Shri Guru Gobind Singhji Institute of Engineering and Technology,

Vishnupuri, Nanded -431606 (MS) [India]

(Government Owned Autonomous Institute)

Annual Report 2019-20

Contents

1. Institute's Basic information

Established in 1981, **Shri Guru Gobind Singhji Institute of Engineering and Technology (SGGSIET)**, **Nanded** has grown to the level of being recognized as a promising leader in the area of technical education, research and technology transfer.

Started with just two undergraduate programs in 1981, it now offers 10 undergraduate and 10 postgraduate programs. It also offers Ph. D. program under Quality Improvement Program of Ministry of HRD, Government of India, New Delhi. Pragmatic Management of the Institute has taken proactive steps to depute faculty to various IITs and NITs for higher studies. The faculty not only acquired higher qualifications but also brought back along with them the culture of these premier organizations. SGGSIET is rich in highly qualified faculty with more than 50% of the regular faculty being Ph.D. holders.

In less than 25 years of its inception, the Institute has made a mark in technical education and quality research which got endorsed by a third-party survey constituted by Government of Maharashtra and headed by Dr. F. C. Kohli, Chairman, TCS. Through that survey conducted in 2004, SGGSIET, Nanded got identified as an Institute which can be raised to the level of Centre of Excellence along with other well-established institutes like COE, Pune, VJTI, Mumbai, and ICT, Mumbai. Institute was ranked 89th out of the top 100 engineering institutes in India in 2015 (The National Institutional Ranking Framework (NIRF) is an initiative of Human Resource Development. This framework outlines a methodology to rank institutions including IITs and NITs across the country). The Institute has state of the art equipment and machinery for teaching as well as research/consultancy services. Faculty have contributed for laboratory development through proposals to various funding agencies like AICTE, DST, BARC, NRB, etc. other than the funding obtained under two phases of TEQIP and from Government of Maharashtra. Most of the laboratories are kept open for the students 24 × 7. Four of the institute's departments have DST-FIST sponsored laboratories. Faculty research abilities have led to the establishment of a "Centre of Excellence" in the area of Signal and Image Processing (S&IP) under TEQIP.

The Institute has a very progressive and pragmatic approach in providing its services to all its stakeholders. We at SGGSIET believe in self-learning of students. It is always our endeavor to provide encouraging environment for students' learning. The Institute has collaborations with several premier institutes (including foreign universities) and industries through which opportunities like internships, credit transfers, industry relevant projects, etc are made available for the students. The students have also taken due advantage and performed par excellence. It is exhibited by their placement either in terms of the numbers or their positions at various renowned industries, acquiring seats for higher education (so far, our students have got AIR 1 four times in GATE), establishing their own ventures (including MNCs) and even selection in administrative & engineering services. Our students have exhibited their overall development through participation in socially relevant projects and activities. They have even grabbed opportunities of serving the local administration/government agencies through a process of competitive bidding also. The research culture of the institute has been proven through publication in thousands of research contributions with good citation record in peer reviewed prestigious national/international journals and reputed international conferences. Many faculties are reviewers for international journals. Several books have also been published by the faculty. Patenting is becoming a promising feature of the institute basically because student projects are also getting converted into patents. Establishment of Innovation Laboratory and participation of roughly 15% of the total student strength in various Innovation projects is a key feature of the institution.

Academic Programs (Present Status):

Under Graduate Programs (UG): Presently the institute offers ten (10) undergraduate programs namely, Civil Engineering (1984, 60), Chemical Engineering (2009, 30), Computer Science and Engineering (1986, 120), Electrical Engineering (2011, 30), Electronics and Telecommunication Engineering (1981, 120), Information Technology (2000, 60), Instrumentation Engineering (1981, 40), Mechanical Engineering (2012, 60), Production Engineering (1984, 60), and Textile Technology (1987, 30), (Total sanctioned intake: 610)

Post Graduate Programs (PG): The institute offers ten (10) postgraduate programs namely, Mech. CAD/CAM (1996, 25), Civil Water Management Engineering (1991, 18), Computer Networks and Information Security (CN&IS) (2011, 18), Electronics Engineering (1987, 30), Information Technology (2011, 18), Instrumentation Engineering (1987, 18), Mechanical – Product Life Cycle Management (2009, 18), Structural Engineering (2015, 18) Textile Technology (2016, 15) and VLSI and Embedded System (2015, 18), (Total sanctioned intake: 196)

Ph.D. Program (Research Program):

Institute is recognized as a research center by SRTM University, Nanded for doctoral program, as well as by Government of India and Q.I.P. Programme scholarships are available to the full time research scholars, Center of Excellence in signal and image processing, Technical Education Quality Improvement Program of the Ministry of HRD, Government of India, Visvesvaraya Ph.D. Scheme of Department of Electronics and Information Technology, Govt. of India, Sponsored and Joint Research projects with various organizations such as BRNS and NRB etc. As of now, number of ongoing Ph.D. scholars is 193 and number of Ph.D. awarded is 264.

Focus Research Areas:

- **Chemical Engineering**: Separation technology, Energy and environmental Engineering, Heat networking, Process intensification.
- **Civil Engineering:** Water Resources Systems**,** Environmental Engineering, GIS Application for Water Resource Management, Earth Sciences, Rehabilitation of Structures.
- **Computer Science and Engineering:** Pattern Classification & Image Processing, Wireless, Fuzzy & Neural Networks, Data Mining, Machine Vision.
- **Electrical Engineering:** Smart Grid, Power Quality Analysis, Digital Protection of Transmission lines.
- **Electronics & Telecommunication Engineering:** Digital signal and image processing, Pattern recognition and computer vision, VLSI and Embedded systems.
- **Information Technology:** Digital Image processing, Data mining and Pattern Recognition, Wireless Sensor Networks and QoS
- **Instrumentation Engineering:** Digital Signal and Image Processing, Advance Process Control, Control Systems, Intelligent Control, Biomedical Instrumentation, Agricultural Instrumentation.
- **Mechanical Engineering:** Mechatronics, Renewable Energy and Applications, Product Lifecycle Management
- **Production Engineering:** Analysis of self healing composites, Sheet metal forming, Micro manufacturing and Non-traditional manufacturing processes, Quality and reliability engineering, Customization of CAD CAM Software, Solar energy applications for Agriculture.
- **Textile Technology:** Spinning, Weaving, Non-woven, geo-textile, fiber spinning and productivity analysis.

Centre of Excellence in Signal and Image Processing:

As a part of an ambitious plan, Government of India selected 30 best institutions from all over India through competitive proposals for establishing Centers of Excellence for collaborative and multidisciplinary research within specific thematic areas of regional or national importance. Indian government had supported the Centre of Excellence (CoE) with research funding of 50 million Indian Rupees under the World Bank Assisted Technical Education Quality Improvement Program of India (TEQIP)-II. Based on competitive merit, our institute was selected for establishing CoE in Signal and Image Processing for carrying out focused research on specific areas such as Biomedical Signal and Image Processing, Biometrics, Diabetic Retinopathy, Video Surveillance, Video Processing, Speech Processing, etc.

More than 20 faculty from various departments of engineering and basic sciences of our institute are actively engaged with the CoE. Members of CoE have strong publications numbering more than 1200 in peer reviewed journals and conferences with cumulative citation index of 5500. Presently more than 100 scholars are registered for Doctoral program. The Centre has established a state-of-the-art Signal and Image Processing Laboratory. Objectives of the CoE include:

- Creation of technologies that can be commercially exploited by industries
- Tapping the top-class talent to carryout frontier research in Signal and Image Processing
- Developing high caliber manpower and entrepreneurs in the field
- Training of R&D manpower for industry

Center for VLSI Design and Verification- Supported by Mentor (a Siemens Company):

VLSI center was established with an objective of empowering the students and research scholars for electronic circuit design and its implementation on chips through the requisite knowledge and skills. The laboratory is well equipped with almost all the software required for VLSI Design (such as all tools of Mentor Graphics: HEP Category I, II; Cadence Research bundle, Tanner Tools, Xilinx ISE, Microwind). Use of open source software for SPICE such as NG Spice, etc. are also promoted in the laboratory. Other notable facilities include SPARTAN-II, Vertex-5, Xilinx video processing kit, etc.

A graduate program with specialization in VLSI and Embedded systems has also been launched. The curriculum is carefully designed to the industrial requirements with the help of industrial contacts and Alumni working with organizations like Applied Micro, Texas Instruments, Intel, etc. The Center promotes the students to engage in real life problems and therefore has been a notable entity of our Institute.

Centre of Excellence in Metal Forming:

This centre has been set up for imparting training and to carry out research in cutting edge technologies in the area of metal forming encompassing focus on bulk forming including forging, rolling, extrusion, wire drawing, tube drawing, roll forming, and sheet metal forming including press working operations such as bending, deep drawing, stretching and combined mode of forming of sheet metal parts and issues related to spring back and blank hold force and draw bead design, material formability property evaluation and characterization, design of forming equipment's, tooling and fabrication techniques, extending to micro forming and forming non-metallic materials such as composites and acrylic.

Latest Manufacturing Simulation Kit added in this center includes casting, bulk metal forming, sheet metal forming, heat treatment; CNC machining along with static, dynamic and crash analysis tools provide additional strength. The die sinking EDM, Wire Cut EDM, Electro Chemical Machining set up, Hass make CNC Machining center and M. Tab CNC Turning center, CMM Machine and rapid proto typing machine, incremental forming set up provides back up for tooling design efforts.

CAD/CAM:

Post graduate program in Mechanical CAD/CAM was started in year 1996 with intake of 18 which was later increased to 25 in 2004. Most of the students admitted to the programme are GATE qualified. State of art facility in the field of CAD/CAM is available in the department. The labs are equipped with EDM, wire EDM, ECM, Micro EDM, rapid prototyping, CNC lathe, CNC milling machines etc. CAD lab of the department is equipped with high end hardware and software's as NX 8.5, ANSYS 15 (Research version), CATIA etc. Most of the students carry out their one-year projects in Mahindra and Mahindra Ltd., Larsen and Toubro, Whirlpool, Greaves Cotton, BAJAJ Auto, 3D PLM Ltd., IIT Bombay, VNIT Nagpur, RRCAT Indore, IPR Ahmedabad, Thermax Ltd., VRDE Nagar, Bosch Ltd. Nashik etc., Many of them got placement through the internship. The programme is well supported by adjunct faculties from different industries.

Product Lifecycle Management (PLM):

We, at SGGSIET-Nanded, look at PLM as a philosophy strongly based on lean thinking with its CAD based Information Management Tool being most suitable for making the New Product Development process lean. With our engagement in the area of CAD/CAM since late 80s, we could start a graduate program in CAD/CAM in 1996 and subsequently we could get involved in the latest and futuristic area of PLM. Graduate program in PLM was started in 2009. Our alumni working in the area of PLM, highly placed industrial personnel working with Siemens and Dassault, and a few international faculties helped us frame the curriculum. In the very first year of its inception, the graduate program got a boom due to inclusion by Siemens' 'GO PLM' program through which we could acquire 20 licenses of "Teamcenter Unified" and "Community Collaboration". On the go, we acquired various other software namely Technomatix, Delmia, Windchill, etc to provide the students with the right environment and choices. Requisite hardware is also in place.

We have very good links with several leading industries of India who support us for expert lectures, adjunct faculty, curriculum design, internship and placement. Following is the not all-inclusive list of industries who support us: Siemens Industry Software Ltd., Siemens Global Delivery Centre, Mahindra and Mahindra Ltd., Tata Motors, Whirlpool, Grieves Cotton Ltd., etc. Mostly, second year students of the graduate program invariably carry out internship for one full year at the industries thereby helping us have strong industry bonds. Generally, the graduates are absorbed at the places of their internship.

Technology Innovation and Entrepreneurship Centre:

"Initiate-Innovate-Implement" principle is being practiced at SGGSIET through many engineering teams for innovation development. The teams are of interdisciplinary nature. Student members get involved in design and development of new product, implement new ideas and features from ground up – no dealing with legacy! Presently students are working on various interdisciplinary projects like –Smart Quad-copter, Bus Tracking System, Energy Generation, Water Purification System, RC Plane, RFID based systems, also providing solutions to local industries and Municipal Corporation.

We leverage open source technologies in all these areas and add incremental value on top of them. The patents are also filed based on different innovative projects carried out by the students. During the academic year 2013 to 2015, twenty patents have been filed by the institute, one international patent awarded. The facility created in the institute helps students in continuously improving their technical knowledge as well as improving overall creativity performance. The Institute is open to provide the facility to incubate the new technology-based entrepreneurs.

Features of Institute:

- One of the very few State Government aided Institutes in the State to attain Autonomous status in the year 2004. Autonomous status was extended twice. Recently UGC has extended Autonomous status up to 2021-22.
- Many programs accredited by NBA some UG and PG programs accredited 4 times. Current Accreditation status four UG Programs and two PG programs accredited by NBA (20182021). Application for other programs and NAAC is in progress.
- Merit based Admissions `through State Level Centralized Admission Process.
- Good placement record. Total number of students selected on-campus (2014-15: 332, 2015-16: 372 and 2016-17: 350, 2017-18: 224, 2018-19: 253, 2019-20: 277)
- Special facilities for research in the areas of cutting-edge technologies.
- Industry Sponsored Laboratories and Centers.
- Strict Academic discipline and adherence to academic calendar. Continuous assessment, 100% classes, on-time exams and results.
- Engineering exploration Laboratory: Introduced from AY 2018-19 to FY all branches.
- Institute was selected through National level competitive bidding for financial assistance of World Bank Assisted programs: TEQIP-I, TEQIP-II, Center of Excellence in Signal and Image Processing and TEQIP-III and also presently, the Institute is mentoring College of Technology, Pantnagar under TEQIP-III.
- Institute executed 24 MoUs with Industries and 17 MoUs with Institute/Research Organization (National/International) in last 5 years.
- Patents (Filed – 31, Granted – 02)
- Research Symposium to nurture a research attitude and motivation for higher studies.
- Creation of new laboratories and Industry sponsored laboratories- To provide the new and advanced practical environment to implement the new ideas.
- Adjunct Faculty from Industries and reputed Institutes
- Special initiatives for career guidance and competitive examination like GATE/UPSC
- International Research Collaboration: UTP Malaysia, City College, Univ of New York.
- Institute offers various Research Schemes for doing Ph.D. with fellowship under QIP-Ministry of HRD, Visvesvaraya Ph.D. Scheme - DEiT, TEQIP, Centre of Excellence, Maulana Azad National Fellowship and special Institute research scholar scheme.
- Choice Based Credit System (CBCS) – allows flexibility in teaching-learning process
- Liberal Learning Scheme (LLS) – to nurture the hobbies of students
- Credit Transfer Scheme (CTS: VJTI, COEP, WCE and SPC) –students to study one semester in other reputed Institute (2013-14: 1, 2014-15: 23, 2015-16: 6 and 2016-17: 20)
- Certificate courses on Foreign languages (Spanish - 2014-15: 82, 2015-16: 31 and 2016-17: 80, French -2014-15: 75, 2015-16: 30 and 2016-17: 47 and German- 2016-17: 33)
- Pragyaa – National Level TechFest – to demonstrate technical and administrative skills – from last thirteen years institute is hosting this event with around 3500 participation.
- Robotics for Next Generation (RNXG) – platform to integrate inter disciplinary projects
- “Utsav” Annual Cultural Festival – to demonstrate their artistic skills
- Drishti – Institute Magazine – to promote reading and writing culture
- Zenith - Institute Sports Event – inspiration for participation in sports from technical institutes across the state (Started in academic year 2015-16)
- UPSC Chapter – platform to prepare for competitive examinations – started in 2010 and @100 students are member of this chapter (through rigorous selection process)

- Scholarships support through Alumni – to encourage competition and social awareness (Sadbhavana Scholarship, Ashiyana Scholarship).
- Graduation Day (Student's Felicitation and Farewell Function) - Director's Gold medal and Certificate of Academic Excellence for Institute Topper, Gold, Silver and Bronze medal for Toppers in respective course.

