

activity. The institution functions as per the norms given by the statutory bodies time to time and also accountable for all of its stakeholders.

The institute offers various value-added courses which are in line with the conventional syllabus which includes emerging technologies like Machine learning, Artificial intelligence, Internet of things, blockchain technology etc. Institute also provides different platforms of MOOC such as Swayam, NPTEL etc. In the years gone by, we have seen the increase in number of participants and students are benefitted with the extended hands.

This diversified generation also need a mentor, a guide to counsel them at every stage of career. We at SIESGST, have implemented a mentor – mentee scheme effectively. A faculty mentor is allotted for the group of 20 students who keeps the track of all the mentees which includes their academic growth, attendance, extracurricular activities and participation, hobbies, and extra ordinary skill sets, etc. The professional counsellor has been appointed in the campus to extend the counselling to the students.

We at SIESGST proposes to provide vocational training for youth adults in the age group of 14 from amongst orphanage, kids, school dropouts as its initiative under institute social responsibilities. Few of such youth children have already been identified they will be groomed in all aspects. There is a huge demand for risky labor particularly in the trades of electrical repairs, plumbing, welding, tailoring and others. The youth will be given training in one of the identified trade and then undergo internships for a period of three months or six months. The initiative will be extended in facilitating employment entrepreneurship.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College			
Name	SIES GRADUATE SCHOOL OF TECHNOLOGY		
Address	Sri Chandrasekarendra Saraswathy Vidyapuram, Sector-V, Nerul, Navi Mumbai		
City	Navi Mumbai		
State	Maharashtra		
Pin	400706		
Website	www.siesgst.edu.in		

Contacts for Communication						
Designation	Name	Telephone with STD Code	Mobile	Fax	Email	
Principal(in-charge)	Atul N Kemkar	022-61082401	9819150392	022-2771877 9	principal@siesgst.a c.in	
IQAC / CIQA coordinator	Leena V Ladge	022-61082403	9867801816	022-2771877 9	iqac@siesgst.ac.in	

Status of the Institution	
Institution Status	Private

Type of Institution		
By Gender	Co-education	
By Shift	Regular	

Page 9/99 24-06-2023 01:43:51

Recognized Minority institution			
If it is a recognized minroity institution Yes 202303141400.pdf			
If Yes, Specify minority status			
Religious			
Linguistic	Tamil Linguistic		
Any Other			

Establishment Details

State	University name	Document
Maharashtra	University of Mumbai	<u>View Document</u>
Maharashtra	University of Mumbai	View Document

Details of UGC recognition				
Under Section	Date	View Document		
2f of UGC				
12B of UGC				

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)					
Statutory Regulatory Authority	Recognition/App roval details Inst itution/Departme nt programme	Day,Month and year(dd-mm- yyyy)	Validity in months	Remarks	
AICTE	View Document	02-03-2021	12		
AICTE	View Document	02-03-2021	12		
AICTE	View Document	02-03-2021	12		
AICTE	View Document	02-03-2021	12		

Recognitions		
Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	No	
Is the College recognized for its performance by any other governmental agency?	No	

Location and Area of Campus					
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.	
Main campus area	Sri Chandrasekarendra Saraswathy Vidyapuram, Sector-V, Nerul, Navi Mumbai	Urban	6.12	15113.82	

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Pr ogramme/C ourse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BE,Electroni cs And Telec ommunicatio n Engineering	48	HSC and CET or JEE	English	60	58
UG	BE,Compute r Engineering	48	HSC and CET or JEE	English	120	120
UG	BE,Informati on Technology	48	HSC and CET or JEE	English	60	60
UG	BE,Mechani cal Engineering	48	HSC and CET or JEE	English	60	22
UG	BE,Electroni cs And Computer	48	HSC and CET or JEE	English	60	60

	Science					
UG	BE,Artificial Intelligence And Data Science	48	HSC and CET or JEE	English	60	60
UG	BE,Artificial Intelligence And Machine Learning	48	HSC and CET or JEE	English	60	60
UG	BE,Compute r Science And Engineering Iot And Cyber Security Including Block Chain Technology	48	HSC and CET or JEE	English	60	60
PG	ME,Pg Artificial Intelligence And Data Science	24	GRADUATI ON and GATE	English	18	1
PG	ME,Pg Information Security	24	GRADUATI ON and GATE	English	18	1

Position Details of Faculty & Staff in the College

	Teaching Faculty											
	Profe	Professor				Associate Professor			Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government		1	1	8			1	25		1	ı	69
Recruited	2	3	0	5	1	4	0	5	17	49	0	66
Yet to Recruit				3				20				3
Sanctioned by the Management/Soci ety or Other Authorized Bodies				0				0				0
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit				0			1	0		1		0

	Non-Teaching Staff							
	Male	Female	Others	Total				
Sanctioned by the UGC /University State Government				36				
Recruited	27	9	0	36				
Yet to Recruit				0				
Sanctioned by the Management/Society or Other Authorized Bodies				4				
Recruited	4	0	0	4				
Yet to Recruit				0				

	Technical Staff							
	Male	Female	Others	Total				
Sanctioned by the UGC /University State Government				30				
Recruited	10	1	0	11				
Yet to Recruit				19				
Sanctioned by the Management/Society or Other Authorized Bodies				5				
Recruited	2	3	0	5				
Yet to Recruit				0				

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	2	3	0	1	4	0	5	4	0	19
M.Phil.	0	0	0	0	0	0	0	2	0	2
PG	0	0	0	0	0	0	12	43	0	55
UG	0	0	0	0	0	0	0	0	0	0

	Temporary Teachers									
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	1	0	1
M.Phil.	0	0	0	0	0	0	0	1	0	1
PG	0	0	0	0	0	0	3	8	0	11
UG	0	0	0	0	0	0	0	0	0	0

	Part Time Teachers									
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0
UG	0	0	0	0	0	0	0	0	0	0

Details of Visting/Guest Faculties						
Number of Visiting/Guest Faculty	Male	Female	Others	Total		
engaged with the college?	0	2	0	2		

Provide the Following Details of Students Enrolled in the College During the Current Academic Year

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	359	11	0	0	370
	Female	150	4	0	0	154
	Others	0	0	0	0	0
PG	Male	2	0	0	0	2
	Female	0	0	0	0	0
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academic Years						
Category		Year 1	Year 2	Year 3	Year 4	
SC	Male	9	18	7	4	
	Female	2	2	3	0	
	Others	0	0	0	0	
ST	Male	0	0	0	0	
	Female	0	0	0	0	
	Others	0	0	0	0	
OBC	Male	49	33	24	22	
	Female	15	9	8	3	
	Others	0	0	0	0	
General	Male	306	263	190	172	
	Female	135	124	89	97	
	Others	0	0	0	0	
Others	Male	8	41	21	31	
	Female	2	20	5	9	
	Others	0	0	0	0	
Total	'	526	510	347	338	

Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:

Education Policy lays particular emphasis on the development of the creative potential of everyone. It is based on the principle that education must develop not only cognitive capacities - both the 'foundational capacities 'of literacy and numeracy and 'higherorder' cognitive capacities, such as critical thinking and problem solving – but also social, ethical, and emotional capacities and dispositions. NEP-2020 promotes moving away from the conventional content-based and rote learning practice towards holistic learning. South Indian Education Society's Graduate School of Technology (SIESGST) is affiliated with the University of Mumbai and follows guidelines issued by the University of Mumbai. Following are the activities taken by the institute that shows the preparedness towards the NEP under multi disciplinary skills. The SIES consists of Engineering, Arts Science and commerce college, and Management institute which runs various courses at undergraduate and postgraduate levels affiliated with the university of Mumbai, this provides the base for multidisciplinary/interdisciplinary courses in the various domains of STEM. These institutions could be part of teaching universities in the future as the NEP 2020 implementation progresses. Institute provides electives to the Final year students in both the semester referred to Institute level optional courses in various interdisciplinary domains like environment management, Cyber security, and Laws, Product Lifecycle Management, etc to name a few. The department-level electives also provide interdisciplinary courses in the third and final year of engineering. The final Year elective for the EXTC branch is Digital forensics, Natural Language processing. Students are also offered various Minor degree courses in interdisciplinary domains. Institute also has an active National Service Scheme unit that regularly undertakes socio-cultural activities. During summer and winter vacations Institute offers various value-added courses from the different domains of engineering which support multidisciplinary/interdisciplinary education. Students regularly participate in various competitions at the state and national level, Final year projects which include Hackathons which provide a platform for solving real-world problems which are multidisciplinary/interdisciplinary domains of engineering. The institution has formed a research

mentoring committee with experts from various engineering and relevant sciences disciplines to guide the institution's research activities. Institute proactively working towards implementation of the suggestions given in the NEP-2020 and Mumbai universities.

2. Academic bank of credits (ABC):

SIES Graduate School Of Technology, affiliated to Mumbai University is in the process of implementing the Academic bank of Credits from time to time as per guidelines issued by UoM from the Academic year 22-23. The students in the institute have registered on ABC portal and the information of the same is updated to the University of Mumbai. The institute also has MoU signed with foreign university for academic collaboration which will be of importance with the progress in NEP implementation. Various pedagogical approaches like inquirybased, collaborative and integrative approaches are used by the faculty members during their course delivery. Summative and Formative assessments and assignments are used to evaluate the Students' learning outcomes. Institute is also actively involved in providing students with AICTEs Parakh assessment. Faculty members are also involved in developing study material and Assessment components which are available in the public domain.

3. Skill development:

NEP 2020 aims to develop employable skills among the youth of the country by training them adequately for the skills that are required by the industry. To be an important part of NEP2020 skill development, SIESGST provides an education that includes several courses catering the importance of soft skills, team work, problem solving, decision making, analytical thinking etc. Value based education courses such as universal human values, professional ethics, environmental sciences are also conducted. Also, events commemorating the national and international days of importance, birth, death anniversaries of eminent people are organized to bring inspiration, motivation and camaraderie among students and faculty for a value based career and life. To ensure students develop the skills required in industry, the Institute has the legacy to conduct skills based student development programs in various domains. The latest trends skill based programs conducted for the students include Robotics KInematics using

Python Programming and Automation, Advanced Java Programming, Web and Mobile App Development, Competitive Coding, Embedded System Design, FPGA Design using Verilog, Web Applications in Cybersecurity, Full Stack Development, Network Management and Security etc. The students undergo skill tests after attending such programs and also implement projects based on developed skills. Apart from these students develop managerial/leadership skills, planning and entrepreneur skills and interpersonal skills by participating in extracurricular activities, and organizing events on/off campus. Institute faculties are also undergoing skill based certifications to impart skill based education to the students. Institutes regularly conducts Department Advisory Board (DAB) meetings to get industry expert feedback on latest skills requirements in industry and accordingly plans for the conduction of skill development programs for students. Thus the institute is stepping forward to fulfill the skill based education requirements of NEP2020.

4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):

Objectives and Benefits of Promotion of Indian Languages, Arts, and Culture: Help students develop their creative thinking skills. Reduce stress levels. Improved Academic performance. Problem Solving Decision making Team Building Both Art & Culture are two wonderful ways of preserving or strengthening a strong community's sense of place, forging a personal identity, and showing your creativity. Art & Culture boast multiple opportunities for learning, entertainment, leisure, personal growth, and improving communication with others. As per the guidelines of NEP, the institute already follows different forms of arts, works of literature, customs, traditions, linguistic expressions, artifacts, heritage sites etc. All these things are clearly visible in the various activities which take place at our institute: Literary Festival of Performing Arts is a 3-day long Literary festival organized by The Literary Team of Student Council SIES GST, staging some of the most vibrant voices, poets, lyricists, and musicians to move the audience with joy and let them experience the vibration of echoes of India through this festive celebration. It includes a poetry recitation competition – Alfaaz. The LFPA festival also included various performances like Devi Stotram

(solo dance performance) dedicated to the Goddess and inaugurating the ceremony. It was followed by Puppetry, showcasing the long lost art of puppetry. Fabulous recitation of poems and Music performance on beatboxing which lifted many spirits. Institute also celebrates Indian festivals like Dussehra, Diwali, Pongal, Makar Sankranti where students and teachers participate in big numbers. The institute organizes a grand GARBA NIGHT for students on Dussehra. The institute celebrates TRADITIONAL DAY (RIWAYAT) where the institute gives the privilege to its students to come traditionally dressed. The institute arranges annual Industrial visits to different places in INDIA once a year for the THIRD YEAR Engineering students. Such visits are Industrial as well as sight-seeing. This helps the students benefit in the form of visiting India for tourism, experiencing Indian hospitality, purchasing India's handicrafts and handmade textiles. The Student Council has various Music and Dance clubs. Aaroha is the Music club where there are students who are very good classical singers, instrumentalists etc. We also have a Folk Dance club- AAGMI. The students showcase various folk dances from different states during different occasions. Though the medium of instruction as per guidelines is English, looking at government initiatives and demand by the stakeholder we also use regional language (such as Hindi/Marathi) so that our students will not suffer in understanding and implementation. We also believe in the preservation and promotion of Indian languages as one of the targets of the College in the future. Yoga sessions are conducted for students by trained faculty members. Apart from the above-mentioned activities which are already taking place, the institute will introduce: Sanskrit sessions for students by calling Sanskrit experts from other institutes. Few faculty members are contributing in translating NPTEL courses in regional language (Marathi).

5. Focus on Outcome based education (OBE):

The goal of outcome-based education is to ensure that the curriculum is designed to achieve the specific knowledge or skills that the student should acquire. Graduate attributes (GAs) articulate the generic abilities to be looked for in a graduate of any undergraduate degree program. They form the Program Outcomes (POs) that reflect the skills, knowledge and abilities of graduates regardless of the

field of study. In outcome-based education, a "design down" process is employed which moves from POs to Course Outcomes (COs) and outcomes for individual learning experiences. Each course outcome must be detailed and focused on the specific performance to be expected. The Teacher/Instructor must be able to measure each Course Outcome by using the appropriate verb mentioned in Bloom's taxonomy. Each course outcome must be such that the students must be able to achieve those with a reasonable amount of effort and application of the knowledge gained by them. The course outcomes are mapped to program outcomes. Data is collected from different assessment tools to evaluate the Course outcome: Internal assessment, assignments, projects, lab experiments, etc. The quality of the assessment tools is checked by the course coordinator to ensure CO coverage and the difficulty level of the question paper. The targets of attaining course and program outcomes are set in advance by the course instructor based on the previous year's performance. The CO and PO attainment calculation process starts with CO attainment calculation and the CO attainment values are used for PO calculation. These attainment levels of program outcomes is analysed to find gaps if any at the program level and the appropriate action is planned. This whole process ensures the graduate outcomes are measured and effectively achieved during the four years of engineering education.

6. Distance education/online education:

SIES graduate school of Technology has successfully carried all the activities related to academic and curriculum delivery like various teaching strategies, assessment and examinations through online education mode during the two years of pandemic. The faculty members used online platforms and created the learning resources by recording videos using softwares like Screenomatic, Camtasia, OBS, Loom etc. The Practical sessions were conducted using Virtual labs, simulation tools. G Suite was used for various teaching-learning activities along with Microsoft Teams. All SIES Institutes are using Microsoft 365 accounts for academic and administrative purposes. So the institute is well prepared to implement distance education/online education. Faculties are encouraged to enroll and attended online webinars, workshops, STTP, FDP etc. The Institute is also registered as a

SWAYAM-NPTEL Local Chapter. During the last couple of years, students and faculty of the institute have enrolled and completed various online courses offered by various MOOC platforms. As a part of Institutional strategic plan,the faculty members are in the process of development of various MOOC courses in all four quadrants. This will help students to learn multidisciplinary certification courses through distance education/online mode.

Institutional Initiatives for Electoral Literacy

1. Whether Electoral Literacy Club (ELC) has been set up in the College?	Yes. Established in the year 2023. Electoral Literacy Club The main objective of ELC Club is to engage the students with the electoral system of India. In this club students contribute to the concept of nation building by raising awareness about voting rights and electoral participation. The details are available on the college website with below link. https://siesgst.edu.in/docs/EL.pdf
2. Whether students' co-ordinator and co-ordinating faculty members are appointed by the College and whether the ELCs are functional? Whether the ELCs are representative in character?	Yes Sr. No Year Faculty Coordinator Student Coordinator 1. 2022-23 Prof. Mahesh Biradar Mr. Abhishek Tiwari
3. What innovative programmes and initiatives undertaken by the ELCs? These may include voluntary contribution by the students in electoral processes-participation in voter registration of students and communities where they come from, assisting district election administration in conduct of poll, voter awareness campaigns, promotion of ethical voting, enhancing participation of the under privileged sections of society especially transgender, commercial sex workers, disabled persons, senior citizens, etc.	1. Voter awareness guest lectures conducted for inhouse students. 2. Voter Registration camp for the eligible students is conducted on 31st March 2023. 3. Voter Awareness Camp for general public including senior citizens & disabled persons is proposed at Nerul Station in April 2023.
4. Any socially relevant projects/initiatives taken by College in electoral related issues especially research projects, surveys, awareness drives, creating content, publications highlighting their contribution to advancing democratic values and participation in electoral processes, etc.	SIES Graduate School of Technology is proposed to create online video Series content on voter awareness and registration process.
5. Extent of students above 18 years who are yet to be enrolled as voters in the electoral roll and efforts by	Voter registration drive is conducted at Institute for above 18 yrs of age students

ELCs as well as efforts by the College to	
institutionalize mechanisms to register eligible	
students as voters.	

Extended Profile

1 Students

1.1

Number of students year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
1852	1723	1683	1799	1753

File Description	Document
Upload Supporting Document	<u>View Document</u>
Institutional data in prescribed format	View Document

2 Teachers

2.1

Number of teaching staff / full time teachers during the last five years (Without repeat count):

Response: 141

1	File Description	Document
	Upload Supporting Document	<u>View Document</u>
	Institutional data in prescribed format	View Document

2.2

Number of teaching staff / full time teachers year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
77	80	78	97	98

3 Institution

3.1

Expenditure excluding salary component year wise during the last five years (INR in lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
662.74	537.99	805.78	872.97	622.25

File Description	Document
Upload Supporting Document	<u>View Document</u>

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

1.1.1 The Institution ensures effective curriculum planning and delivery through a well-planned and documented process including Academic calendar and conduct of continuous internal Assessment

Response:

The South Indian Education Society's Graduate School of Technology affiliated with the University of Mumbai (UoM) takes adequate and timely measures to deliver an effective curriculum. A well-planned and documented process is in place and followed throughout the semester.

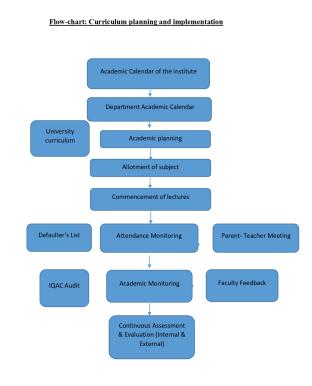
- As per the academic schedule given by the University, a well-structured academic calendar is proposed by the principal of the institute and is approved by the academic council in the review meeting. The academic calendar provides the date of commencement of the academic session, the schedule of internal assessments schedule, Parent Teacher meetings, mid-term and final submissions, practical/oral exams, preparation holidays, end-semester examinations, etc.
- The Institute follows the syllabus prescribed by the UoM. Based on the syllabus and the student strength, the department heads calculate the workload every semester. Depending on the expertise, experience opted choices, and the actual requirement in the department the subject allocation is done. The timetable committee prepares the timetables (class, laboratory, and individual faculty) for all programs every semester.
- Every faculty member, in coordination with the course coordinator, finalizes course outcomes to achieve program outcomes and program-specific outcomes, makes a session plan for efficient content delivery of the allotted subject, and prepares teaching material, laboratory manual, assignments, etc.
- In addition to traditional classroom teaching, faculty members also use various ICT tools and active learning strategies. The process is also supplemented with an online learning management system to make it more effective.
- A mentor-mentee scheme is also implemented to guide the students so that they strengthen their academics as well as co-curricular and extracurricular skills.
- Each faculty maintains a handbook for all the records related to the session plan, list of experiments and assignments, attendance for theory/tutorials/practical, continuous evaluation of the student, term-work marks calculation, etc.
- Each faculty member maintains a course file consisting of a syllabus, course notes, university question paper, course outcomes, and mapping of course outcomes with program outcomes and program-specific outcomes.

24-06-2023 01:43:52

- The gap analysis is done by the course coordinator along with in charge faculty which could be a prerequisite gap, course gap, or program gap. All the above gaps are discussed with the departmental advisory board members to conduct various activities like guest lectures, seminars, workshops, value-added courses, industrial visits, projects, and providing students with internships.
- Syllabus coverage is reviewed twice in a semester and preventive action is taken if there is any deviation to make sure 100% syllabus is covered.
- The academic performance of students is continuously evaluated in theory and practical sessions by conducting class tests, and internal tests during the semester.
- File submissions and other term-end activities are carried out as per the academic schedule and university guidelines.

All notifications are issued to the students through their official email IDs created using Microsoft
Teams for education belonging to sies.edu.in the domain. Feedback from students is obtained for
faculty, curriculum, and infrastructure. Based on the feedback, the Principal and the Managing
council of the SIES take the necessary action.

Page 27/99 24-06-2023 01:43:54



File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

1.2 Academic Flexibility

1.2.1 Number of Certificate/Value added courses offered and online courses of MOOCs, SWAYAM, NPTEL etc. (where the students of the institution have enrolled and successfully completed during the last five years)

Response: 307

File Description	Document
List of students and the attendance sheet for the above mentioned programs	View Document
Institutional programme brochure/notice for Certificate/Value added programs with course modules and outcomes	View Document
Institutional data in the prescribed format	View Document
Evidence of course completion, like course completion certificate etc. Apart from the above:	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

Other Upload Files	
1	<u>View Document</u>

1.2.2 Percentage of students enrolled in Certificate/Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

Response: 20.05

1.2.2.1 Number of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
316	487	603	188	172

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

1.3 Curriculum Enrichment

1.3.1 Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability in transacting the Curriculum

Response:

The Institute gives immense importance to Professional Ethics, Gender, Human Values,

Page 29/99 24-06-2023 01:43:58

Environment, and Sustainability as these are important for the development of individual professionals and society. To strengthen and to imbibe the above issues, the Institute has initiated various supporting activities. A comprehensive explanation pertaining to the same is as follows.

Professional Ethics - University curriculum includes courses such as Professional Communication, Business Communication, Cyber security and laws, project management, etc. in order to address the issues pertaining to professional ethics. To spread awareness about the cyber threats, CSI, the student chapter, organized the session on "Basics of Cyber Security". Mock parliament was conducted on 'India's data protection policies' to educate the students about professional ethics. A session was conducted on 'Time Management' which highlighted students on effective planning techniques to achieve success in all endeavors. The students are encouraged to apply and implement original technical ideas and to practice the professional work ethics by avoiding plagiarism for their project report using Urkund- plagiarism software.

Gender Sensitization-

Institute is committed to gender equity in the campus and provides facilities for the same. Institute conducts various seminars and events/activities which are committed to gender equity. Main focus of these events is gender sensitization. The Institution has established Internal Complaint Committee (ICC), Women Development Cell (WDC) and National Service Scheme (NSS) Cell to identify, address and conduct various programs on such issues.

Human Values - Institute has conducted various activities to impart human values to graduating students. The Institute with the support of the NSS unit organizes blood donation drives, cloth donations, and donations in case of natural calamities. The student induction program is mandatory for newly admitted students with the focus to inculcate human values in students and make them aware of utilizing engineering knowledge for societal benefit .The induction program includes Sessions on Yoga, Universal Human Values(UHV), Gender equality, Disaster Management, First aid workshops, English proficiency test and Some fun games.

Environment and Sustainability - As per the guideline of the University Grant Commission (UGC), the course of Environment Studies is made mandatory for all undergraduate programs. Disaster Management, Environment Management, and Product Lifecycle management are institute level electives for B.E. The objective of these courses is to educate students to preserve the quality of the environment. The courses explain the role of technological cement to overcome environmental problems; and aims to sensitize the youth about the various environmental concerns and importance of sustainability. With this technical knowledge, one should be able to protect themselves in adverse conditions. So, a workshop on Disaster Management is conducted to introduce several ways of protecting ourselves to avoid fatal injuries. Institute conducts the extension activities associated with environment and sustainability under the banner of NSS.

File Description	Document	
Upload Additional information	View Document	
Provide Link for Additional information	<u>View Document</u>	

1.3.2 Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year)

Response: 96.98

1.3.2.1 Number of students undertaking project work/field work / internships

Response: 1796

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

1.4 Feedback System

1.4.1 Institution obtains feedback on the academic performance and ambience of the institution from various stakeholders, such as Students, Teachers, Employers, Alumni etc. and action taken report on the feedback is made available on institutional website

Response: A. Feedback collected, analysed, action taken& communicated to the relevant bodies and feedback hosted on the institutional website

File Description	Document
Feedback analysis report submitted to appropriate bodies	View Document
At least 4 filled-in feedback form from different stake holders like Students, Teachers, Employers, Alumni etc.	View Document
Action taken report on the feedback analysis	View Document
Link of institution's website where comprehensive feedback, its analytics and action taken report are hosted	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Enrolment percentage

Response: 84.95

2.1.1.1 Number of seats filled year wise during last five years (Only first year admissions to be considered)

2021-22	2020-21	2019-20	2018-19	2017-18
486	328	315	359	352

2.1.1.2 Number of sanctioned seats year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
576	420	390	390	390

File Description	Document
Institutional data in the prescribed format	<u>View Document</u>
Final admission list as published by the HEI and endorsed by the competent authority	View Document
Document related to sanction of intake from affiliating University/ Government/statutory body for first year's students only.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.1.2 Percentage of seats filled against reserved categories (SC, ST, OBC etc.) as per applicable reservation policy for the first year admission during the last five years

Response: 0

2.1.2.1 Number of actual students admitted from the reserved categories year wise during last five years (Exclusive of supernumerary seats)

2021-22	2020-21	2019-20	2018-19	2017-18
0	0	0	0	0

2.1.2.2 Number of seats earmarked for reserved category as per GOI/ State Govt rule year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
0	0	0	0	0

File Description	Document
Institutional data in the prescribed format	<u>View Document</u>
Final admission list indicating the category as published by the HEI and endorsed by the competent authority.	View Document
Copy of communication issued by state govt. or Central Government indicating the reserved categories(SC,ST,OBC,Divyangjan,etc.) to be considered as per the state rule (Translated copy in English to be provided as applicable)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.2 Student Teacher Ratio

2.2.1 Student – Full time Teacher Ratio (Data for the latest completed academic year)

Response: 24.05

2.3 Teaching- Learning Process

2.3.1 Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences and teachers use ICT- enabled tools including online resources for effective teaching and learning process

Response:

We at SIESGST, conduct various student-centric activities to improve the quality of teaching-learning. The activities that are conducted under experiential learning, participative learning, and problem-solving methodologies are:

Experiential learning:

Experiential learning is the process of learning through experience by doing and reflecting. We encourage students to practice various technical and non-technical skills through project development, student seminars, student development programs, workshops, internships and industrial visits. These activities are planned, conducted and monitored regularly by the faculty to ensure that students are practicing the required skills, reflecting on their experiences and improving their skills. For example, an industrial visit was organized by the Electronics and Telecommunication Department for Third-year students as a part of the Radar Engineering subject at Sameer, IIT Mumbai. The panel discussion was used in the subject Entrepreneurship & E-Business (Sem V, EXTC) where students were made aware of all the different phases in the entrepreneurship challenges faced.

Participative learning:

We always strive to enhance the learning experience of learners in class through various interactive and participatory approaches apart from traditional teaching. These approaches aid in creating a feeling of responsibility in learners and makes learning a process of construction of knowledge. Various approaches used are- Think-Pair-Share, Flipped Classroom, Peer Instruction, Cross word puzzle, Group Discussion, Technical Paper Writing etc. For example, Think-Pair-Share was conducted for the subjects Artificial Intelligence (CE, Sem VII), Information Security (IT, BE Sem VIII). The Flipped classroom was conducted in subject Digital Logic Computer Architecture (Sem III, CE), DCC (EXTC, Sem V), PLM (ME, Sem VII), Management Information System (ILO, Sem VII) where students were asked to prepare from the shared eBooks and ppt, and the assessment was conducted in the classroom. Peer instruction was conducted in the subject Wireless Network (IT, Sem VI), RSA (EXTC, Sem V).