Facilities:

- Eco-friendly green campus spread over 46 acres in Vishnupuri, Nanded.
- Very good infrastructure facilities, equipment for overall academic development.
- Smart Classroom – to provide the best and conducive environment for teaching and learning and also to encourage self-learning. All the classrooms equipped with Projectors, PA systems with set-top boxes.
- Fully Wi-Fi connected campus – to access the various resources of information and knowledge at anywhere anytime.
- Sports facility and AC Gymnasium.
- 24x7 laboratories are open – to accelerate and experience learning process through practicals
- (TIEC) Technology Innovation and Entrepreneurship Centre – to nurture the technical ideas and sharpen their minds towards entrepreneurship.
- The institute central library has large collection of 54000 library books and 16000 book bank books of Text and Reference books – Open for more than 16 Hours per day.
- Boys and Girls Hostels: Well-maintained Boys and Girls Hostels with a capacity each approx. 650 each, Limited Faculty quarters, married Ph. D. scholars' accommodation.

New initiatives:

1. 3-week induction program as suggested by AICTE – Based on Jeevan Vidya (Universal Human Values).
2. Common Courses such as Business analytics, Project Management, English for technical Paper writing and Research Methodology and IPR at PG level- Compulsory for all branches.
3. Curricular reforms – CBCS, Open electives- inter and intra departmental-interdisciplinary, Foreign languages, etc.
4. Examination Reforms – (20 marks in semester assessment based on class tests, quizzes, assignments etc.), 30 Marks Mid Semester examination and 50 Marks End semester Examination.
5. Six months of Industrial Internships for UG BTech students, One year for M Tech PG students and as per the need for six months/one year to Industries and research Organizations for Ph. D. students.
6. Financial Support to student for presenting papers to recognized international Conferences once in their duration of program (4 Years for B Tech, 2 Years for M Tech and 3 Years for Ph.D.) to the tune of 50% from institute funds.
7. Financial Support to Faculty members – for presenting papers in international conferences (once in three years), Seed money for research, Purchase of Laptop, stationary and consumables etc.
8. MoU with industry associations such as CMIA (MAGIC), Aurangabad and NIMA, Nashik for project internships and incubation.
9. MHRD's Institute Innovation Council. Participation and prizes in Smart India Hackathons.
10. More than 50 Experienced Adjunct faculty from Industries and academia supporting strengthening of academics etc.

2. Vision and Mission

Vision statement:

Education of Human Power for Technological Excellence

Mission statements:

- Dissemination of knowledge by offering world class education
- Right to information for all stake holders
- Promotion of sustainable industrialization to development of appropriate technologies
- Continuing education programs for reengineering of regional socio-economic system in the light of dynamic, global technological changes
- Contribution to national wealth through innovation

3. Information regarding affiliating university

- 10 Undergraduate programmes, 10 Postgraduate programmes, and Ph.D. programme are affiliated to **Swami Ramanand Teerth Marathwada University (SRTMU), Nanded**

4. Information regarding academic autonomy (from 2004)

- Institute became autonomous vide Govt of Maharashtra Resolution: 22/July/2002, 31/3/2004 and UGC notification vide F13-1/2004(Desk-AC) dated 24/02/2005.
- SRTMU notification Estt/3/2005-06/2270-2453/ dated 30/07/2005
- Extension of autonomy was first granted in 2011 – Vide UGC notification: F22-1/2011 (AC) dated 03/11/2011 and SRTMu Notification dated Estt/3/ 2011-12/4229/ dated 09/12/2011
- Extension of autonomy was further granted for the period of (2018-2023) vide UGC notification no: F22-1/2017 (AC) dated 13/10/2017 and SRTMU Notification: Acad./Affl.-03/Notification/2017-18/2900/dt. 15/03/2018

Institute adopted fixed credit system since 2004. Statistical relative grading is used for grading students with continuous evaluation. In the past 16 years, we shifted from original 100 marks single examination at the end of semester to 20-20-60 system for three years and then 30-70 for almost 11 years and now i.e. since 2018 we further shifted to a pattern of In-Semester Evaluation (ISE), Mid-Semester Evaluation (MSE) and End-Semester Evaluation (ESE) with distribution of marks as 10+30+10+50 (ISE1+MSE+ISE2+ESE). Choice based credit system was adopted since 2013 with many Institute level and Department level electives. We introduced liberal learning system by offering courses like foreign languages, music, arts etc.

From 2018, we changed the curriculum as per the guidelines received through AICTE model curriculum and several reforms are introduced Engineering Exploration and Project Based Learning (PBL) to provide a scope to demonstrate creativity in the students. This helps in inculcating habit of thinking on practical solutions on real life problems. Engineering Exploration subject is introduced at first year and is based on project-based learning with glimpses of engineering systems from all disciplines.

We have also adopted Credit Transfer Scheme (CTS) for a semester from reputed institutes like COEP, VJTI, SP College of Engg, Walchand College of Engineering, etc. Also,the credits transfer scheme is available for courses from MOOCS such as NPTEL. Such scheme will be made available to courses from Swayam, Coursera, edX etc from coming academic year.

Three internships have been made available to students with one in each of the summer vacations. During summer vacations of first year, students can go for social internship. In summer vacations of second year and third year students join for internships in Industries or Research Organization. In final year students are provided with opportunities to work in Industries, research organizations or highly reputed academic Institutions.

We have adopted an Outcome Based Education (OBE) System and hence we design curriculum and implement reforms in examination and evaluation system to support this system. We regularly perform Academic Audit of our teaching-learning process through senior faculty from IITs, NITs or highly reputed academic Institutions for evaluation of quality. This helps to introduce reforms in teaching-learning and evaluation process for improvement in quality.

To support slow learners, we conduct summer term during summer vacations every year. This facility provides extra time to slow learners and improves the transition rate.

Before students go on vacation after every term we prepare and circulate Academic Calendar for next semester. This helps students and faculty for their planning. Since the Institution has become autonomous, we strictly follow the calendar in each semester.

5. Governance Structure :

PRESENT COMPOSITION – BOARD OF MANAGEMENT

NAME	TITLE
Vacant (To be appointed by Government of Maharashtra)	Chairman
Vacant (To be appointed by Government of Maharashtra)	Member
Vacant (To be appointed by Government of Maharashtra)	Member
Dr. A. Venugopal Reddy, Vice Chancellor, JNTU Hyderabad	Member, UGC Nominee
Prof. V. M. Gadre, Professor of Electrical Engineering, IIT Bombay	Member (Eminent Academician)
Prof. L. M. Waghmare- Dean, Faculty of Science and Engineering and Nominee of the University (SRTMU, Nanded)	Member (Affiliating University Nominee)
Principal Secretary, Higher and Technical Education, Government of Maharashtra, Mantralaya, Mumbai	Member
Dr. Abhay Wagh, Director, Directorate of Technical Education, 3, Mahapalika Marg, Mumbai 400001	Invitee
Mr. Satish Tidke, Deputy Secretary, Higher and Technical Education,	Invitee

Government of Maharashtra, Mantralaya, Mumbai	
Dr. Yashwant Joshi Director, SGGS Institute of Engineering and Technology, Vishnupuri, Nanded	Member & Secretary (Ex officio)

(GOVERNANCE)

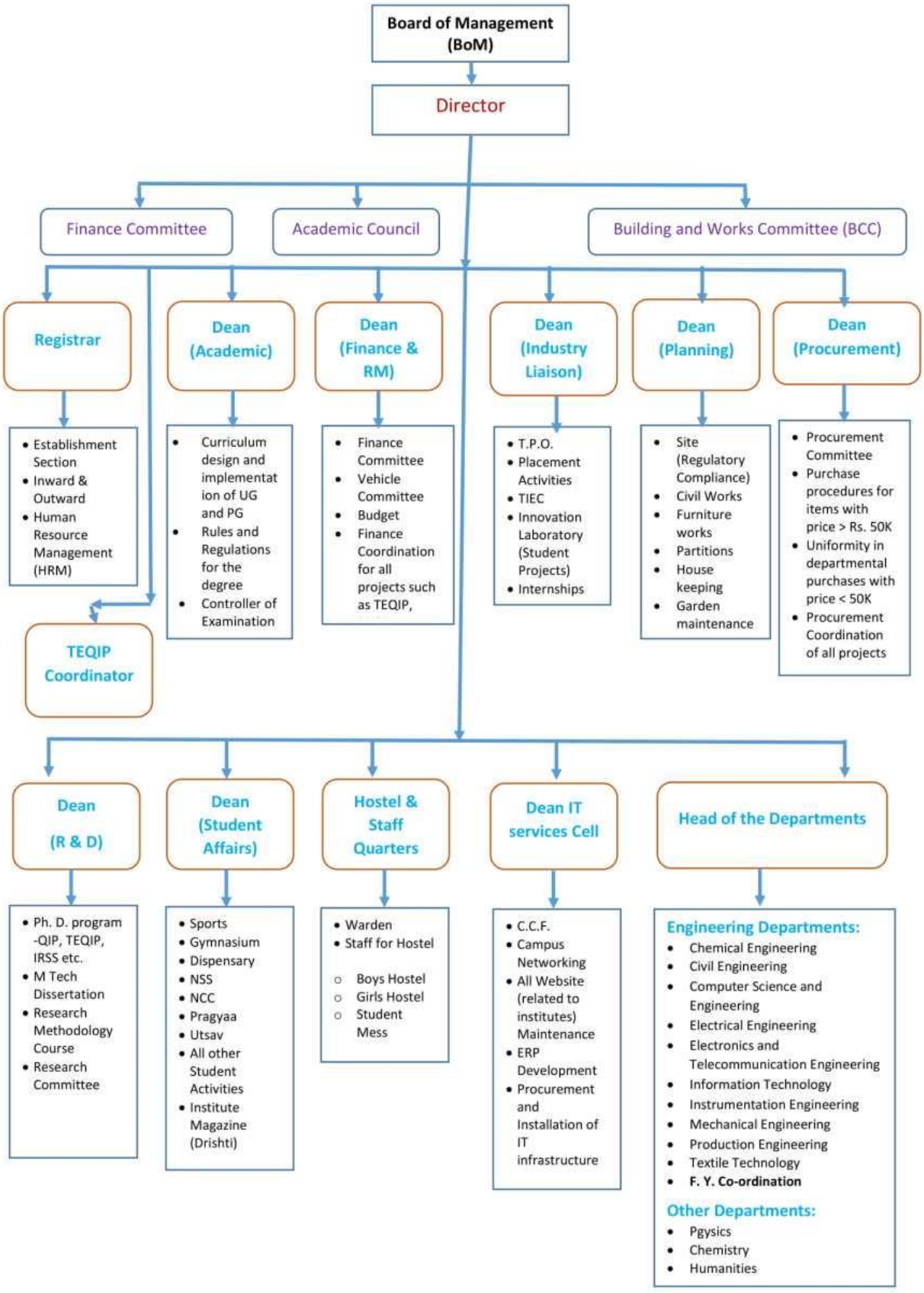
- Defined Rules and Procedure

  - Follows the UGC/AICTE & Govt. of Maharashtra norms and standards.
  - Maharashtra Civil Services Rules (MCSR) 1981 are applicable to all regular employees.
  - The appointment of employees made by following an open and transparent selection procedure
    1. Issue of attractive advertisement for the posts at National / State-levels;
    2. Issue of rolling announcement of vacancies on the Institute's web site;
    3. Adherence to State's Reservation Policy for weaker sections of society;
    4. Setting up Screening Committees to identify candidates to be interviewed;
    5. Setting up Selection Committees to interview the identified candidates;
    6. Placing the Selection Committee Reports before the BOM, DTE and Affiliating University for approval;
    7. Issue of Appointment Letters by Director to selected candidates.
  - Promotions
    1. Faculty : Career Advancement Schemes (CAS) of UGC/AICTE is implemented from time to time.
    2. Staff : Appropriate time bound promotions as Govt. of Maharashtra Norms

- Committees

  1. Antiragging committee
  2. Antiragging squad
  3. Discipline Committee
  4. SC/ST Committee
  5. Grievance Committee
  6. Sexual Harassment Committee

6. Organization structure :



Dean and Administrators:

Sr. No.	NAME	DESIGNATION
1.	Dr. R. S. Holambe	Dean (Academics)
2.	Mr. S. M. Nilangekar	Registrar
3.	Dr. S. N.Talbar	Dean (Students Affairs)
4.	Dr. R. R. Manthalkar	Dean (R&D)
5.	Dr. A. B. Gonde	COE (Controller of Examination)
6.	Dr. A. V. Nandedkar	TEQIP Coordinator
7.	Dr. S. S. Gajre	Dean (Industry Liaison)
8.	Prof. P. S. Nalwade	Dean (IT services)
9.	Prof. P. B. Ullagadi	Dean (Planning)
10.	Prof V. B. Tungikar	Dean (Procurement)
11.	Prof. B.M.Patre	Dean (Finance and Resource Management)

7. Academic Calendar :

Shri Guru Gobind Singhji Institute of Engineering & Technology, Vishnupuri, Nanded (M.S.) PIN 431606 INDIA
(Govt. Aided Autonomous Institute)
Academic Calendar for Semester-I, **First Year UG and PG** Academic Year 2019-2020

Academic Activities	*Date(s)*
Start of Classes	August 1, 2019
Induction Program for First Year UG students	August 6-30, 2019
Welcome program for FY PG students	August 19, 2019
Feedback of students before Mid-term	September 9-14, 2019
Mid-Term Examination	September 16-20, 2019
Mid-term evaluation of Project/Dissertation/Seminars UG/PG students	September 23-28, 2019
Internal Academic Audit	September 23-28, 2019
Last date to show Mid-Term answer sheets to students and submit to Examination Section	October 4, 2019
Last date for evaluation of laboratory courses	November 15, 2019
Feedback of students before End-term	November 11-15, 2019
Classes end (last date to show end-term continuous assessment marks to students)	November 15, 2019
End-Term Theory Examination	**November 18-30, 2019**
End-term evaluation of Project/Dissertation of UG/PG students	December 2-4, 2019
Assessment of papers for End-Term examination	Nov. 19 - Dec. 4, 2019
Result (Meeting of Grade moderation committee, display of grades, and submitting result to Examination section)	December 5, 2019
Receipt of application form for showing End-Term answer-sheet(s) to students	December 9-10, 2019
Showing of answer-sheet(s) to students	December 12, 2019
Start of next semester	December 16, 2019

List of Holidays		
Date(s)	**Day(s)**	**Holiday**
Aug 12, 2019	Monday	Bakari Eid
Aug 15, 2019	Thursday	Independence Day
Sept 02, 2019	Monday	Ganesh Chaturthi
Sept10, 2019	Tuesday	Muharram
Sept 17, 2019	Tuesday	University Foundation Day
Oct 02, 2019	Wednesday	Gandhi Jayanti
Oct.08, 2019	Thursday	Vijayadashmi
Oct.28, 2019	Monday	Balipraptipada
Nov.12, 2019	Tuesday	Gurunanak Jayanti

Note: All Heads and Faculty are requested to engage additional classes of First Year UG and PG on Saturdays for completion of contents of syllabus up to Midterm.