Problem-based learning:

Students are given exposure to various problem-solving methodologies by solving real-world problems, design problems, mindmaps and case studies. For example, the problems posed are open problems like "design a system to check the quality of air". Such problems have unstated goals and constraints and have multiple correct solutions. Such problem-solving activity enables students to not only apply concepts learned but also aid in developing skills related to formulate problems and subproblems, generate alternative solutions, identify constraints and analyse and select solutions. Similarly, case studies were presented in the subjects Satellite Communications (EXTC, Sem VIII), Distributed Computing (CE, Sem VIII), EAA(EXTC, Sem VI), and IOE(IT, Sem VIII). In the course Data Structures (ECS, Sem III) the students were given with an open problem and guided by the teacher to solve it systematically. Problem-solving activity was conducted in the subject Image Processing (IT, Sem V).

ICT tools- Various ICT tools are used by faculty like MSTeams, Polling tools (Mentimeter, Kahoot, etc), Virtual labs, concept map, simulations, Padlet etc.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

2.4 Teacher Profile and Quality

2.4.1 Percentage of full-time teachers against sanctioned posts during the last five years

Response: 91.1

2.4.1.1 Number of sanctioned posts year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
99	84	78	105	106

File Description	Document
Sanction letters indicating number of posts sanctioned by the competent authority (including Management sanctioned posts)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.4.2 Percentage of full time teachers with NET/SET/SLET/ Ph. D./D.Sc. / D.Litt./L.L.D. during the last five years (consider only highest degree for count)

Response: 22.09

2.4.2.1 Number of full time teachers with NET/SET/SLET/Ph. D./ D.Sc. / D.Litt./L.L.D year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
20	19	20	20	16

File Description	Document
List of faculties having Ph. D. / D.Sc. / D.Litt./ L.L.D along with particulars of degree awarding university, subject and the year of award per academic year.	View Document
Institution data in the prescribed format	<u>View Document</u>
Copies of Ph.D./D.Sc / D.Litt./ L.L.D awareded by UGC recognized universities	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.5 Evaluation Process and Reforms

2.5.1 Mechanism of internal/ external assessment is transparent and the grievance redressal system is time- bound and efficient

Response:

Mechanism of maintaining transparency in internal/external assessments:

Internal assessment comprises of internal tests which are two separate heads of passing as per the syllabus scheme prescribed by the University of Mumbai. The internal assessments are planned as per the University academic calendar and informed to students and faculty in the start of the semester.

Two internal tests are conducted for 20 marks and an average of two tests is considered as 20% of the total weightage in each theory subject along with an end semester examination of 80 marks. The first test is conducted within 45 days of college reopening in such a way that at least 40% syllabus should have been covered in the class and the second test is scheduled after the next 40% is covered.

The internal assessments are routinely monitored by Internal Quality Committees to ensure that they meet the learning outcomes outlined in the course syllabus and the questions at various Blooms taxonomy levels are covered. The solution of the test along with the question-wise marking scheme is prepared and shared with students after the exam to maintain transparency and uniformity in the assessment of the internal tests.

The external paper assessment for second and third year is done by the internal faculty and is moderated by external faculty. For first and final year, the external assessment is taken care by the university.



Mechanism of grievance redressal system:

In SIESGST, we follow a transparent, time-bound, and efficient method in terms of dealing with internal examination-related grievances. Various internal examinations are being performed throughout the semester. Some of them are – unit-test1, unit-test2, assignments, lab continuous evaluation, project evaluations, etc.

Internal Assessments (Test 1 and Test 2)

The faculty evaluates the papers within a week of the conduction of the test. The evaluated answer sheets are shown to students in class and faculty undertakes individual grievances with a student on the paper if required by the student.

Lab experiments-

Page 37/99 24-06-2023 01:43:59

The lab submissions are taken in LMS, e.g. Teams, Google classroom, and the marks given by the facult
are available to the students immediately, thus providing a transparent way for students to reflect on their
strengths and areas of improvement.

Project evaluation-

In a semester two internal evaluations of the project are conducted in front of the panel consisting of group of faculties.

Assignments-

Faculty evaluates assignments based on the rubric which is also shared with the students.

External Assessments:

If students have grievances related to evaluation of university answer paper, then students can apply for photocopy or revaluation if they are not satisfied with their results. In case of former, students will get photocopy of their answer sheet where they can go through the sheet and if they wish they can further go with revaluation of their paper. The fresh assessment of their answer sheet will be done by external faculty. The results of re-evaluation will be announced as per the university norms. The entire process is maintained transparent and time bound by the university.



2.6 Student Performance and Learning Outcomes

2.6.1 Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the

Page 39/99 24-06-2023 01:43:59

institution are stated and displayed on website

Response:

Course Outcomes: The Course Outcomes (COs) represent the expected knowledge and skills a student acquires at the end of a course. The University of Mumbai syllabus the course outcomes are specified for each course. Faculty in each department refers to the university-prescribed course outcomes and modifies if necessary to improve the efficiency and effectiveness of the course content delivery. The COs are finalized after discussing with the course coordinator who is an expert in the given domain and has more than three years of experience in teaching the course. The subject teacher maintains a teaching plan in which course outcomes are written, which are measurable, precise, and mapped across all cognitive levels of Bloom's taxonomy. This process is done at the start of the semester and uploaded on the college website. The introductory lecture for all courses is meant for communicating the COs to the students.

Program Outcomes and Program Specific Outcomes: Institute follows the Program Outcomes (POs) and Program Specific Outcomes (PSOs) to improve the quality of teaching and learning. Since 2015, the National Board of Accreditation has defined 12 POs thus maintaining uniformity across all branches of the Undergraduate Program in Engineering. The Program Outcomes (POs) which are based on Graduate attributes are disseminated amongst all stakeholders through the following ways:

- 1. Notice boards- PO, and PSOs are prominently displayed on Department notice boards, laboratories, and classrooms.
- 2. Brochures- In the college brochure, the POs, and PSOs are mentioned.
- 3. Institute website- On each department web page, POs, PSOs, and COs are mentioned.
- 4. Workshops, seminars, and webinars have been conducted to educate the teachers about outcome-based education and its implementation.
- 5. Faculty Handbook: The POs, PSOs, and COs are maintained in every faculty handbook.
- 6. Course File: Every course in-charge creates a course file and maintains the Internal Evaluation which contains information about the weightage assigned to each CO and assessment methods and mappings between each CO & PO-PSO.
- 7. Laboratory manuals include, POs, PSO and COs in the first few pages for respective courses.
- 8. Parents-Teachers Meet- During Parents-Teachers Meet which is conducted every semester the HOD presentation includes the POs, and PSOs, to educate parents about the same.
- 9. Department Advisory Board meeting- In this meeting, all the stakeholders are involved (alumni, parents, students) in which the POs, PSOs, and their attainment levels are discussed to identify the gaps and the action taken.

Program Educational Objectives (PEOs): PEOs have been defined and stated after much deliberation and involvement of stakeholders. This has been done for all undergraduate programs being offered at the institute. They are also disseminated amongst all stakeholders and are prominently displayed on Department notice boards, laboratories, classrooms, college brochures, and also the institute website along with the POs. In our institution, every faculty member understands the concept of Outcome-based education and diligently tries to ensure that outcome attainments are met.

File Description	Document		
Upload Additional information	View Document		
Provide Link for Additional information	View Document		

2.6.2 Attainment of POs and COs are evaluated. Explain with evidence in a maximum of 500 words

Response:

We follo	w a system	atic proc	ess of	f measur	ing attainm	ent leve	ls of pro	ogramme of	utcomes (PO)	, pro	ogram-
specific	outcomes	(PSO),	and	course	outcomes	(COs)	which	includes:	Calculation	of	direct
attainmer	nt, indirect	attainmer	nt and	Final att	tainment lev	el is sur	nmarize	d in the flo	w-chart (figu	re 1)	•

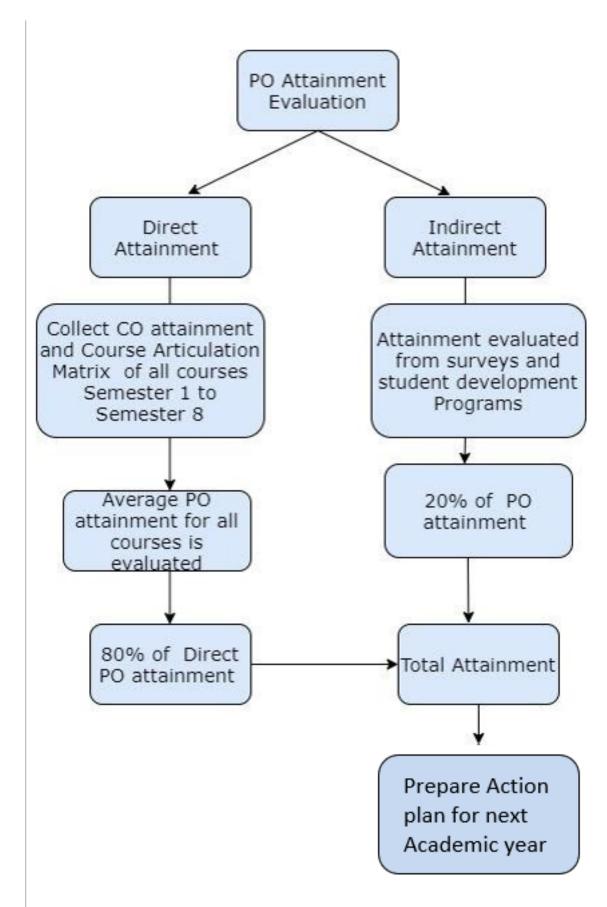


Figure 1. Overall attainment calculation

Direct Attainment

The steps of direct attainment is shown below-

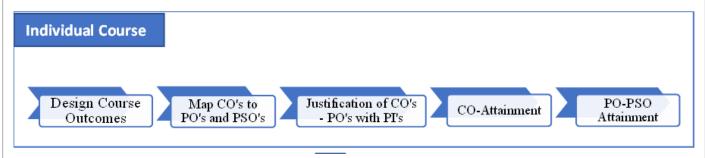


Figure 2- Steps for direct attainment

Direct attainment follows the steps given in figure 3.

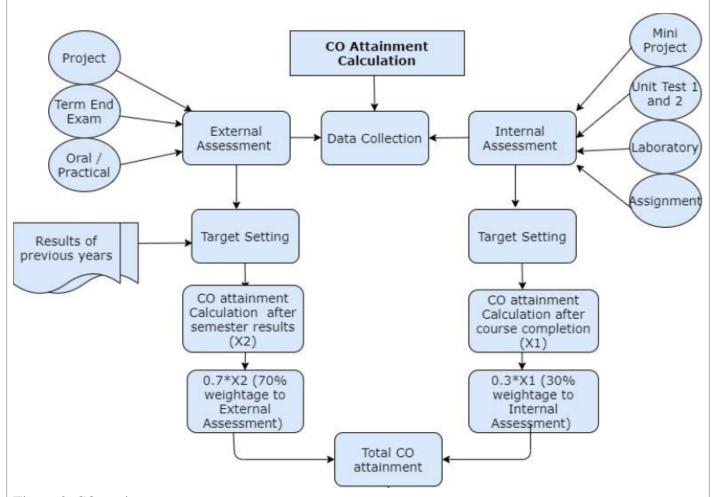


Figure 3. CO attainment process

1. Design Course outcomes- Course outcomes are learning goals that a student is expected to learn at the end of the course. The subject teacher maintains a teaching plan in which around six CO are written, which are measurable, precise, and mapped across all cognitive levels of Bloom's taxonomy.

COs are continuously assessed during the semester using various assessment techniques like unit tests, assignments, class tests, lab assignments, lab experiments, project evaluations, etc. The assessment questions given in tests are mapped to COs and the student scores of these test questions are used to calculate the attainment level of the COs.

2. Map COs to Program Outcomes(POs)- PO/PSOs are skills that a student should acquire at the end of four years of engineering studies. These skills are acquired through various courses and activities taken in the department.

Each CO in a given course is mapped to PO/PSOs using CO-PO matrix as shown in table 1.

Table 1. Mapping of PO to CO using correlation levels 1 (low), 2(medium), or 3(high).

	PO1	PO2	PO3	PO4	PO5	PO6	PO12
C202.1	3						
C202.1 C202.2		3		1			
C203.3	2						
C203.n							

3. Attainment of Course Outcomes- To calculate attainment level, targets are set based on the average of the previous year's results.

The attainment level of each CO is average of attainment levels mapped and assessed using various tests.

4. CO-PO attainment- Attainment level of each CO is used to calculate attainment level of its corresponding mapped PO/PSO using CO-PO attainment level table as shown in Table 2.

Table 2. CO-PO attainment level

	PO1	PO2	PO3	PO4	PO5	PO6	PO12
C202.1	2						
C202.1 C202.2		3		1			
C203.3	3						
C203.n							

	Average	3	3	1		
l	attainment					
	evel					

Indirect attainment:

Indirect Attainment Indirect attainment is obtained by course exit survey taken at the end of each course and program exit survey taken at the end of the program.

Final attainment:

Finally, average attainment of all the courses from the first year to the final year department-wise is maintained in a consolidated table. The final attainment is given 80% weightage for Direct Attainment and 20% weightage for In-direct Attainment

The consolidated table is shown in table 3.

Table 3. Consolidate PO attainment level.

PO1	PO2	PO3	PO4	PO5	PO6	PO12
2		3				
	3		1			
3				2		
	PO1 2 3	PO1 PO2 2 3 3 3	PO1 PO2 PO3 2 3 3 3	PO1 PO2 PO3 PO4 2 3 1 3	PO1 PO2 PO3 PO4 PO5 2 3 1 3 2	PO1 PO2 PO3 PO4 PO5 PO6 2 3 1 2 3 2 2 3 3 3 3 4 4 4 4 4 4 4 4 4 4 4 4

Direct	3	3	3	1	2	2	3
attainment							
(80%)							
In-Direct	3	3	2	3	3	3	3
Attainment							
(20%)							
Average	3	3	3	2	3	3	3

:

File Description	Document		
Upload Additional information	<u>View Document</u>		
Provide Link for Additional information	View Document		

2.6.3 Pass percentage of Students during last five years (excluding backlog students)

Page 46/99 24-06-2023 01:44:00

Response: 97.43

2.6.3.1 Number of final year students who passed the university examination year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
463	474	450	445	443

2.6.3.2 Number of final year students who appeared for the university examination year-wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
471	474	451	479	460

File Description	Document
Institutional data in the prescribed format	View Document
Certified report from Controller Examination of the affiliating university indicating pass percentage of students of the final year (final semester) eligible for the degree programwise / year-wise.	View Document
Annual report of controller of Examinations(COE) highlighting the pass percentage of final year students	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response: 3.34

2		
File Description	Document	
Upload database of all students on roll as per data template	View Document	

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

3.1.1 Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)

Response: 13.1

3.1.1.1 Total Grants from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
0	3.92	2.3	4.5	2.38

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

3.2 Innovation Ecosystem

3.2.1 Institution has created an ecosystem for innovations, Indian Knowledge System (IKS), including awareness about IPR, establishment of IPR cell, Incubation centre and other initiatives for the creation and transfer of knowledge/technology and the outcomes of the same are evident

Response:

SIES GST strongly believes in supporting innovations for its stakeholders viz faculty, research scholars, staff and students. In its endeavor to create a holistic approach to address the need for nurturing ideas that could contribute to the betterment of society, an enabling ecosystem is established. The innovation and entrepreneurship ecosystem provides a one stop solution to innovators and entrepreneurs with an advantage of all facilities being available in a single campus.

The Centre for Innovation Incubation & Entrepreneurship Development (CIIED) has been set up at SIES GST with an aim to cater to inclusive development of the startup ecosystem. The activities are classified into three major thrust areas namely Entrepreneurship Development, Product Development and Startup facilitation.

In the first phase, the CIIED has undertaken several initiatives to connect the students, professionals, entrepreneurs and with communities who work for promotion of startups and budding entrepreneurs.

To further facilitate Entrepreneurship related activities, the Institute Innovation Council (I2C) has been set up at SIES GST (03/12/2018) as per MHRD Guidelines.

Objectives of Institute Innovation Council:

The Ministry of Human Resource Development, Govt. of India has established an 'Innovation cell' with a purpose of systematically fostering the culture of Innovation in all Higher Education Institutions (HEIs) across the country. MHRD's Innovation Cell (MIC) is undertaking multiple major initiatives like formation of Institution's Innovation Council (IIC) in more than 1000 Higher Educational Institutions, Smart India Hackathon (SIH) 2019, currently implementing programs such as Atal Ranking of Institutions on Innovation Achievements (ARIIA).

Major focus of IIC

- To create a vibrant local innovation ecosystem.
- Start-up supporting Mechanism in HEIs.
- Prepare institute for Atal Ranking of Institutions on Innovation Achievements Framework.
- Establish a Function Ecosystem for Scouting Ideas and Pre-incubation of Ideas.
- Develop better Cognitive Ability for Technology Students.

Innovation & creativity cell: The innovation and creativity cell of SIES GST is active to enhance knowledge, skills, personality & productivity of students. Primary purpose of this cell is to nurture the innovative and creative minds of students

These activities train the students to participate in various competitions like Avishkar, Smart India Hackathon, Ideation, etc.

Intellectual Property Rights (IPR) Cell: The main objective of the IPR Cell is to create awareness about IPR, conduct workshops, seminars and impart training course on IPR, disseminate knowledge on patents, and its registration aspects, etc.IPR cell also motivate & trains faculty to submit research proposals for obtaining funds from various government and nongovernment organization. As a result, DST, AICTE funded projects have been sanctioned to our college.

The entrepreneurship cell: It organizes events to instill the culture of entrepreneurship among faculty and students. The entrepreneurship cells work closely with the Incubators and Innovation Center for providing required guidance on innovations and start up formation. This motivates many students and faculty to create their own start-ups. These start-ups are incubated at the state -of- the- art incubation facilities.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

3.2.2 Number of workshops/seminars/conferences including on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship conducted during the last five years

Response: 71

3.2.2.1 Total number of workshops/seminars/conferences including programs conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
19	17	15	13	7

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	<u>View Document</u>

3.3 Research Publications and Awards

3.3.1 Number of research papers published per teacher in the Journals notified on UGC care list during the last five years

Response: 0.23

3.3.1.1 Number of research papers in the Journals notified on UGC CARE list year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
5	9	8	5	5

File Description	Document
Link to the uploaded papers, the first page/full paper(with author and affiliation details)on the institutional website	View Document
Link to re-directing to journal source-cite website in case of digital journals	View Document
Links to the papers published in journals listed in UGC CARE list or	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

Page 50/99 24-06-2023 01:44:00

3.3.2 Number of books and chapters in edited volumes/books published and papers published in national/international conference proceedings per teacher during last five years

Response: 1.01

3.3.2.1 Total number of books and chapters in edited volumes/books published and papers in national/international conference proceedings year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
44	38	25	21	15

File Description	Document
List of chapter/book along with the links redirecting to the source website	View Document
Institutional data in the prescribed format	View Document
Copy of the Cover page, content page and first page of the publication indicating ISBN number and year of publication for books/chapters	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.4 Extension Activities

3.4.1 Outcomes of Extension activities in the neighborhood community in terms of impact and sensitizing the students to social issues for their holistic development during the last five years.

Response:

SIES GST practices outcome-based education while preparing the curriculum, by considering some of the program outcomes such as societal consciousness, environment and sustainability, to be important to the core engineering discipline as well as to the holistic development of the student. The co-curricular activities are planned so that the students have ample opportunity to expose to the societal issues to extend their domain knowledge and practical skills on real time basis.

1. Social Welfare:

National Service Scheme (NSS) Unit of SIES GST, involves students in resolving socially significant issues. The NSS Unit attempted to collect donations for the Kushtarog Nivaran Samiti during the flood emergency. The NSS actively working towards a cleaner environment through a plastic collection campaign, education of the underprivileged, manure creation for trees, organising a clothing and food donation drive.

Also has important responsibilities in organising tree plantations, Swachh Bharat initiatives, and blood donation camps.

NSS unit organizes several street plays such as dignity of labour, societal pressures, favouritism, also annual Blood Donation, Swachh Bharat and tree plantation. Compost pits that recycles campus wet and dry waste on-site was designed and implemented by NSS unit, which has reduced the wet waste outgo of our campus to zero.

The NSS unit also contributes to the Institute's Social Responsibility (ISR) by schooling destitute children. It organized a donation drive to aid the Kerala flood victims from 18 to 24 August 2018, a flood relief drive for helping the victims of Kolhapur and Sangli floods. which was a huge success due to generous donations from both the faculties and the students.

2. Environment Consciousness:

The Student Council, when the NSS unit partnered up with Bisleri International Pvt. Ltd. in their CSR initiative to spread awareness about the generation and safe management of plastic wastes. Check-dam, underground canals and soak pits were built during the 7-day Residential camp.

3. Celebration of Important Days:

The Student Council, along with NSS, celebrates Independence Day, Republic Day, Lal Bahadur Shashtri Day, and Gandhi Jayanti every year by performing skits and singing songs to keep nationalism alive in every student. Also celebrates Marathi Bhasha Diwas, International Yoga Day are also organized with zeal.

4. Gender Sensitization:

The Student Council, in collaboration with Women Development Cell (WDC), coordinates many projects that have an essential social bearing, also celebrating Women's Day, Teacher's Day, campaigns against the harassment of women, literacy drives, arranging sessions by experts on gender sensitization and legal rights of women.

5. Wellbeing Sessions:

Handholding sessions on topics time management, nourishment and diet planning, hypertension, physical and mental health maintenance were arranged. Since the advent of Covid-19 pandemic, the volunteers have taken an active part in spreading awareness on various issues like: Mental health, Aarogya setu app and Mask making. Volunteers prepared masks at their homes in huge volume and distributed to common people.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

3.4.2 Awards and recognitions received for extension activities from government / government recognised bodies

Response:

SIES Graduate School of Technology practices outcome-based education, such as societal consciousness, environment and sustainability, individual and team work to be important to the core engineering discipline and to the holistic development of the student as a complete professional. Several government-recognized agencies awarded the institute for their consistent efforts. The institution got 38 awards in the form of Appreciation certificates since 2017 to 2022.

The NSS unit of SIES GST organises the Blood Donation Camp every year because it recognises the critical need of blood donation. The institute was given appreciation certificates for its blood donation programme from a number of famous hospitals, including L.T.M.G. Hospital, Sion, Mumbai-22, Nair Hospital, and J.J.Hospital, Mumbai, between the years of 2017 and 2022.

Institute got appreciation certificate by Kushtarog Nivaran Samiti, Shantivan Ashram, Panvel for donation drive for flood relief in 2021–2022. Nidhi Charitable Trust, which supports the pan-India initiative "Mission Million Books," gave the institute a certificate for its book donation drive.

Clean and green is the perfect dream. Let us go green to get our planet clean.By raising awareness of cleanliness, the Institute organised a Mega Collection Drive for the Swachh Bharat Mission in 2021–2022 and was awarded a certificate of appreciation from the NMMC, TMC, and Samarth Bharat Vyaspeeth (SBV), Mumbai.

The "Bottle for Change" programme was conducted to collect plastic waste in order to spread awareness of environmental issues and emphasise the significance of using zero plastic; for this initiative, the institute received an appreciation certificate from Bisleri International Pvt.Ltd. in 2018. The institute gained accolades for Mumbai Beach Warriors Cleanup Program from NGO Khushiyan Foundation in 2019. The Warrior Foundation honored it for the collecting of E-Waste with a certificate of recognition in 2017.

SIES GST is deeply committed to promoting social consciousness and has organised several campaigns to aid the less fortunate. Nashabandi Mandal Maharashtra State granted the institute a certificate in 2017 for the campaign SAY NO TO DRUGS. Similarly, in 2019 it received a certificate of appreciation for raising funds for the Goong NGO's flood rescue operations in Kolhapur and Sangli.

Institute was rewarded for The drive Beti Bachao Beti Padhao Marathon from Raigad Athletics Association in 2019. For the construction of two dams and a drainage system in Warap Village during the NSS Camp in 2019, the Gramshevak of Warap Village Ta.Pen recognised the institution. Samarpit Bahuuddeshiya Seva Bhavi Sansta, Latur, Maharashtra rewarded it for creating 2000 and Lions Hospital, Navi Mumbai, Maharashtra, honoured it for making 25000 face masks.

Agastya International Foundation honored the institute in the Anveshana-Science and Engineering Competition in 2018. Sandeep Foundation rewarded it for attending the IEEE Bombay Section Congress the same year. Samarpit Bahuuddeshiya Seva Bhavi Sansta, Latur, Maharashtra rewarded it for creating 2000 and Lions Hospital, Navi Mumbai, Maharashtra, honoured it for making 25000 face masks.

SIES family has adopted a school in adivasi area near Shahapur Maharashtra for redevelopment of school

Page 53/99 24-06-2023 01:44:00

building, computer centre and digitization.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

3.4.3 Number of extension and outreach programs conducted by the institution through organized forums including NSS/NCC with involvement of community during the last five years.

Response: 65

3.4.3.1 Number of extension and outreach Programs conducted in collaboration with industry, community, and Non- Government Organizations through NSS/ NCC etc., year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
12	12	15	15	11

File Description	Document
Photographs and any other supporting document of relevance should have proper captions and dates.	View Document
Institutional data in the prescribed format	View Document
Detailed report for each extension and outreach program to be made available, with specific mention of number of students participated and the details of the collaborating agency	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.5 Collaboration

3.5.1 Number of functional MoUs/linkages with institutions/industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the last five years.

Response: 34

File Description	Document
Summary of the functional MoUs/linkage/collaboration indicating start date, end date, nature of collaboration etc.	View Document
List of year wise activities and exchange should be provided	View Document
List and Copies of documents indicating the functional MoUs/linkage/collaborations activitywise and year-wise	View Document
Institutional data in the prescribed format	<u>View Document</u>
Provide Links for any other relevant document to support the claim (if any)	View Document

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

- 4.1.1 The Institution has adequate infrastructure and other facilities for,
 - teaching learning, viz., classrooms, laboratories, computing equipment etc
 - ICT enabled facilities such as smart class, LMS etc.

Facilities for Cultural and sports activities, yoga centre, games (indoor and outdoor), Gymnasium, auditorium etc (Describe the adequacy of facilities in maximum of 500 words.)

Response:

ICT enabled facilities such as smart class,LMS etc.

At SIESGST, efficient teaching and learning is achieved through traditional classroom teaching, practical training though state of art laboratories. The Institute has adequate infrastructure as per the AICTE norms. The campus of GST is spread in the area of 24795.64 sq. m. with the total constructed area of 15113.82 sq.m. SIESGST ensures safety and security by monitoring the campus locality, covered under CCTV surveillance. The infrastructural facilities include ICT enabled Lecture Halls, Tutorial rooms, Drawing Halls, Seminar Halls, Laboratory, Library, TPO Office, First Aid Room, Counselling Centre, Office, Exam Cell, Assessment Rooms, Workshops, Seminar Hall, Auditorium, E-Learning Studio, Photocopy Centre, Canteens, Gymkhana, Open Amphitheatre, and other facilities including HOD Rooms, Faculty Rooms, BCR and GCR and Storerooms. In SIES GST each department has well equipped laboratories with excellent software and

necessary hardware with an overall investment of more than 10 crores. Some of the major laboratory equipment that can be listed are NI lab view, vibrometer, CNC lathe, microwave bench, Blown-film extrusion, Offset printing machine, Injection, and blow moulding machine. Institute has a well set up central computing facility in the area of 154 sq. m. where students, as well as faculty, can avail the facility of internet and audio-visual aids.

The Institution has adequate facilities for cultural activities, sports, games (indoor, outdoor), gymnasium, yoga centre etc.

The Institution has adequate facilities for cultural activities, sports, games (indoor, outdoor) and gymnasium.

The Student council of SIES GST is well organized and has two dedicated positions as sports secretary to manage the sports events. Faculty sports in charge plans the sports activities along with the student members without hampering the academics. The college provides facilities for indoor sports, and the outdoor games are conducted in coordination with municipal corporation/ gymkhanas outside or in the vicinity of the institute. SIES GST has an in-house gymnasium facility and the faculty and students can avail after the lecture hours and a dedicated space for Yoga and Meditation for improving the mental and physical health of faculty and students. The Student council of SIES GST has a team to organize various cultural events on various occasions such as first-year orientation, farewell, teacher's day, National Festivals, Annual Festivals, Open Mic, Music Charity Concert, Funfairs, and the end-of-the-year farewell etc. The institute has enriched students with dedicated clubs that helps in boosting their inherent talents. The college also has open-air lawn and amphitheater for the creation of a supportive atmosphere and

Page 56/99 24-06-2023 01:44:00

facilities.