	July 2019					August 2019					September 2019					October 2019					November 2019					December 2019				
Monday	1	8	15	22	29		5	12	19	26	2	9	16	23	30		7	14	21	28		4	11	18	25		2	9	16	23	30
Tuesday	2	9	16	23	30		6	13	20	27	3	10	17	24		1	8	15	22	29		5	12	19	26		3	10	17	24	
Wednesday	3	10	17	24	31		7	14	21	28	4	11	18	25		2	9	16	23	30		6	13	20	27		4	11	18	25	
Thursday	4	11	18	25		1	8	15	22	29	5	12	19	26		3	10	17	24	31		7	14	21	28		5	12	19	26	
Friday	5	12	19	26		2	9	16	23	30	6	13	20	27		4	11	18	25		1	8	15	22	29		6	13	20	27	
Saturday	6	13	20	27		3	10	17	24	31	7	14	21	28		5	12	19	26		2	9	16	23	30		7	14	21	28	
Sunday	7	14	21	28		4	11	18	25		1	8	15	22	29		6	13	20	27		3	10	17	24		1	8	15	22	29

Legend:	Mid-term	End-term	Result	Term-II starts	Holidays

Controller of Examinations
Controller of Examinations
SGGSIE&T, Nanded.

Dean (PG Studies)
S.G.G.S.I.E.&T Nanded

Dean (Academic)
Dean (Academics)
SGGS Institute of Engineering & Technology
Vishnupuri, Nanded

Director
Director
S.G.G.S.I.E. & T., Nanded

Shri Guru Gobind Singhji Institute of Engineering and Technology, Vishnupuri, Nanded-431606

Academic Calendar for Semester-II (Academic year 2019-20)

Academic Activities	Dates
Semester Begins (Commencement of Classes)	**16 December 2019**
Submission of forms and payment of fees for Re-registration and Re-appearing students to examination section Last date (with late fees)	December 16 – 21, 2019 December 28, 2019
Selection of departmental elective(s), institute open elective(s), if any.	December 26, 2019
Display of list of Reregistered and Reappearing Students by Students' Section / Examination at examination section notice boards and concerned departments	December 30, 2019
Alumni Meet 2020 and Industry Interaction	**December 21-22, 2019**
Feedback of students Before Midterm	January 27-31, 2020
Mid Term Examination	**February 10-15, 2020**
Zenith (Feb. 22-24, 2019), Pragyaa and Utsav (Feb. 25-27, 2019)	**February 22-27, 2020**
Showing of Mid Term answer sheets to Students and submitting to Exam. Section	5 March 2020
Feedback of students Before Endterm	13 - 17 April 2020
Classes End	16 April 2020
End Term Theory Examination	**April 20 – 30, 2020**
CAP duration for End Term Examination	**April 20, 2020– May 9, 2020**
Result (Display of Final Grades in the Departments and Submission hard and soft copy of Grades to Exam Section)	May 11, 2020
Receipt of Application form for showing End Term answer sheets to students with fees	May 12–13, 2020
Showing answer sheets to the students	May 15, 2020
Registration, Payment of Fees for Summer Term Examination & submission of documents to Exam Section.	May 15–23, 2020
B.Tech. Farewell (Issue of departure documents)	**13 June 2020**
Start of next semester	**13 July 2020**

List of Holidays

Date	Holiday	Date	Holiday
25 Dec. 2019	Christmas	2 April 2020	Shri Ram Navmi
19 Feb. 2020	Ch. Shivaji Maharaj Jayanti	6 April 2020	Mahaveer Jayanti
21 Feb. 2020	Mahashivrartri	10 April 2020	Good Friday
10 March 2020	Dhulivandan	14 April 2020	Dr. B.R. Ambedkar Jayanti
25 March 2020	Gudipadwa	1 May 2020	Maharashtra Divas

Note:- The schedule given above may change as per circulars from Government of Maharashtra, SRTMU Nanded, District Collector, Nanded and Director of the Institute.

Academic Activities only for Final Year B.Tech. GATE Forum course attending registered students and with courses

Start Classes (or Internship)	February 11, 2020
Mid Semester Examination (at Department level)	April 6-11, 2020
Classes End	May 23, 20120
End Semester Examination (Theory)	May 25-30, 2020
Project Examination	June 1-3, 2020
Result (Display of Final Grades in the Departments and Submission hard and soft copy of Grades to Exam Section).	June 4, 2020
Receipt of Application form for showing End Term answer sheets to students with fees and Showing of answer-sheet(s) to students	June 5, 2020

Dec-2019 to June 2020

	Dec.					Jan.					Feb.					March						April					May					June					July				
Monday		2	9	16	23	30		6	13	20	27		3	10	17	24		2	9	16	23	30		6	13	20	27		4	11	18	25		1	8	15	22	29		6	13	20	27
Tuesday		3	10	17	24	31		7	14	21	28		4	11	18	25		3	10	17	24	31		7	14	21	28		5	12	19	26		2	9	16	23	30		7	14	21	28
Wednesday		4	11	18	25		1	8	15	22	29		5	12	19	26		4	11	18	25		1	8	15	22	29		6	13	20	27		3	10	17	24		1	8	15	22	29
Thursday		5	12	19	26		2	9	16	23	30		6	13	20	27		5	12	19	26		2	9	16	23	30		7	14	21	28		4	11	18	25		2	9	16	23	30
Friday		6	13	20	27		3	10	17	24	31		7	14	21	28		6	13	20	27		3	10	17	24		1	8	15	22	29		5	12	19	26		3	10	17	24	31
Saturday		7	14	21	28		4	11	18	25		1	8	15	22	29		7	14	21	28		4	11	18	25		2	9	16	23	30		6	13	20	27		4	11	18	25	
Sunday	1	8	15	22	29		5	12	19	26		2	9	16	23		1	8	15	22	29		5	13	19	26		3	10	17	24	31	7	14	21	28		5	12	19	26	

Controller of Examinations

Dean (Academic)

Director

8. Infrastructure : Academic, Library, Computer Centre, Residential, Hostels etc.

A) Academic :

FACILITIES AND TECHNICAL SUPPORT	
Departmental Laboratories – All departments are supported by well equipped with requisite number of laboratories	
Center of Excellence – state of art facility for doing research in signal and image processing	
Central Computing Facility – 175 computers well connected Intranet and Internet	
Industry Sponsored Laboratories	
E-PASS (Lab supported by Emerson Process Management, Mumbai)	
Dr. George H. Endress Innovation at Glance- Process Instrumentation Laboratory (Endress and Hauser (India) Automation Instrumentation Pvt Ltd) –Inaugurated on 23rd December, 2017	
Center for VLSI Design and Verification (Mentor Graphics, USA)	
Braiding Machine (Supported by Alumni of Textile Department)	
SGGS-Sai Technologies Center (Supported by SAI Technology, USA)	
Innovation Laboratory	
Workshop, Drawing Hall and Seminar Halls	
Language Laboratory	

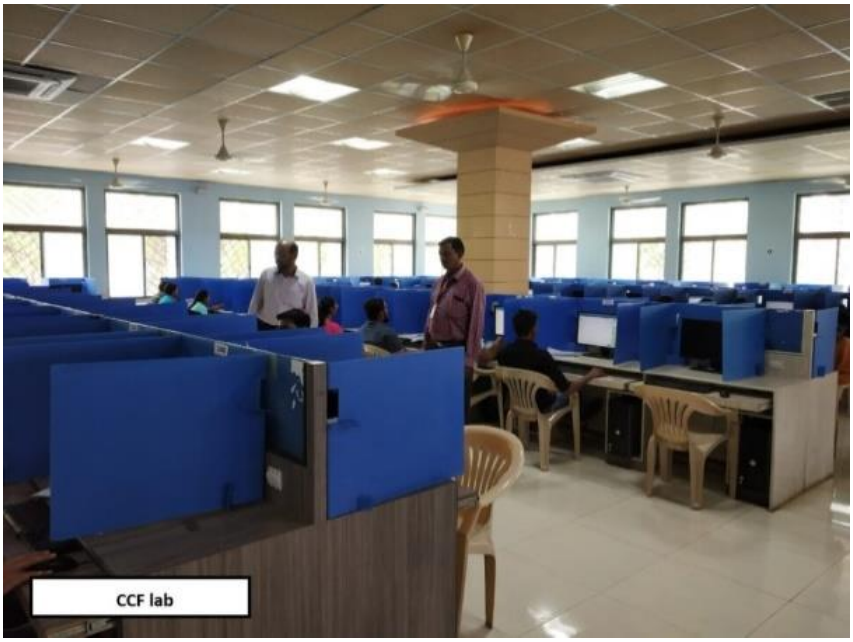
B) Library

- Subscribed AICTE mandatory e-data bases are available for users.
- The institute central library has large collection of 58725 library books and 16555 book bank books of Text and Reference books.
- Total number of Volumes and titles are 75280, 23438 respectively.
- This has provision of over 20 computers with 1GBPS bandwidth speed attached with LAN and lease line internet access.
- Provide seamless access to print as well as digital learning resources.
- More than 10,000 students have used this e-Library since last four years.
- Foreign Language book section: French, Spanish, German language books are available.
- Corporate membership offers membership to Industries/Institutions/ Corporate houses and Organizations.
- Uses KOHA – Open Source Library Management Software.•
- OPAC: Online Access Catalogue available at all times on campus by using the link http://10.70.2.55
- Knimbus remote access & Mobile app for hassle free access for databases for 24X7 any where any device.

- Library conducts training sessions to help users locate access of e-journals and e-books. Also conduct orientation programe for first year students.
- Library book transaction Timings: 9:00 am to 7:00 pm ,
- Reading hall: 9:00 am to 11:00 pm.
- Library is kept open on all working days except public & National holidays.
- The following E-databases are subscribed in the year 2020 :

Publisher	Link	Count
IEEE-IEL	**http://ieeexplore.ieee.org**	**464**
Science Direct (Elsevier)	www.sciencedirect.com	275
Springer	http://www.springerlink.com	586
ACM Digital Library	http://dl.acm.org	44
ASCE	http://ascelibrary.org/	30
ASME	http://asmedigitalcollection.asme.org	22
e-Book		
Springer	http://link.springer.com	2082
IEEE-Wiley	http://ieeexplore.ieee.org	550

C) Computer Centre :



Central Computing Facility is located in Administrative Building of SGGS at ground floor.This facility provides open source computing platform for the students, staff and faculty of this Institute.

It has got 152 desktop machines and three Servers with the state of the art configuration to cater the need of software development and programming. All the computers are well connected to the Intranet and Internet with the help of Ethernet Backbone Switches. The Facility is powered with 4 Single phase 5 KVA UPS and three Servo Stabilizer. The main aim of this facility is to provide open source linux computing environment to the students for experimentation, programming, and to carry out project work.

Purpose and Use of Central Computing Facility:

- To provide a central site for hands on computer training.
- Facility to access computing resources to all students, staff and faculty of this institute.
- To teach different programming languages on open source Linux environment.
- Environment for students to learn and experiment different software tools to carry out their projects, dissertations and research work.
- To provide support for training programs, short term courses and technical workshops.
- Access from all desktop computers to the internet.
- Facility to carry out online examination on Linux/Open Source Environment for campus recruitment

D) Residential including Hostels :

Residential Facility						
Sr. No.	**Name of Place**	**Bulit Up area in Sq.M.**	**No. Of Qtr.**	**No. Of Rooms**	**No. of residents/ Students**	**No. of Guest Rooms**
1	Director Qtr. (G+1)	322.10	1	11		
2	Rector Qtr. (G+1)	218.50	1	11		
3	B-type Qtr. (G+2) (Devgiri Hostel) (83 Sq.M each Qtr.)	974.70	12	4		
4	C-type Qtr. (F.F)	216.60	2	6		
5	C-type Qtr. (G.F) (48 Sq.M. Each Qtr.)	216.60	4	3		
6	P.hd. Qtr. (married research scholars)	538.60	9			
	Hostel Rooms					
a)	Nandgiri Hostel (A, B, C, D Wing) (G+1)	3264.40		60	230	
b)	Krishna Girls Gostel (G+3)	3311.40		84	350	2
c)	Sahyadri Hostel (G+3) (A & B wing)	9847.00		104	487	8
d)	Godavari Girls Hostel (G+1)	2999.70		72	281	

E) OTHER FACILTIES:

Auditorium – 700 seating capacity
Internet Facility (1.1 Gbps)- Rail Tel (By NKN) and Reliance Communication Ltd.
Wi-Fi campus equipped with 25 access points
Sport facilities – Turf Pitched Cricket Ground, Basketball Court With Floodlights, Lawn Tennis Court with Floodlights, Volleyball Courts, Kabaddi Ground, Football Ground, Indoor Table Tennis Hall,, Sports Hall For The Hostel Students Open 24/7 which Includes Table Tennis, Chess and Carrom Boards.
Gymnasium – Air-Conditioned Gymnasium

9. Profile of Departments with infrastructure and facilities

Department of Chemical Engineering:

The department started in the year 2009-10, with intake of 30. The faculty is well qualified & dynamic. This department has well equipped laboratories – (i) Chemical Reaction Engineering, (ii) Process Control and Simulation, (iii) heat Transfer, (iv) Mass Transfer, (v) Fluid Flow Operation, (vi) Gas Chromatography, (vii) Applied Chemistry. Placement of the department for the earlier batches in about 70%. Achievements: Signed MoU with NIT Nagpur; Got best project prize for consecutive two years from TCS; Third year students got first, second and third prize in National level project competition at IIT Roorkee; Students also got third prize at IIT Bombay in Chem-e-car competition; Department arrange the special lecturers, industry visits and expert talks from industry people as well as professors from ICT, IITs and NITs; Organized a National level conference on "Environmental & Energy Aspects for sustainable Development" and STTP on Application of Bioprocess & Nanotechnology in Chemical Engineering.

Department of Civil Engineering:

The department of Civil Engineering has been in existence since 1984 and has grown into full-fledged department with specialization in the areas of i) Water Recourse Engineering and ii) Structural Engineering. The department has three major missions: 1. Excellence in Teaching & Research, 2. Imparting Knowledge Relevant to the Industry and Society. 3. Contribution to Sustainable Development. To carry forward this mission and bring synergy, the departmental activities embrace planning, design, and consultancy. We also organize special lectures, field visits, expert talks etc. for students. As a result of which the students are placed in various reputed core and software companies. The department has well equipped laboratories. Our computer center has all state of art software in the area of water resources engineering and structural engineering. The faculty is actively engaged in R&D activities and have many publications in peer reviewed national and international journals and conferences to their credit. The department has produced more than 20 doctorates. The academic programs, B.Tech., M.Tech., and Ph.D. in Civil Engineering are amongst the best in the country. Many of faculty members have received advanced training from reputed institutions in India. Many of our alumni hold prestigious position in leading academic institutions, industry and the Government in different capacity. A good number of the alumni are successful entrepreneurs in various sectors like construction, water resources, information technology, consultancy firms etc. Many are working abroad in different countries. It is also actively engaged with international institutions for research exchange, specialized international collaborative training and other activities.

Department of Computer Science and Engineering:

The department has excellent computing facility with high speed intranet and internet connectivity. Human resources at the department are rich blend of experience and dynamism. The department continuously strives for a strong network with the alumni, industry personnel and faculty of premier Institutes. The department has strong association with the leading industries such as Tata Consultancy Services Ltd., Pune, IBM India Pvt. Ltd., Bangalore and Persistent Systems, Pune is a key feature of the department. Motivating the students for higher studies and entrepreneurship is one of the best practices. Alumni are working with leading industries like IBM, Intel, Infosys, Google, etc.

Department of Electrical Engineering:

The department of Electrical Engineering is started in academic year 2011-12 with intake of 30 students. The department provide standards. The department provide standard education as per requirement of Industry. Great care has been taken while designing syllabus of the department to

full fill the need of industry as well as various competitive examination. Students are taking active part in different research base project competition and many students are awarded at National level competition. Few students were also selected in IIT Mumbai for internship object after National Level screening test and also few students have filed patents on their projects. The department has keen interest in signing MoU with industry and premier educational Institute enhance academic quality of department. Students have been selected in companies like Reliance, TCS, Vidyut Control etc. The Department has strong interaction with industries like MHADISCOM, Aplab Industries Ltd., Kohler Power System, PRDC, H.V. India, L.R. Nuclear consultant, N-Kennin transformer etc. Faculty members are regularly taking part in various STTP Courses, Conferences and publishing their work at National & International level.

Department of Information Technology:

The department of Information Technology has started its UG program in the academic year 2000-01 with an intake of 60 students and PG program in the year 2011-12 with an intake of 18 students. The department has very good infrastructure with enough laboratories for UG and separate laboratories for PG with excellent computing facilities. The department has an Advance IT Lab for research for UG and PG students. Syllabus is designed with the help of Industry Advisory Panel to fulfill the need of the industry as well as to help students to prepare for the exams like GATE. Department has signed an MoU with Industry for students' internship and projects. The alumni of the department are very active and provide continuous support in the development of the students and the department as a whole. The alumni are working with the leading industries like Persistent, IBM, TCS, Infosys GS Labs, etc.

Department of Instrumentation Engineering:

Department has always shared the vision of the Institute in striving for excellence in research and teaching activities and has succeeded in this endeavor to a large extent. The faculty is well qualified, dynamic and experienced. Well-equipped laboratory facilities are made available to the Undergraduate and Postgraduate students. Distributed Control System Lab comprising of Yokogawa DCS Centum VP, DCS Training panel, PLC's of various makes viz. Allen Bradley, Siemens, GE-Fanuc, ABB are available which helps to create industrial environment and execution of the real time automation projects. Numerous biomedical equipment, multi process trainer, multi variable control trainer, heat exchanger temperature control module are notable amongst the several equipment facilities. Department has built a strong network with alumni and industry experts. Various multinational companies like Reliance Industries Ltd, Emerson Export Engineering Centre, Thermax India Ltd, Petrofac Pvt. Ltd, Aker Solutions, Johnson Controls, Tata Consultancy Services, Honeywell, Tata power and Ipac Automation are the regular recruiters of our students. The goal of the department is to provide high quality state of art education, research, development and consultancy facilities for technological excellence in Instrumentation Engineering.

Department of Electronics and Telecommunication Engineering:

Established in 1981 with 30 students, now the department offers B.Tech. with intake of 120 and two PG courses - M.Tech. (Electronics) with intake of 30 and M.Tech. (Embedded Systems and VLSI Design) with intake of 18. The department was accredited by NBA in February 2003 and June 2008. The faculty is well qualified, dynamic and experienced (11 with Ph.D. to their credit, and 3 more pursuing). The department has strong research groups in Digital Signal and Image Processing, Speech Processing, Computer Vision, Pattern Recognition, VLSI Design and Embedded Systems. The department has been achieving good academic results and is the top priority for admissions. The department has well equipped laboratories in VLSI, Embedded Systems, Computer Vision, and Communication Engineering. We receive funds from various agencies such as AICTE, DST, and State government, in addition to consultancy. Many faculty members are working on various committees such as AICTE,

NBA, BOS, RRC of various universities. Also, they are reviewers for many international journals including IEEE, IET, Elsevier, and Springer. The department is a recognized research center of Swami Ramanand Teerth Marathwada University, Nanded since 1995. QIP research center with sanctioned intake of 2 was started from the academic year 2012-2013. It also gets funds for Ph.D. scholarships through schemes like Visvesvaraya Ph.D. scheme of DeITY of Govt. of India, TEQIP, and Center of Excellence in Signal and Image Processing. There is a close association with academic institutes like IIT Bombay, IIT Kharagpur, IIT Roorkee, and few other institutes/organizations of National Importance. In addition to this, we have a strong rapport with industry. Many companies - Mentor Graphics, Intel, Sankalp Semiconductors, IBM, Applied Micro, Texas Instruments, TCS, Cognizant, CDAC, Motorola, etc. to name a few - have contributed to the development of the department. The department has signed MOUs with many industries such as Mentor Graphics, Eklaksha VLSI R&D Centre Pune, CEERI Pilani, etc.

Department of Mechanical Engineering:

The department offers B. Tech. (Mechanical Engineering) since 2012-13 with an intake of 60 and M. Tech. (Mechanical – Product Lifecycle Management) with intake of 18 since 2009-10. Important features of the department are as follows: Established PLM & CAE Laboratory with software like TEAMCENTER, WINDCHILL, ANSYS, CARSIM and SUSPENSIONSIM; Established E-Foundry Cell in association with IIT Bombay having license of AUTOCAST, software for casting simulation; "Hingoli Fabrication and Engineering Cluster Development and Research Foundation"; Lot of industry connect like Paithani Cluster, Aurangabad, MoU and collaborative work with Practical Vision Consultants (PVC), Aurangabad, Industry Advisory Panel (IAP), comprising of experts from industry and research organizations including ARAI Academy, Pune, Yashshri Press Components, Aurangabad and Varroc Engineering, Pune; Appointed Adjunct faculty from industries and premier institutes; Some of the industrial partners for Internship / Placement support to students are TATA Motors, Pune, MACPL, Aurangabad, Yeshshri Press Components, Aurangabad, Jailaxmi Casting & Alloys, Aurangabad, Suddpram Auto Engineering Pvt. Ltd, Pune, Simplified Technologies for Life, Jalna, TATA Steel, Jamshedpur, Faith PLM Solutions, Pune, 3d PLM Software, Pune, Whirlpool of India Ltd, Pune; Product Life Cycle Management Laboratory, Strength of Material Laboratory, Mechanical Measurements and Metrology Laboratory, Engineering Metallurgy Laboratory, Theory of Machines Laboratory, Vibration Laboratory, Applied Thermodynamics Laboratory, Fluid Mechanics Laboratory,

Heat Transfer Laboratory, Internal Combustion Engine Laboratory, Refrigeration and AirConditioning Laboratory, Mechatronics Laboratory, Automobile Laboratory, Turbo Machinery Laboratory, Neural Network Laboratory, Solar Research Laboratory; Laboratories are well equipped with state-of-the-art facilities that cater the needs of the UG, PG and Ph. D. students.

Department of Production Engineering:

Department of Production Engineering, established in 1984 with an intake of 30 (UG) students, has grown in size and stature and offers undergraduate course of Production Engineering with an intake of 60 students. The department is having highly qualified faculty, staff and well-equipped laboratories and workshop. The modern facilities for tool engineering and manufacturing support (design, analysis and manufacturing), state of art computational & CAD/CAM facilities, departmental library, student's association (PESAM), etc. Research and development activities in the fields of NCMP, CAD/CAM, CAE, etc. are the major features of this department. Our alumni are highly placed in sought after industries and administrative services. Our students have secured AIR 1 in GATE examination thrice. Students, projects are innovative in nature and 06 patents have been field so far. The department focuses on all round development of the students through exposure to industries and innovative project contest.

Department of Textile Technology:

The department offers B.Tech., M.Tech. and Ph.D. programmes in Textile Technology. The department Provides latest and relevant quality education covering various aspects of design, development and manufacturing of textiles. Department has eight faculty members out of which six are doctorates (mostly from IITs). The department has well equipped laboratories of spinning, weaving, testing, knitting, geo-textile, computer and processing. These laboratories are well equipped with state-of-the-art facilities that cater the needs of the UG, PG and Ph.D. students. In addition to this, department has strong interaction with industry and alumni. The alumni are working in most prestigious companies like Reliance, Raymond, Spentex, Morarjee, Welspun, Filatex, Supreme nonwovens, Trutzschler, Barmag, Infosys, Wipro, Cognizant, TCS etc. Department organizes seminars, workshop, alumni meet, industry visits, conferences for students and faculty. Every year, the department organizes community development programmes for the local unemployed youth and women in the field of weaving and knitting. Department has the MOU with the leading institute in Textiles. The department has appointed Adjunct faculty from industries and premier institutes.

Department of Mathematics:

In mathematics faculty primarily do research in Algebraic Geometry and Coding Theory. The research undertaken is mainly in the areas: Finite Fields, Algebraic Geometry and Coding Theory. We always try to explore the interdisciplinary research between Coding Theory, Computer Science, and Information Technology, Mathematics Department has association with research institutes like Department of Mathematics, IIT Bombay (India), Department of Electrical Engineering, IIT Bombay, (India), Poncelet laboratory (UMI, 265 du CNRS) Moscow (Russia). Indo- Russian Project: Department of Mathematics, SGGSIE and T, IIT Bombay and Poncelet Laboratory, Moscow have received an Indo-Russian project sanctioned by Govt. of India and Russian Government worth Rs. 17 Lakh. The main objective of the project is collaborative research “Algebraic Varieties over Finite Fields and Linear Error Correcting Codes”. We have organized an international conference on Algebraic Geometry and Coding Theory at IIT Bombay as a part of this project. We also have visited Poncelet Laboratory to carry out the joint research. We are planning to organize a bilateral workshop in India as well as Russia to promote further ties between researchers from both the countries in the relevant area.