LMS Facility

SIESGST implemented ERP system for automation of Academic and Administration activities. It includes faculty load allocation, time table management, student attendance management, session plan creation, mentor mentee activities, lab work uploading and assessment and term work calculation. It was also used for student feedback generation as well as attendance analysis.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

4.1.2 Percentage of expenditure for infrastructure development and augmentation excluding salary during the last five years

Response: 8.26

4.1.2.1 Expenditure for infrastructure development and augmentation, excluding salary year wise during last five years (INR in lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
39.13	9.50	24.54	87.35	128.80

File Description	Document
Institutional data in the prescribed format	View Document
Audited income and expenditure statement of the institution to be signed by CA for and counter signed by the competent authority (relevant expenditure claimed for infrastructure augmentation should be clearly highlighted)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

4.2 Library as a Learning Resource

4.2.1 Library is automated with digital facilities using Integrated Library Management System (ILMS), adequate subscriptions to e-resources and journals are made. The library is optimally used by the faculty and students

Response:

Library is fully automated, and the library module of the ERP system is a one stop solution for all library automation activities. The software is user friendly and very useful in automating the various functions of library including configuration of branches, circulation modules, branch wise membership registration of users, access rights, management of bibliographical data of various items such as books/journals/ejournals/CDs, cataloguing of books, facility to convert legacy data, data backup, online public access catalogue (Web OPAC), book reservation, book bank management etc. The unique feature of the software is the provision to generate various kinds of library reports such as author and title-wise details of books, list of e-books, bound volume of journals, flexible and customization in generation of reports, downloading accession register, digital library, barcode generation of books, overall statistics of various items, stock verification etc. Besides this software is compatible with library standards and software is being used by several libraries across the country. Library has also the set up for Dspace e-repository and NPTEL video lectures which can be accessed within the campus. In addition to that library provides photocopy and internet with wi-fi facility to access e-resources throughout the campus. Library has a separate portal providing useful information which can be accessed: https://librarygst.wixsite.com/library. The library has good bay guides which helps the readers to easily locate the books and other reading material even without the help of Library staff. The files relevant to Library and Library services are well maintained and labelled for easy access to any of the library staff. The Central Library is also a member of DELNET which gives access to e- Books and 5000 full text e - journals both at National and International level. The Central Library is also a member of NDL which has a collection of more than 6 lakh e- books which the students and staff are utilizing.

Display boards of library data and services - There are library data boards which give information about the collection and services offered. Library Facilities & Services Reprography and Scanners facility - A high end Ricoh multifunction printing machine is available in the library which has the facilities like copying, scanning, and printing. Back volumes of journals, Project Reports, Question Banks, Syllabus sets etc. - The journals that are being subscribed are stored as back volumes. Library also maintains Project reports submitted by the students as part of their course curriculum. Library Orientation Programs - We conduct Library Orientation Program every year to first year students to familiarize library facilities, resources and services. We also guide them searching techniques in Library OPAC and also to locate the same on the shelf.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities and provides sufficient bandwidth for internet connection Describe IT facilities including Wi-Fi with date and nature of updation, available internet bandwidth within a maximum of 500 words

Response:

Institution frequently updates its IT facilities and provides sufficient bandwidth for Internet connection

The institute has always given priority for up-gradation of IT facilities. The IT infrastructure of SIES GST meets all requirements and complies with all regulatory stipulations. All PCs in the institute are connected in LAN for internet access. In-addition WI-FI access points are installed at prominent locations, making internet access convenient for students and staff.

Servers and PCs are maintained, updated and upgraded at regular intervals.

The campus is well connected with an intercom facility for internal communication.

Regular updating is done in facilities at institute level as well as department level. The description of the same is provided below

- Internet Connection: The institute regularly updates the internet connection every year and as of now, the available internet bandwidth is 100 MBPS provided by JIO that is latest renewed in 2022.A second backup line by TATA is provided with bandwidth of 20MBPS.
- No. of Systems and their Configuration: GST has a total of 610 computers for student use which are well connected to the internet via LAN and have high end configuration.
- Firewall/Security: GST uses firewall service from Sophos-XG 330 and the support license is latest renewed in 2022.
- Biometric Attendance: The institute provides a biometric attendance for faculties.
- Networking Peripherals: GST has networking switch provided by DLINK of speed 1 GBPS. The institute follows star topology for internal connections.
- Licensed softwares: Institute has various softwares needed for academic purposes which includes Flash Pro, Photoshop, MATLAB, NetSim, Xilinx ISE, Tensbuster, ANSYS, autoSIM, AutoCAD and SolidWorks apart from basic software like Office, Tally etc.
- Licensed version of OS: The institute has Microsoft campus license.
- I/O Devices: The institute purchases printers as per the requirements given by the departments. The institute has in all 54 laser printers.
- Media Lab/Video Lecture making Facility: The institute has a well-equipped media lab where faculties can prepare their video lectures. This has been very useful during the initial phases of pandemic.
- LCD Projectors: Upgrading of IT is seen in teaching learning process as OHPs in the institute have been intermittently replaced by LCD. The institute has overall 42 projectors.

- CCTV Surveillance: GST has a very efficient electronic surveillance system which consists of 123 cameras installed throughout its campus.
- Servers: The institute has total 9 servers.
- Online Lectures: The institute has licensed versions of G Suite and Microsoft 0365 via which the online lectures and practicals from March 2020 are being conducted.
- Plagiarism Software: GST uses licensed version of URKUND software.
- ERP System: The institute uses the JUNO ERP system for recording details like student attendance, student journal submissions, staff leave management, student railway concession etc.
- Website: SIESGST has its own website: SIES | GST (siesgst.edu.in)

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

4.3.2 Student – Computer ratio (Data for the latest completed academic year)

Response: 3.04

4.3.2.1 Number of computers available for students usage during the latest completed academic year:

Response: 610

File Description	Document
Purchased Bills/Copies highlighting the number of computers purchased	View Document
Extracts stock register/ highlighting the computers issued to respective departments for student's usage.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

4.4 Maintenance of Campus Infrastructure

4.4.1 Percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, during the last five years (INR in Lakhs)

Response: 28.69

4.4.1.1 Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component year wise during the last five years (INR in lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
135.06	51.98	260.58	317.19	239.75

File Description	Document
Institutional data in the prescribed format	<u>View Document</u>
Audited income and expenditure statement of the institution to be signed by CA for and counter signed by the competent authority (relevant expenditure claimed for maintenance of infrastructure should be clearly highlighted)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1 Percentage of students benefited by scholarships and freeships provided by the institution, government and non-government bodies, industries, individuals, philanthropists during the last five years

Response: 27.07

5.1.1.1 Number of students benefited by scholarships and freeships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
585	537	488	475	300

File Description	Document
Year-wise list of beneficiary students in each scheme duly signed by the competent authority.	View Document
Upload Sanction letter of scholarship and free ships (along with English translated version if it is in regional language).	View Document
Upload policy document of the HEI for award of scholarship and freeships.	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.1.2 Following capacity development and skills enhancement activities are organised for improving students' capability

- 1. Soft skills
- 2. Language and communication skills
- 3. Life skills (Yoga, physical fitness, health and hygiene)
- 4.ICT/computing skills

Response: A. All of the above

File Description	Document
Report with photographs on Programmes /activities conducted to enhance soft skills, Language and communication skills, and Life skills (Yoga, physical fitness, health and hygiene, self-employment and entrepreneurial skills)	View Document
Report with photographs on ICT/computing skills enhancement programs	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.1.3 Percentage of students benefitted by guidance for competitive examinations and career counseling offered by the Institution during the last five years

Response: 47.75

5.1.3.1 Number of students benefitted by guidance for competitive examinations and career counselling offered by the institution year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
703	1094	1267	618	525

File Description	Document
Upload supporting document	<u>View Document</u>
Institutional data in the prescribed format	View Document

5.1.4 The institution adopts the following for redressal of student grievances including sexual harassment and ragging cases

- 1. Implementation of guidelines of statutory/regulatory bodies
- 2. Organisation wide awareness and undertakings on policies with zero tolerance
- 3. Mechanisms for submission of online/offline students' grievances
- 4. Timely redressal of the grievances through appropriate committees

Response: A. All of the above

File Description	Document
Proof w.r.t Organisation wide awareness and undertakings on policies with zero tolerance	View Document
Proof related to Mechanisms for submission of online/offline students' grievances	View Document
Proof for Implementation of guidelines of statutory/regulatory bodies	View Document
Details of statutory/regulatory Committees (to be notified in institutional website also)	View Document
Annual report of the committee motioning the activities and number of grievances redressed to prove timely redressal of the grievances	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.2 Student Progression

5.2.1 Percentage of placement of outgoing students and students progressing to higher education during the last five years

Response: 64.4

5.2.1.1 Number of outgoing students placed and \prime or progressed to higher education year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
309	240	267	322	327

5.2.1.2 Number of outgoing students year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
463	474	450	445	443

File Description	Document
Number and List of students placed along with placement details such as name of the company, compensation, etc and links to Placement order(the above list should be available on institutional website)	View Document
List of students progressing for Higher Education, with details of program and institution that they are/have enrolled along with links to proof of continuation in higher education.(the above list should be available on institutional website)	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.2.2 Percentage of students qualifying in state/national/international level examinations during the last five years

Response: 50.49

5.2.2.1 Number of students qualifying in state/ national/ international level examinations year wise during last five years (eg: IIT/JAM/NET/SLET/GATE/GMAT/GPAT/CLAT/CAT/ GRE/TOEFL/ IELTS/Civil Services/State government examinations etc.)

2021-22	2020-21	2019-20	2018-19	2017-18
51	95	85	107	71

File Description	Document
List of students qualified year wise under each category and links to Qualifying Certificates of the students taking the examination	View Document
Institutional data in the prescribed format	<u>View Document</u>
Provide Links for any other relevant document to support the claim (if any)	View Document

5.3 Student Participation and Activities

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

Page 65/99 24-06-2023 01:44:00

during the last five years

Response: 40

5.3.1.1 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 wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
7	5	11	9	8

File Description	Document
Upload supporting document	<u>View Document</u>
list and links to e-copies of award letters and certificates	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.3.2 Average number of sports and cultural programs in which students of the Institution participated during last five years (organised by the institution/other institutions)

Response: 27

5.3.2.1 Number of sports and cultural programs in which students of the Institution participated year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
17	7	57	45	9

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

5.4 Alumni Engagement

5.4.1 There is a registered Alumni Association that contributes significantly to the development of

Page 66/99 24-06-2023 01:44:00

the institution through financial and/or other support services

Response:

ReConnect is SIES GST's Alumni Association was formed in 2012 at SIESGST. The Association is dedicated to bringing together the alumni on a common platform to build another channel of personal and professional support to members of the the community. Alumni meet provides a platform for the exstudents to interact with the Institute. Alumni Linkedin and Facebook pages created helps the institute to remain connected with the alumni. Alumni meet is the annual gathering of SIES GST Alumni, which is held on the first Saturday of January. In all these meets, alumni have shared their valuable experience and inputs on the current trends in the industry. Being institutions most loyal supporters who shape the future of the college in a pivotal manner, ReConnect helps the alumni to engage with the students and staff on a regular basis. Regular workshops, seminars are conducted by alumni .Many star alumni who are currently pursuing and completed higher studies from institutes of eminence, India and Abroad, are holding eminent and illustrious positions in various multinational companies. Alumni have also been helping students with website coding and app development. They have also been actively contributing to the NSS unit and have accompanied students for the NSS camp. Expert speaker: Alumni are invited for guest lectures in their respective domains training programmes, coding competition, for induction programs for the First Year students etc. They have also played a major role in bridging industry academia gap by organizing events like Developer Weekend. They have also been mentoring students of the EDC and have arranged for internships for students. They have also invited as a judge for various technical competitions. Alumni are also invited as a visiting faculty in PPT department. The successful alumni entrepreneurs have been regularly contributing to Entrepreneurship Development Cell (EDC) and innovation cell by conducting workshops on writing 'Business Plans'. They also help us to mitigate the identified gaps through beyond syllabus activities like hands on workshops, guest lectures. IQAC: Alumni are active members of IQAC and their inputs are helping us for quality enhancements. Placements: Alumni facilitate campus recruitment by suggesting their companies. Some of the alumni are members of Department Advisory Board .They also help us in providing industry based input to final year projects.

An alumni committee has been set under the leadership of a senior faculty member to work closely with the Alumni and to ensure strong and productive relationships with the Institute and to implement alumni programs that support the Institutes strategic plan.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1 The institutional governance and leadership are in accordance with the vision and mission of the Institution and it is visible in various institutional practices such as NEP implementation, sustained institutional growth, decentralization, participation in the institutional governance and in their short term and long term Institutional Perspective Plan.

Response:

The Vision and Mission of the Institute has set by considering the need of the society. All the stake holders are involved in setting up the Vision and Mission. Individual departments prepare the Strategic plan and organize the events as per the plan.

SIES: Governance and Management

Vision:

To be a centre of excellence in Education and Technology committed towards Socio-Economic advancement of the country.

Mission:

- To impart advanced knowledge in Engineering and Technology.
- To transform young minds towards professional competence by inculcating values an developing skills.
- To promote research and ensure continuous value addition among students and employees.
- To strengthen association with industry, research organizations and alumni to enhance knowledge on current technologies.
- To promote next generation technocracy and nurture entrepreneurial culture for social-economic growth.

Strategic / Perspective plan:

- 1. To enrich curriculum
- 2. To incorporate digital platform to improve teaching-learning process
- 3. To encourage research and consultancy, industry-institute interaction and entrepreneurship activities.
- 4. To strengthen alumni engagement and enhance student experience.
- 5. To enhance contribution towards society and the environment.
- 6. To initiate new courses at PG and UG level.
- 7. To formulate development plans to improve the overall quality of the institute

The institution follows a democratic and participatory mode of governance with all stakeholders participating actively in its administration to deliver value based and advance education which bring significant benefits to the society.

NEP implementation

As per the guidelines of NEP, the institute already follows different form of arts, works of literature, customs, traditions, linguistic expressions, artefacts, heritage sites etc. All these things are clearly visible in the various activities which take place at our institute: Literary Festival of Performing Arts. The institute organizes a grand GARBA NIGHT for students on Dussehra. The institute celebrates TRADITIONAL DAY (RIWAYAT) where the institute gives the privilege to its students to come traditionally dressed.

To ensure students develop the skills required in industry, the Institute has the legacy to conduct

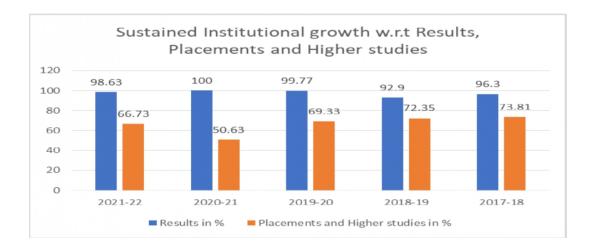
Page 68/99 24-06-2023 01:44:00

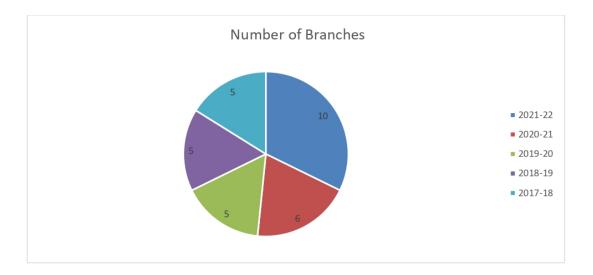
skills-based student development programs in various interdisciplinary / multidisciplinary domains in summer and winter vacations.

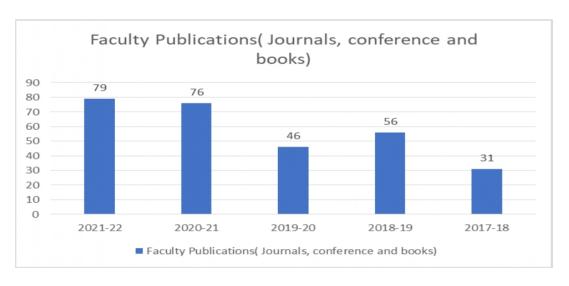
SIES Graduate School Of Technology, affiliated to Mumbai University is in the process of implementing the Academic bank of Credits from time to time as per guidelines issued by UoM from the Academic year 22-23. The students in the institute have registered on ABC portal and the information of the same is updated to the UoM.

Academic Decentralization: There are various committees with well-defined functions that give academic and administrative leadership to the institution. Academic council committee is the main internal governing board which comprises of the Principal, HoDs, Librarian, Training and Placement in charge, IQAC coordinator, Registrar, Network Administrator. Academic Council Committee is responsible for holistic development of the college and to recommend on the enhancement of student facilities, students' life and experiences at the Institute. This major responsibilities of the committee includes preparing the Academic Calendar, monitoring the activities and taking active measures for improvement of standards of teaching, research and training, maintain overall discipline in the campus.

Sustained Institutional Growth has been observed in terms of results, placements and higher studies, no. of branches, faculty publications is shown below.







File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

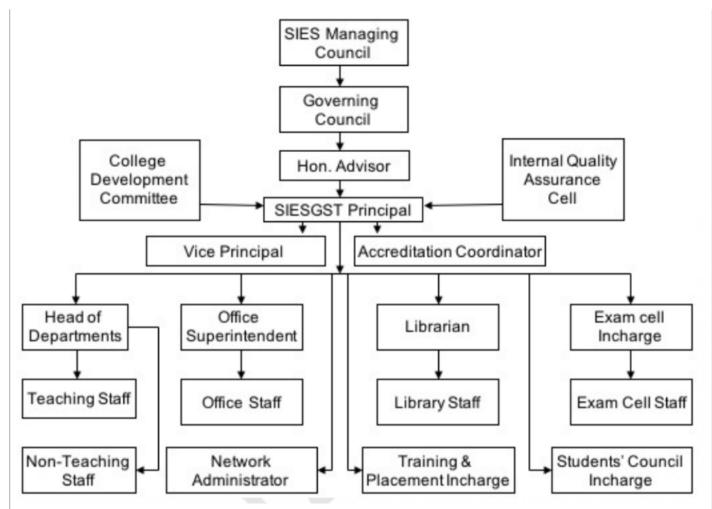
6.2 Strategy Development and Deployment

6.2.1 The institutional perspective plan is effectively deployed and functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment, service rules, and procedures, etc

Response:

1. The institute has a vision to be a centre of excellence in Education and Technology committed towards socio economic advancement of the country. The leadership of SIESGST is through participative management all the way through a structured organizational system with the involvement of all the Stakeholders. The organizational system reviews the institutional strategic plan which in turn sets the academic aims and objectives of the institution and identifies the financial and recruitment strategies. The organizational structure lends itself to sustaining institutional capacity and educational effectiveness through the involvement of external members in various Committees/Boards. Various stakeholders are members of different committees constituted by the institution. The decision-making procedures are made at appropriate levels in the organizational hierarchy.

Page 71/99 24-06-2023 01:44:02



As per the university/ government guidelines, IQAC, Anti-ragging Cell etc. are in place for the institution. There are various committees with well-defined functions that give academic and administrative leadership to the institution. A committee comprising of administrative staff and faculty members are involved in the planning and implementation, academic audit and evaluation. An optimum level of decentralization is in practice through the autonomous flexibility to the departments and participative decision-making process.

SIESGST strictly follows the service rules according to the AICTE norms. Recruitment process is carried out according to the norms of the University, a body comprising of university representative, management representative, Principal, external subject experts decides the worthiness of the candidates by his/her performance in the interview according to the parameters specified by UoM. The teaching and non-teaching staff have the benefits of PF, Gratuity, Mediclaim and other benefits as applicable. The institution follows transparent promotional policies previously through Appraisal forms and through Academic Performance Indicators (API) henceforth. Regular student feedback on improving quality of teaching learning process. Governance are taken twice in a semester for timely corrections. This feedback is analyzed and discussed with concerned faculty in the presence of the Head of the Department and Principal.

Grievance redressal committee looks into the matters related to grievances of staff and students. Suggestion/complaint box is kept near the Principal office/Admin office for the same. Also, every student has assigned a mentor. Grievances related to academic and non-academic matters are conveyed through them and the Head of Institute oversees both the above processes. The Institute has formed all statutory committees like Anti Ragging Committee, Internal Complaint Committee to help students and staff.

B) The institutional Strategic/ perspective plan is effectively deployed

A Strategic Plan was prepared for the year 2018-25. It sets out specific targets in every sphere of activity of the Institute academic programs, research, collaboration with industry, human resource development, entrepreneurship, development of infrastructure and facilities, student life, placement, community outreach, international and alumni relations. These targets are set after extensive consultation to ensure that they are both ambitious and achievable. The targets are achieved by contributions of stakeholders faculty, staff, students, alumni, international partners and industry experts.

To ensure effective implementation of strategic objectives each department submits the compliance report with respect to the well-defined goals.

File Description	Document
Upload Additional information	View Document
Institutional perspective Plan and deployment documents on the website	View Document
Provide Link for Additional information	View Document

6.2.2 Institution implements e-governance in its operations

- 1. Administration
- 2. Finance and Accounts
- 3. Student Admission and Support
- 4. Examination

Response: A. All of the above

File Description	Document
Screen shots of user interfaces of each module reflecting the name of the HEI	View Document
Institutional expenditure statements for the budget heads of e-governance implementation ERP Document	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

6.3 Faculty Empowerment Strategies

6.3.1 The institution has performance appraisal system, effective welfare measures for teaching and non-teaching staff and avenues for career development/progression

Response:

The Institute has a welfare mechanism in place, for teaching and non-teaching staff.

Teaching Staff: As per the norms of AICTE, Pay commission recommendations are implemented. Extending EPF Scheme is implemented to all eligible members (as per PF Rules) Group insurance facility. Maternity Leave of 6 months with pay and extension of additional leave if required. Felicitation for acquiring a higher degree. Free canteen coupons. SIES Jeevan Raksha Vaccination drive was conducted for teaching staff. Encouragement of R&D culture by providing on duty leave.

Non-Teaching Staff: Extending EPF Scheme is implemented to all eligible members (as per PF Rules) Group insurance facility. Uniforms are provided for supporting staff. Maternity, Medical leaves / vacation is sanctioned for the required staff. SIES Jeevan Raksha Vaccination drive was conducted for non teaching staff.

Performance Appraisal System of Teaching Staff Institute follows a well-defined and framed model of performance appraisal system namely API (Academic Performance Indicator) as per UGC guidelines.

It is based on mainly three categories

- 1. Teaching, learning and evaluation related activities
- a. Lectures, tutorials, practical hours
- b. Lectures or other teaching duties
- c. Preparation and imparting of knowledge
- d. Use of participatory and innovative methodologies used
- e. Examination Duties
- 2. Professional development, co-curricular and extension activities
- a. Student related co-curricular extension and field based activities
- b. Contribution to corporate life and management of the department and institution
- c. Professional development activities
- 3. Research and Academic Contribution

- a. Research papers published in refereed journal, journals and conference proceedings
- b. Research publication as Book and Book Chapter.
- c. Ongoing and Completed Research projects and consultancies
- d. Training courses and conferences/seminar/workshop

Student satisfaction is given utmost importance at the Institute and hence it is a part of the faculty appraisal system. The feedback helps to review and improve the quality of the teaching-learning processes and measure the effectiveness of course design and delivery.

The feedback is conducted in online mode and complete confidentiality and anonymity is maintained. Apart from feedback, faculty is also assessed on performance of the students.

Performance Appraisal Process: Every year faculty fills the confidential report at the end of the academic year. The confidential report is reviewed by the Head of the Department and then by the Principal and submitted to HR with recommendation for further consideration for appreciation or corrective action.

Apart from annual self-appraisal, every faculty have to update the details of faculty contribution and performance appraisal in the faculty handbook which is regularly reviewed by the Head of the Department.

Performance Appraisal System of Non-Teaching Staff: Every non-teaching staff also fills a self-appraisal form at the end of the academic year. The self-appraisal is first reviewed by the Head of the Department for Technical staff and by the registrar for the administrative staff and then by the Principal. The self-appraisal reports with recommendation is then sent to HR for further considerations for appreciation or corrective action.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

6.3.2 Percentage of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the last five years

Response: 18.37

6.3.2.1 Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies year wise during the last five years

Page 75/99 24-06-2023 01:44:03

2021-22	2020-21	2019-20	2018-19	2017-18
8	5	14	23	29

File Description	Document
Policy document on providing financial support to teachers	View Document
Institutional data in the prescribed format	View Document
Copy of letter/s indicating financial assistance to teachers and list of teachers receiving financial support year-wise under each head.	View Document
Audited statement of account highlighting the financial support to teachers to attend conferences / workshop s and towards membership fee for professional bodies	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

6.3.3 Percentage of teaching and non-teaching staff participating in Faculty development Programmes (FDP), Management Development Programmes (MDPs) professional development /administrative training programs during the last five years

Response: 55.71

6.3.3.1 Total number of teaching and non-teaching staff participating in Faculty development Programmes (FDP), Management Development Programmes (MDPs) professional development /administrative training programs during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
79	77	81	83	75

6.3.3.2 Number of non-teaching staff year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
54	55	55	59	56

File Description	Document
Refresher course/Faculty Orientation or other programmes as per UGC/AICTE stipulated periods, as participated by teachers year-wise.	View Document
Institutional data in the prescribed format	View Document
Copy of the certificates of the program attended by teachers.	View Document
Annual reports highlighting the programmes undertaken by the teachers	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

6.4 Financial Management and Resource Mobilization

6.4.1 Institution has strategies for mobilization and optimal utilization of resources and funds from various sources (government/ nongovernment organizations) and it conducts financial audits regularly (internal and external)

Response:

SIES Graduate School of Technology is a self-financing private institute. It has a well-defined financial policy which ensures optimal utilization of finances for academic, administrative and research activities. The institute is being run with self sufficient funds generated from tuition fee and other miscellaneous incomes. In case of shortage of funds, the management supports by providing the finance. In case activities like expansion and renovation of building, the management always supports by providing required finance. Financial planning is done at the beginning of the academic year well in advance with efficient budgeting involving all the Heads of Academic Departments and Administrative Sections. Apart from the tuition fee, the resource mobilization is mainly done through

- Interest on Corpus
- Consultancy Charges
- Endowments Scholarships
- Research Grants
- Sponsorship
- Funds from University for NSS Activities
- Sale of Application Forms

The management reviews all the financial activities through scrutiny of budgets and expenses in every quarter. Through centralized purchase the funds are monitored and utilized in an effective manner.

Yes, Institution conducts internal and external financial audits regularly.

M/S. V. Sankar Aiyar & Co, Chartered Accountants have been our Statutory Auditors for the last 5 years. They are independent auditors appointed by the Society to conduct the audit of the financial statements including the Balance Sheet and Income & Expenditure Account of the Society. They have not pointed out any weakness in the internal control system. The reports of the statutory auditors are available for the last 5 years. They have stated in their report that proper books of accounts have been kept by the Society and expressed opinion that the financial statements give a true and fair view in conformity with the accounting principles on the Balance Sheet and Income & Expenditure Account. The qualified opinion is not related to the systems and procedures or the internal control systems.

File Description	Document	
Upload Additional information	View Document	
Provide Link for Additional information	View Document	

6.5 Internal Quality Assurance System

6.5.1 Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes. It reviews teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals and records the incremental improvement in various activities

Response:

IQAC significantly contributes for quality improvement in Reseach, academics and administrations which earlier was carried out by ISO 9001:2008 Quality Management System (2005-2017).

Quality Research: IQAC organizes workshops and Seminars and Symposium on various aspects of research and IPR. This helps to increase the publications in reputed conferences & journals, filing of patents/copyrights.

Digital transformation: During pandemic, SIESGST provided platforms such as G-Suite and Microsoft Office 365 for teaching-learning and various admin purposes. Faculty members created videos for their course content. The recorded video lectures were analyzed by the higher authorities and suggestions were given for better and more effective online content delivery.

Improve Students' performance: To enable students to cope with online to offline mode, the Institute took

some measures like remedial classes, prelims Test Examination for needy students, conducting extra classes on Saturdays, guidance and support for internships. The internship program is offered to expose students to the industrial environment to learn, understand and sharpen the real time technical / managerial skills required at the job. Value added courses are floated to bridge the gap between curriculum and industry and to impart academic flexibility to the students.

Initiatives for NBA: NBA was granted for 03 years 2021-24, for Electronics & Telecommunication, Computer Engineering, Information Technology and Mechanical Engineering. IQAC effectively implemented decentralization of work and by providing participative management for various accreditation related processes.

The teaching-learning process is regularly reviewed by IQAC.

Regular Academic Review Processes: Program Assessment Committee in each department verifies and approves the Course Outcomes (COs) of all courses, mapping of COs to Program Outcomes and Program Specific Outcomes. Quality Improvement Committee (QIC) verifies the theory and lab session plan as per UOM guidelines and suggestions are given if any correction/improvement is required. DAB gives recommendations for the overall academic improvement of the department. The gaps identified by the department are also approved and then the activities are conducted. Syllabus completion reports are collected twice in a semester. Academic Audits are conducted periodically to verify and ensure that the processes are followed correctly.