10. Information regarding NBA accreditation; Accredited and Applied for

UG ACCREDITATION STATUS

Sr. No.	Programme (UG)	Starting Year	Accreditation Status w.e.f. 06/02/2003 (First time)	Accreditation Status w.e.f. 19/07/2008 (Second time)	Accreditation Status w.ef. 08.11.2013 (Third time)	Accreditation Status w.e.f 18/01/2018 (fourth time)
1.	**Electronics and Telecommunication Engineering**	**1981**	**Accredited for 3 years**	**Accredited for 3 years**	**Accredited For 2 years**	**Accredited for 3 years**
2.	**Instrumentation Engineering**	**1981**	**Accredited for 3 years**	**Accredited for 3 years**	**Accredited For 2 years**	**Accredited for 3 years**
3.	Production Engineering	1984	Accredited for 3 years	Accredited for 3 years	--	Accredited for 3 years
4.	Civil Water Management	1984	Accredited for 5 years	--	Accredited	--
5.	Computer Science & Engineering	1986	Accredited for 3 years	Accredited for 3 years	--	--
6.	Textile Technology	1987	Accredited for 3 years	Accredited for 3 years	Accredited For 2 years	Accredited for 3 years
7.	Information Technology	2000	--	Accredited for 3 years	--	--
8.	Chemical Engineering	2009	--	--	--	--
9.	Electrical Engineering	2011	--	--	--	--
10.	Mechanical Engineering	2012	--	--	--	--

NAAC committee visited to this institute for accreditation during 3-4 Feb, 2020

PG ACCREDITATION STATUS

Sr. No.	Program (PG)	Starting Year	Accreditation status w.e.f. 06/02/2003 (First time)	Accreditation status w.e.f. 19/07/2008 (Second time)	Accreditation status w.e.f. 01.11.2013 (third time)
1.	**Electronics Engineering**	**1987**	--	--	**Accredited for 3 years**
2.	**Instrumentation Engineering**	**1989**	**Accredited for 3 years**	**Accredited for 3 years**	**Accredited for 3 years**
3.	Mech. CAD/CAM	1996	Accredited for 3 years	Accredited for 3 years	--
4.	Civil Engineering (Water Management)	1989	--	--	Accredited for 3 years
5.	Product Life cycle Management	2009	--	--	--
6.	Computer Networks and Information Security	2011	--	--	--
7.	Information Technology	2011	--	--	--
8.	VLSI & Embedded System	2015	--	--	Newly started
9.	Structure engineering	2015	--	--	Newly started
10	Textile Technology	2016	--	--	Newly started

11. Programmes offered (UG, PG, Ph.D.)

UG Programs

SN	Course Code	ABBR	Course Name	SI	Admitted within SI	TFWS Admitted Seats	EWS Admitted	JKSSS Admitted	Total
1	202019110	CIVL	Civil Engineering	60	60	03	06	01	70
2	202024210	CSE	Computer Science and Engineering	120	120	05	12	03	140
3	202024610	INFT	Information Technology	60	60	01	05	01	67
4	202029310	ELEC	Electrical Engineering	30	30	01	02	03	36
5	202037210	EXTC	Electronics & Telecommunication Engg.	120	120	04	12	04	140
6	202046610	INST	Instrumentation Engineering	40	40	02	04	00	46
7	202050710	CHEM	Chemical Engineering	30	30	02	01	00	33
8	202060610	PROD	Production Engineering	60	60	00	05	00	65
9	202061210	MECH	Mechanical Engineering	60	60	03	06	02	71
10	202089310	TEXT	Textile Engineering / Technology	30	28	00	02	00	30
Total →				610	608	21	55	14	698

PG Programs

SN	Course Code	ABBR	Course Name	SI	Admitted within SI	EWS Admitted	Vacant within SI
1	202019410	CWM	Civil Engineering (Water Management)	18	13	1	5
2	202026710	CNIS	Computer Networks and Information Security	18	17		1
3	202037610	EC	Electronics Engineering	30	3		27
4	202024610	INFT	Information Technology	18	2		16
5	202046610	INST	Instrumentation Engineering	18	3		15
6	202062110	CAD	Mechanical Engineering (CAD/CAM)	25	6	1	19
7	202060910	PLM	Production Engineering (Life Cycle Management)	18	18	2	0
8	202021210	STRU	Structural Engineering	18	18		0
9	202089610	TEXT	Textile Technology	15	0		15
10	202062010	VLSI	VLSI and Embedded Systems Design	18	11		7
Total				196	91	4	105

Ph.D. Programme

SN	Research Programmes
1	Chemical Engineering
2	Civil Engineering
3	Computer Science and Engineering / Information Technology
4	Electronics and Telecommunication Engineering
5	Instrumentation / Electrical Engineering
6	Mechanical / Production Engineering
7	Textile Technology

Ongoing Ph.D. – 179 Completed Ph.D. - 273

12. Faculty and Staff Positions : Teaching

Sanction, Filled & Vasant Post position on May 2020 with Contractual & CHB Teachrs											
Department	Sanctioned Post			Filled Post			Vacant Post			Contractual Engaged Faculty	CHB
	Prof.	Asso. Prof.	Assist. Prof.	Prof.	Asso. Prof.	Assist. Prof.	Prof.	Asso. Prof.	Assist. Prof.		
Director	1	0	0	1	0	0	0	0	0	0	0
Electronics & Telecommunication	2	5	14	1	2	11	1	-1	3	7	0
Instrumentation	1	2	4	0	4	4	1	0	0	2	0
Computer Science & Engineering	2	5	14	0	2	12	2	2	3	7	0
Information Tech	1	2	9	0	1	6	1	1	3	3	0
Civil Engineering	1	3	10	0	3	2	1	1	7	6	0
Applied Mechanics	0	1	4	0	0	0	0	2	4	0	0
Production Engg	1	3	9	0	1	5	1	1	4	8	0
Workshop Supdt	0	0	1	0	0	0	0	0	1	0	0
Chemical Engineering	1	2	4	0	0	3	1	2	1	5	0
Textile Technology	1	2	4	0	0	4	1	2	0	1	0
Mechanical Engg	1	3	10	0	0	0	1	2	10	12	0
Electrical Engineering	1	2	4	0	0	0	1	2	4	5	0
Mathematics	0	0	3	0	0	1	0	0	2	3	3

English	0	0	0	0	0	0	0	0	0	2	0
Physics	0	0	2	0	0	1	0	0	1	0	3
Chemistry	0	0	1	0	0	0	0	0	1	0	0
Training & Placement Officer	1	0	0	0	1	0	1	-1	0	0	0
Librarian	0	0	1	0	0	0	0	0	1	0	0
System Manager & Administrator	0	0	1	0	0	0	0	0	1	0	0
System Analyst	0	0	1	0	0	0	0	0	1	0	0
	14	30	96	2	14	49	12	13	47	61	6

Sanction, Filled & Vasant Post position on May 2020 with Contractual & CHB Teachers

Sr. No.	Department	Sanctioned Post			Filled Post			Vacant Post			Contract Engaged Faculty	CHB
		Prof.	Asso. Prof.	Assst Prof	Prof.	Asso. Prof.	Assst Prof	Prof.	Asso. Prof.	Assst Prof		
1	Director	1	0	0	1	0	0	0	0	0	0	0
2	Electronics & Telecommunication	2	5	14	1	2	11	1	-1	3	7	0
3	Instrumentation	1	2	4	0	4	4	1	0	0	2	0
4	Computer Science & Engineering	2	5	14	0	2	12	2	2	3	7	0
5	Information Technology	1	2	9	0	1	6	1	1	3	3	0
6	Civil Engineering	1	3	10	0	3	2	1	1	7	6	0
7	Applied Mechanics	0	1	4	0	0	0	0	2	4	0	0
8	Production Engineering	1	3	9	0	1	5	1	1	4	8	0
9	Workshop Suprintendent	0	0	1	0	0	0	0	0	1	0	0
10	Chemical Engineering	1	2	4	0	0	3	1	2	1	5	0
11	Textile Technology	1	2	4	0	0	4	1	2	0	1	0
12	Mechanical Engineering	1	3	10	0	0	0	1	2	10	12	0
13	Electrical Engineering	1	2	4	0	0	0	1	2	4	5	0
14	Mathematics	0	0	3	0	0	1	0	0	2	3	3
15	English	0	0	0	0	0	0	0	0	0	2	0
16	Physicas	0	0	2	0	0	1	0	0	1	0	3
17	Chemistry	0	0	1	0	0	0	0	0	1	0	0
18	Training & Placement Officer	1	0	0	0	1	0	1	-1	0	0	0
19	Librarian	0	0	1	0	0	0	0	0	1	0	0
20	System Manager & Administratator	0	0	1	0	0	0	0	0	1	0	0
21	System Analyst	0	0	1	0	0	0	0	0	1	0	0
Tot		14	30	96	2	14	49	12	13	47	61	6

Support staff

1. Regular Employees : 89
2. Skilled persons :
3. Unskilled persons
4. House keeping
5. Security
6. High skilled
7. Others

13. Exam Results Analysis :

B.Tech. Final 2018-19

Programme	Year	Branch	Appeared	Passed	Fail	Passing %	CGPA 5.0-6.74	CGPA 6.75-7.49	CGPA 7.5-8.49	CGPA >= 8.5
B. Tech.	FINAL	CHEM	33	32	1	96.97	7	9	14	2
B. Tech.	FINAL	CSE	145	134	11	92.41	28	28	55	23
B. Tech.	FINAL	CIVL	69	61	8	88.41	9	25	21	6
B. Tech.	FINAL	EXTC	140	134	6	95.71	32	30	49	23
B. Tech.	FINAL	ELEC	34	31	3	91.18	6	9	11	5
B. Tech.	FINAL	INST	45	44	1	97.78	13	6	15	10
B. Tech.	FINAL	INFT	79	75	4	94.94	25	15	30	5
B. Tech.	FINAL	MECH	67	64	3	95.52	14	16	19	15
B. Tech.	FINAL	PROD	68	65	3	95.59	23	21	15	6
B. Tech.	FINAL	TEXT	34	31	3	91.18	18	11	1	1
			714	671	43	93.98	175	170	230	96

M.Tech. Final 2018-19

Programme	Year	Branch	Appeared	Passed	Passing %	CGPA 5.0-6.74	CGPA 6.75-7.49	CGPA 7.5-8.49	CGPA >= 8.5
M. Tech.	SY	CWM	17	17	100.00			10	7
M. Tech.	SY	EC	28	26	92.86		5	15	6
M. Tech.	SY	INST	14	14	100.00	2	4	5	3
M. Tech.	SY	INFT	17	17	100.00	2	3	8	4
M. Tech.	SY	CADCAM	24	23	95.83		8	11	4
M. Tech.	SY	PLM	17	17	100.00		3	9	5
M. Tech.	SY	CNIS	18	18	100.00	1	6	9	2
M. Tech.	SY	STRU	17	15	88.24	1	1	12	1
M. Tech.	SY	VLSI	18	18	100.00		2	9	7
M. Tech.	SY	TEXT	02	02	100.00			1	1
			172	167	97.09	6	31	89	40

14. Transition rate of UG students

For the Year 2019-2020 : 100% (Due to Pandemic, Result yet not declared)

FY B. Tech. Result 2018-19 (Regular)

SN	Branch	Appeared	Passed in First Attempt	After Re-exam within same year		% All Clear Subjects		% with ATKT	% Improvement by taking summer / re-exam
				All Clear Subjects	ATKT	With First Attempt	With Multiple Attempt within same year		
1	CHEM	33	20	6	5	60.61	78.79	93.94	18.18
2	CIVL	65	40	14	9	61.54	83.08	96.92	21.54
3	CSE	126	92	16	14	73.02	85.71	96.83	12.70
4	ELEC	32	23	1	6	71.88	75.00	93.75	3.13
5	EXTC	123	86	18	14	69.92	84.55	95.93	14.63
6	INFT	64	45	9	6	70.31	84.38	93.75	14.06
7	INST	41	31	6	3	75.61	90.24	97.56	14.63
8	MECH	63	46	14	3	73.02	95.24	100.00	22.22
9	PROD	60	23	13	20	38.33	60.00	93.33	21.67
10	TEXT	29	7	6	14	24.14	44.83	93.10	20.69
		636	413	103	94	64.94	81.13	95.91	16.19

15. GATE qualified students data

SN	Name of the student	Branch	GATE Score	AIR
1	Suraj Vyankat Solanke	Chemical Engineering	389	2039
2	Ajit Pandurang Katare	Civil Engineering	34.96	15398
3	Akshay Bharat Gayake	Civil Engineering	30.49	20850
4	Shivani Wagh	Civil Engineering	16.15	-
5	Gauravkumar Joshi	Civil Engineering	32.56	_
6	Ankush Azade	Computer Science and Enginering	434	7089
7	Ajinkya Atul Tanksale	Computer Science and Enginering	430	7326
8	Sayali Prafull Karnewar	Computer Science and Enginering	410	8537
9	Aniruddha Nishikant Joshi	Computer Science and Enginering	31.67	10281
10	Pranav Sushil Patil	Computer Science and Enginering	367	11966
11	Punam Ramesh Shelke	Computer Science and Enginering	364	12320
12	Nishant Sudhir Patil	Computer Science and Enginering	356	13063
13	Pawar Purudewa Prakash	Computer Science and Enginering	28.67	13494
14	Saurabh Lataru Jagtap	Computer Science and Enginering	294	21544
15	Shaunak Pralay Oza	Electrical Engineering	451	7536
16	Shaunak Pralay Oza	Electrical Engineering	451	7536
17	Anjali Yashwant Ghate	Electrical Engineering	307	18637
18	Aniruddh Pingle	Electrical Engineering	234	28069
19	Ashutosh Chandrashekhar Kulkarni	Electronic & Tele.comm. Engineering	397	8769

20	Mukul Vishnu Lokhande	Electronic & Tele.comm. Engineering	389	9222
21	Pushpak Sunilrao Ghatode	Electronic & Tele.comm. Engineering	29	11623
22	Prajwal Yadav Shete	Electronic & Tele.comm. Engineering	28.67	11931
23	Naresh Ramesh Sawale	Electronic & Tele.comm. Engineering	21	22211
24	Shrikant Gokul More	Electronic & Tele.comm. Engineering	16.33	-
25	Tejaswini Khairnar	Electronic & Tele.comm. Engineering	12:33	-
26	Prashant Maroti Hatkar	Information Technology	19.33	31404
27	Lukesh Rajendra Metha	Instrumentation Engineering	3.33	-
28	Omkar Umeshrao Ambilwade	Mechanical Engineering	578	6969
29	Saurabh Shashikant Deshpande	Mechanical Engineering	531	9282
30	Vishal Vikram Shende	Production Engineering	433	270
31	Pramod Balasaheb More	Textile Technology	659	55
32	Abhishek Pradiprao Tawde	Textile Technology	498	126
33	Ajit Bandu Pawar	Textile Technology	366	232
34	Prabhuraj Archana Barabde	Textile Technology	345	255
35	Harpreet Singh Ranbir Singh Lingerie	Textile Technology	14.67	-

16. Training programs held for students

Training programs held for students

1. Workshop on "Deep Learning:- Concepts and Applications, " December 16–21,2019.

- Organized by the department of Electronics and Telecommunication Engineering.
- This workshop was mainly focusing on the specialized topics of Deep Learning and its practical applications so that it will help participants to update their knowledge and widen their horizon. This six day workshop was divided in four sessions on each day.

2. Design Thinking Workshop :28-29 Dec. 2019 and 14-15 March 2020

was arranged during 28-29 Dec, 2019 and and 14-15 March 2020 for students. This 2-day program is designed to take participants through the process of breaking down a complex problem and turning an idea into an actionable solution and finally making a business model for it using the principles of Complex Problem Solving, Human Centered Design, and Analogous Thinking for Creativity and Empathy Building for Customers. This will be helpful to become entrepreneur as well as will help in seeking a job.

Program Structure

This program covered the following modules:

- Introduction to Human Centered Design
- Understanding Problems
- Complex Problem Breakdown
- Introduction to Research using Empathy
- Market research
- Making Sense of Data using Pattern Thinking
- Creative Problem Solving
- Innovation
- Prototyping Human Centered Solutions and Feedback
- Business Model Canvas and Execution Strategy

Additional Benefits for Participants

As part of our commitment towards creating a global ecosystem of entrepreneurs, innovators and change-makers, all participants will also receive continued mentorship for their projects by Ycenter's global leadership team.