Efforts for better outcomes: the initiatives are taken to include an observer from interdisciplinary departments to review and improve the quality of final year projects developed.

Outcome writing and Mapping: IQAC supports Outcome-Based Education (OBE). The Program Outcomes (POs) are adapted from NBA, program-specific outcomes are prepared by each program from the feedback obtained from stakeholders. The COs are reframed as per Blooms Taxonomy and mapped to POs for the revised syllabus. Higher cognitive level questions included in Assignments.

Test Question Paper Quality Check: The Institute follows UoM guidelines for the conduction of two Internal Assessments (IA). In the process of question paper quality check, the course coordinator verifies the question paper for parameters like marks, Bloom's Taxonomy, and relevance to COs. This process helps to ensure that the IA paper consists of an appropriate mix of questions.

Management review meetings are conducted once every semester to review the achievements of Department and Institute objectives.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

6.5.2 Quality assurance initiatives of the institution include:

- 1. Regular meeting of Internal Quality Assurance Cell (IQAC); quality improvement initiatives identified and implemented
- 2. Academic and Administrative Audit (AAA) and follow-up action taken
- 3. Collaborative quality initiatives with other institution(s)
- 4. Participation in NIRF and other recognized rankings
- 5. Any other quality audit/accreditation recognized by state, national or international agencies such as NAAC, NBA etc.

Response: A. Any 4 or more of the above

File Description	Document
Quality audit reports/certificate as applicable and valid for the assessment period.	View Document
NIRF report, AAA report and details on follow up actions	View Document
List of Collaborative quality initiatives with other institution(s) along with brochures and geo-tagged photos with caption and date.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document
Link to Minute of IQAC meetings, hosted on HEI website	View Document

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1 Institution has initiated the Gender Audit and measures for the promotion of gender equity during the last five years. Describe the gender equity & sensitization in curricular and co-curricular activities, facilities for women on campus etc., within 500 words

Response:

Institute is committed to gender equity in the campus and provides facilities for the same. Institute conducts various seminars and events/activities which are committed to gender equity. Main focus of these events is gender sensitization. The Institution has established Internal Complaint Committee (ICC), Women Development Cell (WDC) and National Service Scheme (NSS) Cell to identify, address and conduct various programs on such issues.

The college has outsourced the security personnel, which also consists of a good number of lady security personnel to ensure safety, security and identity of all students and staff members in the campus. Housekeeping outsourced to PNS Housekeeping services Pvt Ltd also consists a mix of male and female staff taking care of cleanliness and sanitation. Institute has installed adequate number of CCTV cameras in the campus for safety and security. The institute also has common rooms for boys and girls separately. Medical room facility is also available for all the students. With an objective to support women throughout their careers - to empower; engage and enable them to rise to the best of their capabilities, the college has conducted a program in association with CII. Women achievers are regularly invited to campus to motivate the girls.

College students are educated through WDC and NSS cell to be sensitive towards issues of Gender bias, sexual harassment, Women empowerment, Dowry, Safety through skits and dramas. Institution conducts seminars to address various health issues such as Menstrual Disorder and Hygiene, Cervical cancer, Osteoporosis, Proper diet planning, etc. In addition to these, Senior Police Inspectors were called to discuss Legal Formalities and Laws related to girls, road safety etc.

Institute also promotes both girls and boys students to participate in student chapters like EDC, IEEE,IEEE-WIE IETE, CSI, IPI, SAE etc. Girl students work shoulder to shoulder with boys in design team, media team, publicity team, marketing team, creative team and NSS. All students take active part in literary events, editorial team, literature club etc. Also all project teams including Smart India Hackathon, BAJA are motivated to have one girl participant in their teams. Such active participation of girl students in all types of events is result of safe and promoting environment in college. Institute also appoints a lady representative and lady class representative in the student's council to immediately address issues of girls in the campus. Equal opportunities are provided to lady faculty to participate in all activities organized in the institute. Gender sensitivity programs are also organized for boys to emphasis on equality.

A professional counsellor has been appointed for personal counselling including gender issues. The Institute has established a Mentor-Mentee scheme under which every teacher is assigned a group of about twenty students for mentoring them on individual basis at regular intervals.

Page 81/99 24-06-2023 01:44:03

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

7.1.2 The Institution has facilities and initiatives for

- 1. Alternate sources of energy and energy conservation measures
- 2. Management of the various types of degradable and nondegradable waste
- 3. Water conservation
- 4. Green campus initiatives
- 5. Disabled-friendly, barrier free environment

Response: A. 4 or All of the above

File Description	Document	
Policy document on the green campus/plastic free campus.	View Document	
Geo-tagged photographs/videos of the facilities.	<u>View Document</u>	
Circulars and report of activities for the implementation of the initiatives document	View Document	
Bills for the purchase of equipment's for the facilities created under this metric	View Document	
Provide Links for any other relevant document to support the claim (if any)	View Document	

7.1.3 Quality audits on environment and energy regularly undertaken by the Institution. The institutional environment and energy initiatives are confirmed through the following

- 1. Green audit / Environment audit
- 2. Energy audit
- 3. Clean and green campus initiatives
- 4. Beyond the campus environmental promotion activities

Response: A. All of the above

File Description	Document
Report on Environmental Promotional activities conducted beyond the campus with geo tagged photographs with caption and date	View Document
Policy document on environment and energy usage Certificate from the auditing agency	View Document
Green audit/environmental audit report from recognized bodies	View Document
Certificates of the awards received from recognized agency (if any).	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

7.1.4 Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and Sensitization of students and employees to the constitutional obligations: values, rights, duties and responsibilities of citizens (Within 500 words)

Response:

The institute provides a culturally inclusive environment with mutual respect, effective relationships, and clear communication. People of all cultural orientations work in harmony that is safe from abuse, harassment, or unfair criticism. Everyone has freedom to express their own opinions and are given equal opportunity to participate in teaching, learning, work and social activities.

Equal opportunities are provided to the students in various activities conducted throughout the session irrespective of their caste, creed, religion and region. The institution has an active student council and NSS wing to inculcate a sense of unity, discipline and harmony.

There is no segregation of students on the basis of their lingual or communal background. Students feel safe and secure at the institute.

Various cultures are represented during the fests which depict sense of respect towards all the cultures. Cultural and technical activities are organized inside the college to promote harmony towards each other. Every department also undertake national level competitions to give opportunity to all the students to be part of activities of the Institution. A FE induction is organized for the newbies to give them a delightful start to their four years of engineering journey. Exclusive competitions are organized by senior students for the first-year students. The bonds are strengthened when the learning takes place within the peer group.

The student clubs also organize cultural shows like open mic, Dandiya, drama competitions, charity concerts and Traditional day. Commemorative days like Yoga day, national festivals are also celebrated in the college. All this establishes positive interaction among people of different racial and cultural backgrounds.

At SIES Graduate School of Technology, the day starts with national anthem. All national festivals are celebrated with great enthusiasm to inculcate a sense of patriotism in the students.

The Institution also commemorates the birth / death anniversaries of great Indian personalities like Dr.A.P.J Abdul Kalam, Dr. Babasaheb Ambedkar, Chhatrapati Shivaji Maharaj, Mahatma Gandhi.

Marathi language day is celebrated every year on February 27. Language is root map of our culture and the institute makes efforts to preserve it.

At SIESGST, we believe in giving holistic all round education to the students. And sensitizing students on our constitutional rights, values, duties and responsibilities is one of the primary education given at the institute through various means.

Institute organizes MUN (Model United Nations) program, a two-day international relations conference for all the college students with the agenda to discuss the issues related to nuclear disarmament, preventing potential human rights infringements emerging with the technological developments in networking and communication, improving employment opportunities for refugees and displaced persons (DPs), implementation of uniform civil code across the country etc.

NSS unit of the institution conducts a cleanliness drive to mark the occasion of Swachh Bharat Abhiyan in the college campus as well as in the nearby village area. An oath is taken by all students and faculties to keep their surroundings clean. Also many skits and dance performances are presented in various events related to sensitization.

File Description	Document	
Upload Additional information	View Document	
Provide Link for Additional information	View Document	

7.2 Best Practices

7.2.1 Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual

Response:

1. Title of the Practice: Effective Education Planning & Delivery with Faculty Handbook.

Objectives of the Practice: The concept of Faculty Handbook was initiated with the objectives:

- 1.To have a single point record keeping of the education planning &delivery and attendance monitoring, remedial actions etc
- 2.To have a ready reckoner of the progress of syllabus completion, marks summary of the students, and

result analysis.

3.To record the teachers' participation in Institute activities and their own professional development.

The Context: Faculty needs to refer the session plan, result analysis, attendance records, etc. All these were sorted and included in one single booklet. It became the very heart of Academics in SIESGST. This handbook must be easy to handle, be durable to withstand all the handling by students & teachers for one full semester.

The Practice: Handbook contains the API records of the teacher, regular track of student's attendance. The signatures of students are taken at regular intervals. The session plan includes, the topics planned, their cognitive levels, the instructional strategy, and the mappings with the expected course outcomes. The handbook is also recording of defaulters with their assigned tasks / action taken, seminars / mini projects / final year projects / professional internships, term-work marks, internal assessment marks, etc. The effectiveness of the handbook is maintained with its fortnightly reviewed by the Departmental Heads and monthly reviews by the principal.

Evidence of Success: The handbook has been instrumental in 1. Taking up Quality Objectives for result improvement based on result analysis. 2.Conducting extra / additional lectures based on shortcomings recorded. 3.Continuous Internal Evaluation of the students for laboratory practical / tutorials. 4.Planning the academic schedule, guest lectures and conducting extra theory/practical/tutorial sessions. 5. Maintaining the defaulters lists and recording the action taken

Problems Encountered and Resources Required: 1. Irregularity in maintaining the data in Handbook, which was addressed through the HoDs or in certain cases with a comment by the principal in the handbook. 2.Designing of the handbook and making revisions were a difficult task. 3.Revisions are made only once in the beginning of the Academic Year and quantity of handbooks printed are for two semesters.

2. Title of the Practice: Learner Centric Skill Set Enhancement Programs

Objectives -

- To provide an opportunity for students to interact with fellow students from various engineering disciplines and develop team-spirit, leadership, and practical skills and understand industry best practices.
- To foster new areas of interest, out of the box thinking, enhance problem solving skills.
- To give exposure to the latest cutting-edge technologies like Blockchain technology, Natural language Procession, Web development and 3D printing.

The context -

These courses, which are aligned with the University syllabus and the emerging technologies, give exposure to the students about the latest trends in the technology which are not generally covered in the syllabus. It helps them to correlate the learnt content with practical approach and gets hands on training.

Practice -

We have created a road map. Every department is associated with a professional chapter like IEEE, IETE, CSI, SAE, etc. In addition, there are many activity clubs for coding, Robotics, App and Web Development and an Innovation cell. Every team sets an objective and plans activities every semester with a focus on problem-solving skills. The activity includes seminars and lectures by industry professionals, hands on workshops, competitions, publishing newsletters and technical blogs. The free courses are floated to students at least one week prior to the start date during the summer/winter vacation. The courses duration is 40 hours followed by 15 days of internship projects.

Evidence of Success:

The IEEE student body has been conducting many technical and non-technical events since 2009 and this year has received grants and has been awarded the best IEEE chapter in Mumbai region. All our national level events have grown bigger and better, creating a brand for themselves by attracting students from other states. The ISHRAE and SAE chapters provided experiential learning opportunities and helped bag some attractive jobs. The Web and App team has developed in-house ERP solutions. Every year, the Code-Chef team members have been placed in incredibly good companies. These activities have created an innovative ecosystem that has helped us in getting four-star status by MHRD IIC.

Problems Encountered and Resources Required: We faced the difficulty in

- 1. maintaining the attendance
- 2. Multiple registration.
- 3. Students joined Coursera or Udemy courses, training, etc.
- 4.TE and BE students, who have other commitments like BE project, higher education preparation and external internships, etc.

3. Mentor – Mentee System

Title of the Practice: Mentoring System for Students

Objectives – To minimize dropouts through BMW analysis and action plan, improve overall performance and help students cope with stress through personal counselling.

The context – During the first two years, some students undergo various problems coping up with the engineering curriculum and the demands of education. Considering the student teacher ratio in classrooms, it is impossible to give personal attention to students in the class to address some of the sensitive issues that bother them.

Practice -

Each teacher is assigned 15-20 students for the complete duration of their study. They meet at least once a week to discuss, clarify and primarily to share various problems like personal, domestic, academic, etc. The mentors encourage the students to participate in co-curricular and extra-curricular activities and sports, tracks attendance, test performance, etc. The Mentee details are recorded and maintained in a well-designed mentee card so that the teacher is equipped with all the necessary information about his/her mentee.

Evidence of Success:

Evidence of success of the practice includes improvement in university ranks, better results in the examinations, more regular attendance, less dropouts, increased participation in co-curricular and extracurricular activities, better discipline on campus and a respectful relationship between teachers and students. The students are more relaxed and have a healthy relationship with the faculty members.

Problems Encountered and Resources Required:

- Maintaining attendance.
- Students do not open up with their problems.
- Mentoring needs a special skill set requires a well-committed teaching staff

File Description	Document
Best practices as hosted on the Institutional website	View Document
Any other relevant information	View Document

7.3 Institutional Distinctiveness

7.3.1 Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words

Response:

The institution in one area distinctive to its priority and thrust:

SIES Graduate School of Technology, an integral part of this well-established Community, started in the year 2002 is located in the list of educational hubs in Navi Mumbai imparting quality-based technical education, offering four-year Bachelor of Engineering courses in Electronics and Telecommunication Engineering, Electronics & Computer Science, Computer Engineering, Artificial Intelligence & Data Science, Artificial Intelligence & Machine Learning, Information Technology, Printing & Packaging

Technology, Mechanical Engineering, Undergraduate Program Computer Science And Engineering (Internet Of Things And Cyber Security Including Block Chain Technology).

The Vision of SIES Graduate School of Technology is "To be a center of excellence in Education and Technology committed towards Socio-Economic advancement of the country". In line with its vision of working towards the socio-economic development of the country, the SIES has taken utmost care to give back to the community. 'Project Beacon' is a small step to give meaning and purpose to someone's life.

"Gaining knowledge is the first step of wisdom. sharing it is the first step of humanity"

India's endeavor to emerge as a global economic power relies highly on the quality and quantity of a skilled workforce. We see a vast section of destitute youth and children striving hard to earn a living on traffic signals, canteens, vehicle repair shops, malls, and other such places.