Problem Statement Design-

Start with Writing Problem Statement
Who is facing this problem?
What is the biggest Cause?
What is the biggest effect?
Cause- Ask Why?
Effect- Ask What?
Leaning towards Solution – Ask How?

3. Alumni Industry Expert Meet22-23 Dec 2019

An Industry meet with students for their career guidance and placement was organized during **22-23 Dec 2019.** A gathering of around 100 industry Alumni experts guided the students of all departments. Industry Alumni also promised to conduct Expert lectures and Career guidance sessions in the Institute on regular basis.

4. Three days short term course on "Fundamentals of Accelerated Computing using OpenMP& CUDA C/C++", held during 27th - 29thDecember 2019

This workshop has been delivered to the students by two industry experts. The first expert is Dr.Nilesh chandra K Pikle (PhD in CSE from VNIT Nagpur). He is working as a senior instructor in parallel computing and he is also a certified CUDA programming instructor working for NVIDIA. The second expert is Ms. Pranali Deogade. She has completed BE CSE and Diploma in Parallel Computing / HPC from CDAC. Both of these experts are working in Braingrid Technologies, Pune. Both are specialized in Parallel Computing / HPC and working on the latest technologies in this field. The workshop covered basics of parallel computing, difference between multi-core and manycore architectures, Fundamentals of parallel computing in OpenMP, Introduction to GPU architecture, CUDA programming model, Memory model, CUDA streams, etc.

5. Team Phoenix : BAJA SAEINDIA 2020 Winners

Prizes Won in the Event:

1st overall winner, 1st Endurance, 1st Manoeuvrability, Best speed, Go Green,

Skill BAJA – CAD, styling, welding. Pizes won : More than Rs. 5 Lakhs

6. Induction programme details 2019-20

TEQIP-III Sponsored 'Social Internship – 2019" - for First Year Students

The 52nd National Level Annual Youth Camp was organized at Anandwan (at Anandwan, Chandrapur, Maharashtra) named as **"SHRAM SANSKAR CHHAVANI"** during 15th to 20th May, 2019. A Team of 125 students of F.Y.B. Tech. from SGGSIE&T, Nanded participated in the social internship. A team of Faculty members Dr. Y.V. Joshi , Prof. S.M. Birajdar , Prof. S.B. Dethe , and Dr. B. R. Bombade also participated in the programme

a) Objective of The program:

'Shram Sanskaar Chhavani', started in 1967 by Late Shri. Baba Amte and is an annual event that emphasizes the value of manual work by involving youth in various laborious yet joyful and most importantly, constructive tasks. This camp helps to build a sense of positive work culture, secular values, national unity, environment conservation and encourages scientific curiosity amongst the youth. It has given rise to many social movements in India like NSS, Narmada Bacha Andolan, Knit India Movement etc.

The faculty members also visited to Hemalkasa, Dist. Gadchiroli (place of Dr. Prakash Amte, Lokbiradari Prakalp). Mr. Sachin of Lokbiradari Prakalp has given the information about the development of the prakalp by showing video. During meeting with Dr.Prakash Amate, Dr. Manda Amte and Aniket Amte, faculty members have been addressed regarding innovative methods to organize Social Internship and future possibilities of social internship.

In addition to above activity, our FY students completed Social Internship at different NGOs in Maharashtra. In total 400 students participated in the activities held during May -June 2019.

7. The Art of Living- For F.Y. 2019-20 Students

- The above said programme was organized for newly admitted F.Y.B. Tech. students admitted
- in 2019-20, and staying in the Institute Hostel from 19/08/2019 to 31/08/2019. 240 students participated in the event.
- Mr. Shiva Birkale and Mr. Vikrant Korde, from The Art of Living foundation, Bangalore (Nanded-branch) conducted the event.
- The content of the program is designed by Vyakti Vikas Kendra –India. Institute Facilitator Mentor: Mr. R.B. Godlwar & Dr. Sunil Jondhale,
- Objective of The program: Designed to develop personality, eliminate mental stress, and improve the physical health of the students through Vyakti Vikas Kendra –India.
- Program Outcome: Healthy body and peaceful happy mind, Reduce stress, get more energy.

17. Training programmes held for teachers & staff

QIP Programmes for teachers

1. Machine Learning and Application, Dr. U.V.Kulkarni, Dr. B.R. Bombade, Mr. P.P. Kanhegaonkar, Mrs. M.S. Mahindrakar, January 2019, CSE, 42 participants present.
2. Product Lifecycle Management, Dr. M.K. Rodge & Mr. R.P. Parvekar, 4-8 Feburary 2019, MECH, 41 participants present.

3. Linux Automation with Python, Dr. M.V. Vaidya & Mr. G.K. Pakale, 23-27 Feburary 2019, IT, 45 participants present.
4. Advances in Water Engineering, Dr. M.L. Waikar & Dr. N.H. Kulkarni, 11-15 March 2019, CIVIL, 40 participants present.
5. Probability and Statistics, Dr. A.R. Patil & Mr. P.P. Kanhegaonkar, 15- 20 March 2019, CSE/MATHS, 27 participants present.
6. Overview of Structural Design Industry and Design of Building using Software, Dr. L.G. Patil, 25-29 May 2019, CIVIL, 22 participants present.
7. ASIP-Advances in Signal and Image Processing", Dr. M.B. Kokare & Dr. R.R. Manthalkar, 27 - 31 May 2019, EXTC, 48 participants present.
8. Recent trends in Control System and Applications, Dr. B.M. Patre Dr. R.H Chile ,Dr. S.T. Hamde, 01-05 July 2019, INSTRU, 36 participants present.
9. Waste Energy - A Green Approach, Dr. P.G. Jadhav, Mr. S.B. Dethe, 3-7 July 2019, CHEM, 39 participants present.
10. Project Management for Engineers , Dr. M.L. Waikar & Dr. N.H. Kulkarni, 21-15 Sept. 2019, CIVIL.
11. Advances in structural Engineers Recent Trends, Dr. M.L. Waikar and Dr. Awachat, 1-5 Oct. 2019, CIVIL.
12. Stability and Rehabilitaiton of Engineering Structures , Dr. M.L. Waikar & Dr. G.D. Awchat, 6-10 January 2020, CIVIL, 23 participants present.
13. Analytical Techniques for Applied Research , Dr. P.D. Dahe & Dr. M.L. Waikar, 6-20 Feburary 2020, CIVIL, 22 participants present.
14. Advanced Functional Material in Engineering, Dr. P.G. Jadhav, Mr. S.B. Dethe, Mr. , 24-28 February 2020, CHEMICAL, 39 participants present.

Training/workshop programmes for students and teachers.

1. Electrical Engineering department conducted one day workshop on " **Virtual Labs"** on 14.03.2020. The workshop was coordinated by Dr.R.V.Sarwadnya and Dr.Alok Kanti Deb, Department of Electrical Engineering, IIT Kharagpur was invited to deliver the expert lecture. Total 116 participants were attended (14 teachers and 102 students) this workshop.
2. Department of Civil Engineering has conducted expert lecture on "**Satellite Remote Sensing and its application".** The lecture was delivered on 15.01.2020 and lecture delivered by Dr. Tarendra Lakhankar, Sr.Scientist NOAA-Centre for earth System Science & Remote sensing Technologies, New York. Total 14 students have participated in the lecture.
3. A program was conducted on "**Mothers on Wheels"** on **10th January 2020.** Dr. Madhuri Sahastrabudhe was key note speaker. The program was coordinated by Dr.V.R.Thool.
4. Department of TIFC have conducted two days workshop on "**Design Thinking"** dated December 28-29, 2019. The program was coordinated by Dr.S.S.Gajre and Shri K.Murlimohan. Exert were Mr.Roshan Goswami and Mrs.Manshi Dubey from Y Centre.
5. Department of Computer Science & Engineering have conducted three days workshop on "**Fundamentals of accelerated Computing using Open MP & CUDA C/C++"** held dated **December 27-29,2019.** The workshop was coordinated by Prof.P.P.Kanhegaonkar. Total 109 students have participated in this workshop.
6. Department of Electronics and Telecommunication Engineering have conducted one week program on "**Deep Learning: Concepts and Applications"** Dated **December 16-21,2019.** The program was coordinated by Dr.S.N.Talbar and 138 faculty and students have participated in this event.
7. The induction program "**The Art of Living "**were conducted on 19.08.2019 and 26.08.2019. Around 240 students have taken part in this program.
8. Mechanical Department has conducted workshop entitled on " **Python Workshop and beyond"** was held dated **17.08.2019 – 18.08.2019**. Total 42 students were present for the said workshop.

Academic activities during lockdown:

- Sharing of NPTEL, Swayam course links to all students on regular basis.
- On-line quizzes, Test and assignments were given.
- On-line submission of various practicals were encouraged.
- **The MoU between SGGSIE&T, Nanded and Coursera** provided **a FREE** learning platform to all UG, PG, PhD students and Faculty.
- We have 1505 learners who joined various courses and taken in total 20296 hours of training covering 30177 lessons on Coursera. These figures are during lockdown period only
- Arrangement for free access **on Edx** is being done – Obtained 5000 licenses for online access to 5000 courses **on Edx (Harvard and MIT courses)-** Configuration of inviting users and starting courses will be completed before 22nd May 2020.
- Faculty shared their own PPTs, Notes and Video/Audio Lectures
- Continuous guidance , supervision and meetings through various digital platforms such as Google meet, WhatsApp etc. A few faculty members have engaged and are still engaging classes using Google meet.
- More than 70% faculty members completed Courses from Swayam/NPTEL/Coursera/other Online courses(Minimum 3). A few have done more than 20 courses
- More than 60 faculty completed AICTE Examination reforms workshop (online/Offline)
- Relaxation by **MEDITATION DURING LOCKDOWN** From 27-04-2020 to 17-05-2020: SGGSIE&T in association with International Sahaja Yoga Research & Health Center, Greater Noida Delhi is conducting online training program for faculty , students in Lockdown. More than 300 people are attending the sessions every day. The training is coordinated by Prof. Balaji Shetty.
- SGGSIE&T, Nanded organized an **online Annual Foundation School (AFS-I) in Mathematics for 5 weeks**. We have received a huge response from all over India. The course was inaugurated by Director IITB, Our Director and Head, NCM Mumbai. The course coordinator is Dr Arun R. Patil, SGGSIE&T, Nanded.

18. Students' internship data

Sn	Branch	No.
1	Computer Science Engineering	65
2	Electronics and Telecommunication Engg.	14
3	Information Technology	27
4	Instrumentation Engineering	08
5	Production Engineering	09
6	Textile technology	03
7	Electrical Engineering	08
8	Mechanical Engineering	20
9	Civil Engineering	29
10	Chemical Engineering	00
	Total	183

19. Campus placement data

Under Graduate

Sn	Branch	Placed Studs
1	Computer Science Engineering	82
2	Electronics and Telecommunication Engg.	44
3	Information Technology	42
4	Instrumentation Engineering	23
5	Production Engineering	01
6	Textile technology	05
7	Electrical Engineering	11
8	Mechanical Engineering	07
9	Civil Engineering	01
10	Chemical Engineering	09
		225

Post Graduate

Sn	Branch	No.
1	Computer Networks and Information Security	
2	Electronics Engineering	
3	Civil Engineering (Water Management)	
4	Mechanical - CAD/CAM	01
5	Instrumentation Engineering	
6	Mechanical - PLM	07
7	Information Technology	01
8	VLSI and Embedded Systems Design	
9	Textile Technology	
10	Structural Engineering	
		09

20. Sponsored R&D projects in-hand

Sponsored R&D Projects in hand (During 1st April 2019 to 31st March 2020)

1	Design and development of low cost solar powered various precision agriculture system
2	Design and Development of computer Aided diagnosis (CAD) Tool for CT scan images of Lung Diseases
3	Visvesvaraya Ph.D. scheme
4	Wear characterization of Electro Discharge coated tool steel
5	Development of breathable printed coated textile
6	Optimisation of the process parameters of multi count yarn on ring frame.
7	BRNS

Funds Received

Scheme	Amt. in Rs.
BRNS	1367675.00
MODROB	1000000.00
SPDP	527500.00
ROBOTICS TRAINING CENTRE	5000000.00
Watershed Management Training Centre, NAGADRWADI	1000000.00
Total Funds	8895175.00

21. Candidates completed/On-going PhD

Ongoing Ph.D. – 179

Completed Ph.D. – 273

Ph.D. Completed Candidates (during the 1 April 2019 to 31 March 2020)

	subject	reg_year	name	thesis	res_area
1	Instrumentation Engineering	2014-2015	LAKHEKAR GIRISH VITHALRAO	An Investigation of Adaptive Fuzzy Sliding Mode Control for Underwater Vehicles	Fuzzy Logic Control, Neural Network, PC, IA
2	Computer Science Engineering	2012-2013	WANKHADE KAPIL KESHAO	Design and Developments of Algorithms for Intelligent Data Stream Mining	Data Mining
3	Electronics and Telecommunication Engg.	2014-2015	PAWAR MEENAKSHI MUKUND	Computer Aided Analysis of Mammograms for Breast Diseases	Biomedical Image Processing
4	Computer Science Engineering	2012-2013	MANE DEEPAK TATYASAHEB	Design and Development of Supervised Clustering Algorithms	Clustering, Neural Networks, Machine Learning
5	Civil/Civil Water Management Engineering	2008-2009	ASWAR DINESH SHRIKRISHNA	Geo-Modeling for Dam Foundation Stratum	Geotechnical Engineering
6	Computer Science Engineering	2014-2015	SAPATE SUHAS GAJANAN	Design and Development of Algorithms for Automatic Breast Cancer Detection	Digital Image Processing
7	Electronics Engineering	2013-2014	KAMBLE RAVI MUKUNDRAO	Content Based Retinal Image Retrieval	Medical Image Processing, Computer Visio
8	Mechanical / Production Engineering	2013-2014	SONAWANE DEEPAK CHANDRABHAN	Use of Solar Energy for Effluent Treatment in Process Industry	Solar Energy
9	Computer Science Engineering	2011-2012	KULKARNI ARUN BABURAO	Roboust Clustering Algorithms for Data Clustering and Retrieval	Pattern Recognition
10	Computer Science Engineering	2011-2012	VASGI BHARATI PAVAN	Algorithm For Data Security In Cloud	Data Security
11	Computer Science Engineering	2013-2014	ABD ALFATAH KAID SAEID ALI	Effective Concerted Actions for QOS in Mobile Ad hoc Networks	Mobile AD hoc Networks
12	Instrumentation Engineering	2010-2011	MUQEET MOHD. ABDUL	Person Authentication using Face Recognition	Signal and Image Processing