Creating a sensitive, motivational, and professional environment of vocational training for such sections of society will enable them to acquire skills that will help them to get respectable jobs and empower them to make a dignified living. An education institute can make its contributions towards realizing such a dream of a self-sustaining and skill India. We, at the SIES Graduate School of Technology, stand by this region of social empowerment and equality.

"Those who have the ability to act, have the responsibility to act"

Abiding by this principle, we commit ourselves to the task of an inclusive social upliftment and adopt project beacon as our institute's social responsibility.

Many people and their aspirations remain unfulfilled as the child keeps failing year after year and finally dropping out of school. Being a technical institute with the required wherewithal it is felt that providing practical job skills which will make such youths employable and empower them for their life would be a sustainable initiative. a few of such youth children have already been identified they will be groomed in all aspects of their interests sustained by a small stipend. There is a huge demand for risky labor, particularly in the trades of electrical repairs, plumbing, welding, tailoring, and others The youth will be given training in one of the identified trades and then undergo internships. The industry connects initiative will be extended in facilitating employment entrepreneurship.

The objective is to provide an opportunity to untrained, unemployed youth through skill-based education. It is thus proposed to impart short-term vocational training to the underprivileged sections of the society age group 14 to 40 years provide internships and job opportunities by collaborating with industry. This is an initiative under Institute Social Responsibilities.

The core structure and detailed syllabus have been prepared and it is proposed to schedule the classes three days a week, four or five hours a day based on the availability of resources. The practical and theory classes are conducted separately. Additional space is given for sewing and tailoring on the college campus.

The enrollment is done by taking applications and screening applicants based on the family income support education level, interest, etc. The database will be maintained for information and follow-up.

Collaboration with the industry is aimed to provide for training and employment inputs of specific requirements will also be collected from potential employers and course content modified accordingly.

Page 88/99 24-06-2023 01:44:03

'Project Beacon' incorporates for the targeted youth a set of training programs that are recognized by and relevant to the requirement of industries and service providers. To begin with, several vocational trades of carpentry, Sewing tailoring, plumbing, electrician, computer operators, and Web designing have been taken up. Each of these courses is preceded by a foundation course to get the candidates acquainted with the minimum, computer skills, spoken English, and mathematics.

It is rightly said, "It cost the candle nothing to light another candle, we pledged to be the candle of inspiration and go on the light the beacon of knowledge".

The courses like sewing tailoring, AC Mechanic, Electrician, computer operator, web designing, and welding are conducted every year in two sessions that is Jan-June and July-December. The first batch was started in Jan -June 2016 and 49 students were admitted and 28 were certified, whereas in July-December 2016, 40 students were admitted and 24 were certified at the end.

In July-December 2017 batch, 97 students were admitted and 43 were certified. In the next year Jan-June 2018 batch, 13 students were admitted, and 07 students completed the course. In the next batch, July-December 2018 batch 44 students were eligible for admission and 13 students successfully completed the course.

In the year 2019, Jan-July batch, 135 students were admitted and 52 students completed the course whereas July-December 2019 batch, 166 students were admitted and 70 students completed the course successfully.

In the next year Jan-July 2020 batch, 65 students took admission, but they couldn't complete it due to covid pandemic.

During the covid Pandemic, the Mask making project of the beacon was taken as an initiative and donated 2.5 lakh masks to the frontline COVID warriors, through Navi Mumbai Municipal Corporation and was handed over to Commissioner Abhijit Bangar. The Institute made these masks through its Graduate School of Engineering's Beacon Project, which employs economically challenged women in the Nerul-Vashi area.

The SIESGST has recieved awards like "12th Best educational Quality Enhancement Team (BEQET) president award 2017" for project BEACON empowerment of Underprivileged' and 2nd prize awarded by maharashtra Energy developement Agency's "State level award for excellence in Energy conservation and management, 2017"

After covid, we have started with regular batches for Beacon again from July 2022 onwards.

File Description	Document
Any other relevant information	<u>View Document</u>
Appropriate web in the Institutional website	View Document

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5. CONCLUSION

Additional Information:

SIES Graduate School of Technology, has established itself as most sought after engineering institution amongst the undergraduate students. Professional body chapters like IEEE,CSI, IETE, ISTE, ISHARE, SAE etc are established. The institute has been *awarded* Region 10's *IEEE* Exemplary Student Branch *Award* for consecutive three years, also 9th edition of IEEE student's branch of SIES GST 'Techopedia' (National level competition) has been awarded Bronze in the Darrel Chong Student Activity Award 2021.

SAE student team Turbocrafters participating in various national level competition top ranked in various categories like AIR 14th overall, AIR 6th Endurance, AIR 6th 4WD, AIR 8th Cost Event, AIR 17th Maneuverability, AIR 17th Suspension and Traction in the year 2020-21. The team bagged 3rd rank at National level with prize money of 1.29 lakhs in the year 2019-20.

The college has well established career counselling and placement cells, for guiding students towards a better career. No effort is spared to reduce the gap between the institution and Industry. Students are being directed for intern ship in industries, which turn into the springboards for the students to reach the higher levels in training and knowledge; making them employable. The Institute established entrepreneurship development cell (EDC) to provide the platform for establishing the Start ups and conducts competitions like Bizence (National level Business plan competition).

Institute encourages students to participate in inter/intra collegiate and co-curricular /extra curricular activities namely Byte Camp (National level Hackathon), Turing cup (State level Coding competition), Innovations (National level project competition), Techxter (National level paper presentation competition), Sansodhan (National level project poster presentation competition). Our students have bagged many prestigious awards in Smart India Hackathon, Avishkar (State level research convention), Anveshna. Students regularly participate in State, University and National level sports, cultural, literary competitions and excelled in the competitions.

Institute encourage students to join various MOOC courses by providing platforms like NPTEL, COURSEERA etc. Faculty members are trained to develop MOOC courses and implemented various courses. IQAC ensures timely, efficient and progressive performance of academic, administrative and financial tasks. Institute always strives for the holistic development of the students.

Social Outreach during the pandemic time in terms of making and distributing face masks more than a lakh and beds in thousands to Navi Mumbai Muncipal Corporation

Concluding Remarks:

The SIES Graduate School of Technology has always strived for the best while imparting quality education in various Engineering courses.

The Institute Vision & Mission is planned and devised in line with the organisational goal, Mission 2025:

SIES shall be among the most admired Institutions in India

In alignment with the SIES's Mission 2025, the SIES GST shall contribute to this endeavour of being amongst the most admired academic institutions in India.

Strategic Plan is a participative approach towards imparting high-quality education. Considering the vision and mission, strategic objectives are finalized by the members of the IQAC committee to improve the quality and quantity of research, holistic development of students, engagement with industry and alumni, and enhance the student experience.

The first step towards achieving the goals is to strengthen the planning of academic and administrative activities throughout the academic year. The Academic Council members meet at regular intervals to discuss and devise planning for teaching, learning and Research. The heads of the department and section in charges assist in implementation and execution of the plan. The status is reviewed periodically and monitored by IQAC to ensure the quality and quantity of teaching-learning, research and holistic development of students.

As a part of NBA and NAAC accreditation institute is following outcome based education stressing on graduate attributes.

Department Advisory Boards(DAB) work towards enriching the curriculum by identifying gaps and accordingly design various activities for strengthening the Academic Administration.

All major processes are presented before the College Development Committee (CDC), IQAC, and DAB. The members of CDC, IQAC and DAB meet periodically to discuss and decide further implementation for achieving quantifiable targets. Various committees, formed with the Heads of the departments and senior faculty members, closely work towards the implementation of all policies.

Students mentoring process essentially help in understanding students and help in their professional growth. Cocurricular and extra-curricular activities help students in developing their overall personality. AICTE/ISTE approved STTPs for faculty members, workshops/training from industry experts help teachers and students in upgrading their knowledge and skills.

6.ANNEXURE

1.Metrics Level Deviations

Metric I	D Sub (Questions an	d Answers	before and	after DVV	Verification	1	
1.2.1	Num	ber of Cert	ificate/Val	ue added co	ourses offer	red and on	line courses of MOOCs, SWAYAM,	
	NPT]	NPTEL etc. (where the students of the institution have enrolled and successfully completed						
	durin	ng the last f	ive years)					
					1000			
				Verification				
1 2 2	D			erification:		111	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
1.2.2							ourses and also completed online	
	five y		Cs, SWAIA	AM, NPIEI	L eic. as ago	unsi ine ioi	tal number of students during the las	
	jive y	eurs						
	1.3	2.2.1. Numb	er of stude	nts enrolled	in Certifica	ite/ Value a	dded courses and also completed	
							the total number of students during th	
		ve years		,				
		Answer be	fore DVV V	Verification	•			
		2021-22	2020-21	2019-20	2018-19	2017-18		
							_	
		281	604	827	909	509		
				·			_	
		Answer Af	ter DVV V	erification:			_	
		2021-22	2020-21	2019-20	2018-19	2017-18		
		21.6	407	600	100	170	_	
		316	487	603	188	172		
1.3.2		_		lertaking p	roject worl	k/field wor	k/ internships (Data for the latest	
	comp	leted acade	emic year)					
	1 1	3 2 1 Numl	or of stude	ants undert	aking proj	oct work/fi	ield work / internships	
	1					cct work/ii	icia work / internships	
		Answer before DVV Verification: 1852 Answer after DVV Verification: 1796						
		Amower area D v v verification. 1770						
	Re	Remark: Value updated as per attachments in HEI Clarification.						
1.4.1	1	Institution obtains feedback on the academic performance and ambience of the institution from						
		various stakeholders, such as Students, Teachers, Employers, Alumni etc. and action taken report						
	on th	on the feedback is made available on institutional website						
	comn	Answer before DVV Verification : A. Feedback collected, analysed, action taken& communicated to the relevant bodies and feedback hosted on the institutional website						
	Collin	Answer After DVV Verification: A. Feedback collected, analysed, action taken&						
	communicated to the relevant bodies and feedback hosted on the institutional website							
2.4.1							uring the last five years	
	- 51 60			"9"		- Foots at		
	2.4	4.1.1. Numl	per of sanc	tioned post	s year wise	during the	e last five years	

Page 93/99 24-06-2023 01:44:03

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
99	84	78	105	106

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
99	84	78	105	106

- 3.1.1 Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)
 - 3.1.1.1 Total Grants from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
0	3.92	3.43	4.5	3.6

Answer After DVV Verification:

Ī	2021-22	2020-21	2019-20	2018-19	2017-18
	0	3.92	2.3	4.5	2.38

- Number of workshops/seminars/conferences including on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship conducted during the last five years
 - 3.2.2.1. Total number of workshops/seminars/conferences including programs conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year wise during last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
13	10	13	9	5

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
19	17	15	13	7

- Number of books and chapters in edited volumes/books published and papers published in national/international conference proceedings per teacher during last five years
 - 3.3.2.1. Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year wise during last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
44	38	25	21	15

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
44	38	25	21	15

Number of extension and outreach programs conducted by the institution through organized forums including NSS/NCC with involvement of community during the last five years.

3.4.3.1. Number of extension and outreach Programs conducted in collaboration with industry, community, and Non- Government Organizations through NSS/ NCC etc., year wise during the last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
35	53	46	39	31

Answer After DVV Verification:

	2020-21		2018-19	2017-18
12	12	15	15	11

Number of functional MoUs/linkages with institutions/industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the last five years.

Answer before DVV Verification : 34 Answer After DVV Verification :34

4.1.2 Percentage of expenditure for infrastructure development and augmentation excluding salary during the last five years

4.1.2.1. Expenditure for infrastructure development and augmentation, excluding salary year wise during last five years (INR in lakhs)

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
39.13	9.50	24.54	87.35	128.80

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
39.13	9.50	24.54	87.35	128.80

4.3.2 Student – Computer ratio (Data for the latest completed academic year)

4.3.2.1. Number of computers available for students usage during the latest completed academic year:

Answer before DVV Verification: 610 Answer after DVV Verification: 610

- 4.4.1 Percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, during the last five years (INR in Lakhs)
 - 4.4.1.1. Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component year wise during the last five years (INR in lakhs)

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
135.06	51.98	260.58	317.19	239.75

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
135.06	51.98	260.58	317.19	239.75

- Percentage of students benefited by scholarships and freeships provided by the institution, government and non-government bodies, industries, individuals, philanthropists during the last five years
 - 5.1.1.1. Number of students benefited by scholarships and freeships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
585	537	488	475	300

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
585	537	488	475	300

- 5.1.3 Percentage of students benefitted by guidance for competitive examinations and career counseling offered by the Institution during the last five years
 - 5.1.3.1. Number of students benefitted by guidance for competitive examinations and career counselling offered by the institution year wise during last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
703	1094	1267	618	525

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
703	1094	1267	618	525

- Number of awards/medals for outstanding performance in sports/ cultural activities at University / state/ national / international level (award for a team event should be counted as one) during the last five years
 - 5.3.1.1. 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 wise during the last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
10	7	14	10	10

Answer After DVV Verification:

	2020-21		2018-19	2017-18
7	5	11	9	8

- Average number of sports and cultural programs in which students of the Institution participated during last five years (organised by the institution/other institutions)
 - 5.3.2.1. Number of sports and cultural programs in which students of the Institution participated year wise during last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
36	8	63	45	67

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
17	7	57	45	9

- 6.3.2 Percentage of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the last five years
 - 6.3.2.1. Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies year wise during

the last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
8	5	14	23	29

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
8	5	14	23	29

- 6.3.3 Percentage of teaching and non-teaching staff participating in Faculty development Programmes (FDP), Management Development Programmes (MDPs) professional development /administrative training programs during the last five years
 - 6.3.3.1. Total number of teaching and non-teaching staff participating in Faculty development Programmes (FDP), *Management Development Programmes (MDPs)* professional development /administrative training programs during the last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
79	77	81	83	75

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
79	77	81	83	75

6.3.3.2. Number of non-teaching staff year wise during the last five years

Answer before DVV Verification:

2021-22 2020-21	2019-20	2018-19	2017-18
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2.Extended Profile Deviations

Extended Questions

ID

ı	1 1	NT 1 6 4 1 4 1 1 4 60	
ı	1.1	Number of students year wise during the last five year	ars

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
1852	1723	1683	1799	1753

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
1852	1723	1683	1799	1753

2.2 Number of teaching staff / full time teachers year wise during the last five years

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
83	84	80	103	106

Answer After DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
77	80	78	97	98

24-06-2023 01:44:04