13	Electrical Engineering	2012-2013	SANKESWARI SUBHASH SHRIKANT	Some Studies On Sliding Mode Control Strategies For The Robust of Industry DC Drives	Control System
14	Electrical Engineering	2013-2014	TAMBOLI DIPTI AMOL	Some Studies on Multiple Model Based Control Strategies for Complex System	Control System
15	Electronics and Telecommunication Engg.	2010-2011	SHARMA KAILASH SHRIRAM	Illumination & Pose Invariant Face Recognition	Biometric
16	Electronics and Telecommunication Engg.	2011-2012	BHORGE SIDDHARTH BHAGWAN	Video based indoor human activity detection and analysis	Video And Image Processing
17	Instrumentation Engineering	2012-2013	JOSHI ATUL KRISHNARAO	Analysis and Design of Instrumentation System for Induced Acoustic Emission Testing of Engineering Components	Mechatronic System Design and Analysis
18	Electronics and Telecommunication Engg.	2014-2015	CHAVAN TRUPTI RAMDAS	Image Understanding and Classification by Visual Vocabularies	Computer Vision
19	Electronics and Telecommunication Engg.	2014-2015	PORWAL PRASANNA PRADEEPKUMAR	Automatic Retinal Image Analysis for the Detection of Diabetic Retinopathy	Medical Image Analysis
20	Civil/Civil Water Management Engineering	2014-2015	NILAWAR ADITYA PRADIP	Geospatial Hydrological Modeling of Watershed	Hydrology
21	Computer Science Engineering	2012-2013	JAVHERI SANTOSH BALIRAM	Design and Development of Encryption Techniques for Secure Data Transfer over the Computer Networks	Data Security
22	Electronics and Telecommunication Engg.	2013-2014	NARWADE PRADEEP NARAYAN	Offline Signature Verification	Image Processing
23	Mechanical / Production Engineering	2013-2014	MANE UMESHCHANDRA MOHANRAO	Automated Assembly Sequence Planning	Assembly Planning Of Mechanical Products

22. R&D achievements

Patents filed

Sr. No.	Name of the Patent	File No.	Date of patent Filing/ Grant	Status	Inventors
1.	System to Heat a Fluid using Solar Energy	201921049373	02/12/2019	Filed	Dr. V. B. Tungikar and Mr. D. S. Malwad
2.	System and Method to Dry Turmeric using Solar Energy	201921040162	04/10/2019	Filed	Dr. V. B. Tungikar, Mr. M. R. Nukulwar and Mr. D. S. Malwad

Sr. No.	Name of the Patent	File No.	Date of patent Filing/ Grant	Status	Inventors
3.	System and Method to Cool A Cabin of The Vehicle using the Movable Blower	201921040158	04/10/2019	Filed	Dr. V. B. Tungikar, Mr. M. R. Nukulwar and Mr. D. S. Malwad
4.	System and Method to Produce Jaggery Using Solar Energy	201921034759	29/08/2019	Filed	Dr. V. B. Tungikar and Mr. D. S. Malwad
5.	System and Method to Cool A Cabin of The Vehicle	201921034761	29/08/2019	Filed	Dr. V. B. Tungikar and Mr. M. R. Nukulwar

Highlights on activities done by R&D section in the academic year 2019-20

- NDF scheme
- RPS and MODROB AICTE Proposals
- QIP Activities / Courses
- TEQIP research scholar's issue
- Research Exchange Program
- New scheme of M. Tech
- Research symposium
- DIPEX-2019

NDF Scheme:

- The AICTE launched the National Doctoral Fellowship in last year.
- In the first year 06 Research Scholars have joined in various departments of SGGS. (EXTC-01, INSTRU-03, PROD-1, CIVIL-01)

QIP Activities /Courses:

- Received the Grant of Rs. 49.00 lakh
- 02 Research Scholars joined the institute for Research Work under QIP (INSTRU-01 & PROD-1).
- 07 Research Scholars (4 INSTRU & 3 EXTC) were working on contact program (pre Ph.D.) for final admission in the year 2019-20.
- 05 Short Term Training Programmes were organized under QIP. (Mechanical Engineering Department, Computer Science & Engineering Department, Information Technology, Civil Engineering and jointly CSE-Mathematics department)
- Interviews of Research Scholars for advance admission in the year 2019-20 were conducted in (EXTC,INSTRU & PROD Departments).

INSTITUTE ACHIEVEMENTS/ RECOGNITIONS
(INSTITUTE LEVEL)

- In 2004, Institute granted full autonomous status. Autonomous status was extended twice. Recently UGC has extended Autonomous status up to 2021-22.
- Recognized Research Centre of SRTMU, Nanded since 1994.
- Accreditation of Four UG programs in Nov. 2017
- Institute was selected through National level competitive bidding for financial assistance of World Bank Assisted programs: TEQIP-I, TEQIP-II, Center of Excellence in Signal and Image Processing and TEQIP-III.
- Institute executed 62 MoU's with Industries and --- MoU's with Institute/Research Organization (National/International) in last 5 years.
- Institute contribution to Technical Education at National Level:
  - ✓ Dr. A. S. Pant, Ex-Faculty, Vice Chairman, AICTE, New Delhi
  - ✓ Dr. A. U. Digraskar, Former Central Project Advisor, NPIU, New Delhi
  - ✓ Dr. Y. V. Joshi, Former Director, Walchand College of Engineering, Sangli
  - ✓ Dr. P. B. Ullagaddi, Former Advisor-II (Approval Beurea), AICTE, New Delhi
  - ✓ Dr. S. G. Bhirud, Ex-Faculty, Former Advisor–I (AICTE, New Delhi)
- Institute has International Research Collaboration with UTP Malaysia and City College, University of New York.
- Patents (Filed – 31, Granted - 02)
- Institute offers various Research Schemes for doing Ph.D. with fellowship under QIP-Ministry of HRD, Visvesvaraya Ph.D. Scheme - DEiT, TEQIP, Centre of Excellence, Maulana Azad National Fellowship and IRSS.
- Institute has organized 9 National Conferences and 3 International Conferences in last 5 years.
- Four departments are DST FIST Sponsored.
- Presently, the Institute is mentoring College of Technology, Pantnagar under TEQIP-III.

INSTITUTE ACHIEVEMENTS/ RECOGNITIONS
(FACULTY LEVEL)

Publications Journals	International – 934 and National – 248
Publication Conferences	International – 813 and National – 467
Books	Books – 56 and Book Chapters – 26
Patents	Filed – 31 and Granted – 02
FDP Programs organized	81
Training Programs organized with Industry	82

Awards and Recognitions	1 Best Principal, 1 Best Teacher, 1 BOYSCAST, 2 Young Scientist Awards
Internship Programs Organized	5
Conferences organized	International – 3 and National – 9
MoU's with Industries	International – 2 and National – 25
MoU's with Research Organization	International – 3 and National – 14
Visit to Foreign Universities	20
Research Projects received	31
Members of National/State-Level Committee	BOS, RRC, Academic council, Dean of Various Universities. Also acted as Expert on AICTE, UGC, Autonomy, NBA, DST Committees. Ph. D. referee for various universities, NITs, and IITs
Reviewers of Journals	Most of our faculty members are Reviewers for peer reviewed journals (SCI/SCIE)
Conference/Session Chairs	Majority of the faculty members are reviewers for the Conference/Session Chairs

INSTITUTE ACHIEVEMENTS/ RECOGNITIONS

(STUDENT LEVEL)

- All India Toppers in GATE: 3 times, recently Vinay Gujare from Production Engg department stood first in Gate 2016 score (All India Topper).
- Total number of students qualified in GATE 2014-15: 36, GATE 2015-16: 88 and GATE 2016-17: 97, 2017-18: 90+
- Total number of students got selected on-campus in Academic year 2014-15: 332 , 2015-16: 372 and 2016-17: 350
- "Drishti" is official annual magazine of the institute. Our magazine received "Best Annual Magazine Award" (first prize) thrice and second prize twice since last 5 years.
- Our students are recognized and selected for International Internships at Germany.
- Our students are encouraged to program, develop and maintain various Online Portals for various applications like online result, alumni connect, hostels, etc. (Total number of online portals developed so far : 28)
- Developed Mobile Application for Nanded City Guide.
- One group of students secured first prize in National Level Smart India Hackathon 2017 competition organized by MHRD.
- Our student teams secure 11th position in SAE INDIA BAJA 2016-17 competition.
- Secured first prize in "Chem-E-Car" Cognizance-15 organized by IIT Roorkee.
- Secured first 3 prizes for PROTYPE competition for Design of Heat Exchanger working model organized by IIT Roorkee
- Won first prize in Apogee 2017: Agro Assist, All India competition organized by BITS Pillani.
- Achieved 2nd prize in Quark 2017, all India competition organized by BITS Goa.

• Students have successfully demonstrated Live Webcasting project for 16th Parliamentary and Assembly Elections(2014) under the supervision of District collector administration.
• Our students won first prize in Inter-Collegiate Swimming, Boxing, Table Tennis, Kabaddi (Women) and Chess Tournament in last academic year.
• Waste to Best team of students contributed for the social cause and helped in terms of donation to Asta Orphan Home, Mudkhed , Indira ashram school, Asarjan, SavitribaiPhule Blind School, Taroda, Blind School, Vasarani , and library support for Z.P. schools.
• Publication of papers in various conferences
• Start-Ups by students

23. Consultancy Projects in-hand

Department	Title of the Consultancy Projects	Amount in lakh
Civil Engg.	Water supply to Ahamadpur project cost 45 crores	450.00
	Stability analysis of old medical college bldg at Nanded city	7.56
	TPTA of CNB and other repair works in Nanded dist	5.65
	Water supply to Ardhapur Dist. Nanded	280.00
	Water supply to Himayat Nagar Project	150.00
	Water Supply to Ausa Dist. Latur	360.00
	Tape Water Supply to Kakandi	1.79
	Tape Water Supply to Jharikot	15.96
	Tape Water Supply to Kerur Ta.Biloli	10.85
	Tape Water Supply to Barbada Ta. Biloli	18.12
	Tape Water Supply to Tuppa Ta. Nanded	21.34
IT/CSE	Online court cases monitoring System of Dist. Collector Parbhani	07.00
Prod	महिला आर्थिक विकास महामंडळ	02.00

24. Start-ups and Innovations

Institute has set up a Technology Innovation and Entrepreneurship Centre (TIEC) to facilitate innovations. This houses Innovation Laboratory and Engineering Exploration Laboratory. Students are encouraged to take part in different innovative competitions such as Smart India Hackathons, Robotics Competitions, etc. Many training programmes and special programmes such as Design Thinking Workshops are organised. Summer Trainings are regularly organised with a focus on "Converting Idea to Product Design" approach.

Earlier, students have won Smart India Hackathons, and this year internal Hackathon was conducted on the similar lines of SIH in which hardware and software problem statements were selected by students. It was a grand success and led to enthusiasm among students. This has led to enhancing creativity and imagination of students who boldly are approaching us for start-ups. In the last year, a final year student from CSE has started a start-up company on the campus. It is IT solution provider. Students have done internship in the company. Some other students have started a component delivery company. A few groups of students are taking challenging problems from industries across the globe and providing solutions to them. A few patents have been also filed.

25. Linkage with industry

SN	Email Address	Name Of Student / Student Team List	Email	Year of Study	Branch	Linked/ Worked with:	The year of your Working(April 2018 to March 2020)	Explain the link/work:
	2017bit040@sggs.ac.in	Sharma sachin	2017bit040@sggs.ac.in	3	IT	other	2020	Building a react js website for covid monitoring and latest news about covid.
	Vibhanshukhandekar 2002@gmail.com	Vibhanshu Khandekar	Vibhanshukhandekar 2002@ gmail.com	1st year	Electronics and telecommunication engineering	other	0	Currently I'm associated with nothing.
	o4kadam@gmail.com	OMKAR MUNJAJI KADAM	o4kadam@gmail.com	First Year	Computer Science and Engineering	other	2020	Online Study for Coding

	2016bcs113@sggs.ac.in	Bikramjeet Singh	bikramjeetmehta@gmail.com	2020	Cse	Industry (Internship)	2020	I am doing my internship in cosmos . A company to which our college has provided space in its previence . (TIEC hall) . I have been working with a team handling all the technical work of the company like development of website, maintenance and updation , handling the tools and many more
	2017bin025@sggs.ac.in	Chinmay Dnyate	2017bin025@sggs.ac.in	Third Year	Instrumentation	other	2019	1)Industrial Training cum internship of 2 weeks in Instrumentation Department at GarwarePolyester Pvt Ltd. Aurangabad in May 2019 2)Industrial Training cum Internship of 2 weeks in the domain of design and detailed instrumentation engineering at. Nice Consultancy Thane in Dec 2019.
	2016bcs006@sggs.ac.in	Punam Ramesh Shelke	2016bcs006@sggs.ac.in	2020	Cse	Industry (Internship)	2020	Full stack web developement
	2019bme019@sggs.ac.in	Gokul Adsul	gokuladsul474@gmail.com	First year	Mechanical	other	2020	Python 202
	2018bch016@sggs.ac.in	Waghmode Nivratti Madhav	Waghmodenivratti1997@ gmail.com	Second year	Chemical Engineering	other	2018	To become a self dependent
	2016bpr041@sggs.ac.in	Shubham Tukaram Dukare	shubhamdukare98@gmail.com	Final year	Production Engineering	other	2020	Coursera.org
	2019bec005@sggs.ac.in	Rushikesh Girhe	rushi3428@gmail.com	First year	Electronic and telecommunications	other	2020	Recently I have completed speaks English professionally on coursera
	2017bit055@sggs.ac.in	Swapnil Dhananjay Adnak	2017bit055@sggs.ac.in	3rd year	Information Technology	Industry (Internship)	2020	Data Analyst
	2017bec014@sggs.ac.in	1.Kshitij Sagar. 2. Paresh Shahare.	orangebiometric.work@gmail.com	TY	EXTC	Industry (Project)	2019	Vehicle Intelligence Navigation System
	2017bec014@sggs.ac.in	1.Kshitij Sagar. 2.Shruti kulkarni	2017bec014@sggs.ac.in	TY	EXTC	Industry (Project)	2020	Battery management system
	2017bec014@sggs.ac.in	Kshitij Sagar	sahutechnologies@gmail.com	TY	EXTC	Industry (Internship)	2020	Embedded electronics Research (8051)
	2017bme037@sggs.ac.in	Sandesh Pardeshi	2017bme037@sggs.ac.in	Final	Mech	other	1	Certified courses
	2017bme037@sggs.ac.in	Sandesh Pardeshi	2017bme037@sggs.ac.in	Final	Mech	other	1	Certified courses

	2019bec002@sggs.ac.in	Jagdish Patil	jbpatil2111@gmail.com	FY	Electronics and Telecommunication Engineering	Innovation	2020	My work was based on home automation and safety. I have made a device that catches every movement in a place and notifies all the relevant information to the owner via emails.
	2019bec057@sggs.ac.in	Ramanshu Gawande	2019bec057@sggs.ac.in	First Year	Electronics and Telecommunication Engineering	Startup	2020	E-learning android appliaction development
	2017bec064@sggs.ac.in	Aayush Singh	nahtnam2703@gmail.com	TY	EXTC	Industry (Internship)	2020	Python Teaching Assistant at Internshala, Python Training is the largest training on Internshala, and my role is to solve student queries, evaluate projects, give content feedback, create new content for the training. I have been working as an intern for past 3 months and received an extension of 2 more months, till 1st August. https://trainings.internshala.com/python-training
	2016bin032@sggs.ac.in	Atharva Ravindra Pathak ,Shreyash Meshram ,Vivek Anchewar, Damini Gaikwad,Pranita Narwade, Jyotsna Jambhale	2016bin032@sggs.ac.in	Final Year	Instrumentation	Industry (Project)	2019	Winner of Smart India Hackathon contest 2019(Hardware Edition). Worked on the project of Optimization or water and yield improvement. We used temperature , humidity,soil moisture,Soil pH analyser and level sesor for taking live data and controlled the parameters using these sensors for proper yield improvement in the farm.
	2017bec064@sggs.ac.in	Aayush Singh	nahtnam2703@gmail.com	TY	EXTC	Startup	2020	Python Development Intern at AAIway. This is an AI based startup, I am responsible for developing a deployable end-to-end deep learning pipeline which can recognize faces and screen people based on their temperature captured using thermal camera. This is a 3 month internship started in April 2020 https://aaiway.com/
	2017bpr510@sggs.ac.in	Pranali Prashant Kalse.,Kavya Gajula	pranalikalse18@gmail.com	B.tech final year	Production engineering	Industry (Internship)	2020	As a Design engineer.
	2017bec064@sggs.ac.in	Aayush Singh, Laxmikant Suryavanshi	nahtnam2703@gmail.com	TY	EXTC	Industry (Project)	2020	Person Counting using overhead camera. This project is assigned by Mr.Jivan Katariya, Director of SPJ Embedded Technologies Pvt Ltd. The goal of the project is to count number of people entering and exiting a building using overhead cameras and deploy this on a low-power device such as Raspberry Pi. Demo Video: https://drive.google.com/file/d/1_2sWhLeHrjxst-W3FmppyHvbdxk4JkMW/view

	2017bec082@sggs.ac.in	Swaraj Shingote	2017bec082@sggs.ac.in	Third Year	Electronics and Telecommunication	Innovation	2019	Team Consisting of 6 members participated in Smart India Hackathon 2019(Hardware Edition), which is an initiative of HRD ministry of Government of India to increase the competition among the engineering student to solve the real world problem. This competition was held at Indian Institute of Technology, Delhi during 8 to 12 july ,2019 (5 Day Hackathon). A team of following six students from institute with a team name "DHRUVA_", participated in this competition and won first prize of Rs. 75000/- Problem statement : "To detect bike crash and send SOS to centralized command centre" which was given by Yamaha Motor Solutions India Pvt. Ltd. Working Flow : **Input:** The input to the system are three sets of Inertia Measurement Unit (IMU) data, each set consist of real time Acceleration & Tilt of Bike, hence three sets of real time Acceleration & Tilt of Bike called Sensor Data.Processing: The Sensor Data (Tilt of Bike & Acceleration) are continuously monitored by the controller, if the change in sensor data is greater than threshold, crash is detected. To confirm crash, two alarms (one at a time) are actuated each of a certain snooze time (10 Sec). If the bike driver is unable to switch 'OFF' the alarm, hence crash is not confirmed and SOS is not generated. Else, after the second alarm crash is confirmed and SOS generated. **Output:** Generated SOS is sent to centralized command centre along with nearest ambulance & Hospital with GPS location. A notification will also be sent to Family/Friends and Police Station. However, if the bike is again on the road, the SOS once generated can also be aborted if the driver could not switch 'OFF' the alarms and not need any assistance then driver can abort SOS manually by pressing a switch on device. Your Story Article :https://yourstory.com/2019/08/team-dhruva-smart-india-hackathon-bike-crash-alert
	2017bec108@sggs.ac.in	Mrunal joshi	2017bec108@sggs.ac.in	Third Year	Electronics and telecommunication engg.	Industry (Project)	2020	Project assigned by Mr. Jivan Katariya, Director of SPJ Embedded Technologies

	2017bec082@sggs.ac.in	Swaraj Shingote	2017bec082@sggs.ac.in	Third Year	Electronics and Telecommunication	Innovation	2019	Team Consisting of six members participated in Smart India Hackathon 2019(Hardware Edition), which is an initiative of HRD ministry of Government of India to increase the competition among the engineering student to solve the real world problem. This competition was held at Indian Institute of Technology, Delhi during 8 to 12 july ,2019 (5 Day Hackathon). A team of following six students from institute with a team name “DHRUVA_”, participated in this competition and won first prize of Rs. 75000/-. Problem statement : “To detect bike crash and send SOS to centralized command centre” which was given by Yamaha Motor Solutions India Pvt. Ltd. Working : Input: The input to the system are three sets of Inertia Measurement Unit (IMU) data, each set consist of real time Acceleration & Tilt of Bike, hence three sets of real time Acceleration & Tilt of Bike called Sensor Data. Processing: The Sensor Data (Tilt of Bike & Acceleration) are continuously monitored by the controller, if the change in sensor data is greater than threshold, crash is detected. To confirm crash, two alarms (one at a time) are actuated each of a certain snooze time (10 Sec). If the bike driver is unable to switch ‘OFF’ the alarm, hence crash is not confirmed and SOS is not generated. Else, after the second alarm crash is confirmed and SOS generated. Output: Generated SOS is sent to centralized command centre along with nearest ambulance & Hospital with GPS location. A notification will also be sent to Family/Friends and Police Station. However, if the bike is again on the road, the SOS once generated can also be aborted if the driver could not switch ‘OFF’ the alarms and

								not need any assistance then driver can abort SOS manually by pressing a switch on device.
	2017bec108@sggs.ac.in	Mrunal Joshi	2017bec108@sggs.ac.in	Third year	Electronics and telecommunication engg.	Innovation	2019	Found solution pn problem statement given by YAMAHA Pvt. Ltd. In SIH2019 Problem statement was "To detect a bike crash and send SOS to centralized command center" Link: bit.ly/Robotics-Mrunal
	2017bpr016@sggs.ac.in	Gopal khanduji bhise	2017bpr016@sggs.ac.in	3	Production	other	2018	Quantitative aptitude
	2017bpr513@sggs.ac.in	1.Rutuja Tukaram Boinwad. 2.Anjali Gangadhar Tidke.	2017bpr513@sggs.ac.in	Final year	Production Engineering	Industry (Internship)	2020	Quality Engineer (Intern in purchasing dept.)
	2016bpr023@sggs.ac.in	Mayuri Gurunath Gaikwad	2016bpr023@sggs.ac.in	Final year	Production	Industry (Internship)	2020	Intern in resharpning department
	2019bit056@sggs.ac.in	VIREN RAHUL BHOSALE	2019bit056@sggs.ac.in	FY	INFORMATION TECHNOLOGY	Industry (Internship)	2020	INTERNSHIP AT COSMERS GLOBALSOLUTIONS
	2017bcs007@sggs.ac.in	Piyush Diwakar , Rohan Salunkhe	piyushdiwakar2050@gmail.com	Third year	Cse	Startup	2020	Basically we have created a platform for the students and mess owners where we display the various mess with its menu on our website and students can see the menu and book a seat in any mess on the daily basis.
	2019bit056@sggs.ac.in	1) PRATIKSINGH THAKUR 2) AMIT CHOUDHARY 3)VRUSHABH BHAGWATKAR 4)VEDANG FATE 5)VIREN BHOSALE (TEAM PAVVVFECT)	2019bit056@sggs.ac.in	FY	1.CSE 2.CSE 3.IT 4.IT 5.IT	Industry (Internship)	2020	INTERNSHIP (ORA ROBOTICS) + INNOVATION MADE APP(BMB - BOOK MY BASKET) AS SOLUTION FOR CROWD GATHERING AT STORES AND SHOPS CONSIDERING NEEDS TO FIGHT THIS PANDEMIC.

	surajadude07@gmail.com	Suraj Adude.	surajadude07@gmail.com	2 nd year	Cse	Startup	1	Activity: *About Us:* thebookbazar.com is an online platform where you can Buy new books, you can buy used books in good condition at a reasonable price. Here you can sell your books as well. We also Provide Educational Consulting Services. We aimed to Change the Educational System In India. We at bookbazar Believe that Education is every humans' Basic Right, And we will keep on working for it. thebookbazar.com is Founded with A strong motive to Provide All the necessary Educational Services at a cheaper Prices. Our Services Include: Online Book buying and selling, online Consulting services, Ebooks Services, and Many More to come. Website link: thebookbazar.com Name of student: Suraj Adude, Rajkumar Rajhans. Current status: initial stage.

	surajadude07@gmail.com	Suraj Adude.	surajadude07@gmail.com	2 nd year	Cse	Startup	1	Activity: *About Us:* thebookbazar.com is an online platform where you can Buy new books, you can buy used books in good condition at a reasonable price. Here you can sell your books as well. We also Provide Educational Consulting Services. We aimed to Change the Educational System In India. We at bookbazar Believe that Education is every humans' Basic Right, And we will keep on working for it. thebookbazar.com is Founded with A strong motive to Provide All the necessary Educational Services at a cheaper Prices. Our Services Include: Online Book buying and selling, online Consulting services, Ebooks Services, and Many More to come. Website link: thebookbazar.com Name of student: Suraj Adude, Rajkumar Rajhans. Current status: initial stage.
	2016bec069@sggs.ac.in	Paresh Shahare	2016bec069@sggs.ac.in	B.Tech Final Year	EXTC	Industry (Project)	1	Project Name: Vehicle Intelligent Navigation System The project is about redefining the navigation system for two wheelers.
	2016bec155@sggs.ac.in	Shankar Uamakanto	2016bec155@sggs.ac.in	Final year	EXTC	Industry (Internship)	2020	Vehicle Diagnostics
	2018bpr518@sggs.ac.in	Amar karad	2018bpr518@sggs.ac.in	3rd yr	Production engineering	other	2	Industry intership
	2019bec001@sggs.ac.in	Malegaonkar Gangubai mutyamreddy	2019bec001@sggs.ac.in	First year	Extc	other	2020	My project is robotic arm by using arduino
	2018bit063@sggs.ac.in	Sharvil Kashikar	sharvilkashikar2808@gmail.com	2nd year	Information technology	Innovation	0	Python

	2018bme007@sggs.ac.in	Omkar Singh	2018bme007@sggs.ac.in	second year	mechanical	Startup	1	I have my own business which deals with whole selling of electronic components(company name-ORA Robotics). i also have another startup which works in field of innovation & robotics education(startup name i.e robo monkee).
	2016bpr033@sggs.ac.in	Kavya Rajesh Gajula	2016bpr033@sggs.ac.in	Final year	Production engineering	Industry (Internship)	1	Done project on Crn rail cleaning auto-flushing machine
	2016bcs004@sggs.ac.in	Pranav Sushil Patil	2016bcs004@sggs.ac.in	Final Year	Computer Science and Engineering	Industry (Internship)	2020	iOS Application development
	shahadevnirmal@gmail.com	Shahadev Nirmal	shahadevnirmal@gmail.com	1th	Extc	Startup	2019	.
	2016bpr038@sggs.ac.in	Raksha Kamlakar Biradar	2016BPR038@sggs.ac.in	Final year	Production Engineering	Industry (Internship)	2020	Worked on two projects in Bosch Private Ltd, Nashik.. 1) Adjusting magnet angle with respect to inlet connector. 2) Hydraulic thru flow rejection in valve set assembly of injector.

26. Collaborative activities

Collaborative research with Mentee institutes

Submission of joint research projects to AICTE in collaboration with new TEQIP-III Faculty of CoT Pantnagar.

SGGSIE&T Faculty	CoT Faculty	Area
Prof. V. M. Nandedkar	Astt. Prof. Anandkumar Mandal	Optimizing Electrode design for resistance spot welding of coated steels.
Prof. V.B. Tungikar	Astt. Prof.Devki Nandan	Fabrication of aluminum hybrid metal matrix composite using residue ash.
Prof. M.B. Kokare	Astt. Prof. Harishitosh Bisat and Prof. V M Gadre, IIT Bombay	Image Processing and application of wavelet transform

27. Curricular achievement & Co-curricular achievement

Curricular and Co-curricular Achievements

Features of Curriculum:

UG curriculum:

To maintain the quality of technical education in the country AICTE provided guidelines for design of UG and PG curriculum. We have framed UG and PG curriculum based on AICTE guidelines. Our curriculum focuses on Outcome Based Education (OBE). Internship at final year and Induction Program and First Year are important features of the UG curriculum. The credits and burden of syllabus at first year level is reduced. We have introduced NPTEL courses in the curriculum of final year. The curriculum is designed such that the students should get holistic education which has components of sports, physical activities, values and ethics. The syllabus of various disciplines have been formalized based on industry requirements and market trends, employability, problem solving approach, need for life-long learning, innovation and research.

Features PG curriculum:

The curriculum is **s**tandardized for all PG Programs with uniform credit distribution. The syllabus includes advanced study of specialization through core subjects, flexible and diverse program specific electives. Also open electives widen the skills of students. The designed curriculum enhances engagement of industry in developing innovations and problem solving skills. The curriculum includes collaborating and interactive learning to ensure talent development. Focus is on development of advanced knowledge and specific skills required for industrial development and competency development of learner. For PG programs also, we introduced NPTEL courses in the curriculum

Elaboration on Curriculum and Co-curricular Activities:

Curriculum of our institute gives enough emphasize to issues like Gender, Environmental Sustainability, Human Values and Professional Ethics. Our Institute puts sincere efforts to conduct activities which contribute to orient and sensitize students, other stake holders towards these issues. Some of the issues are addressed in courses like Entrepreneurship, Indian Constitution, Management courses and Environmental Studies. For addressing the crucial issue of Environment and Sustainability **c**ourses like Environmental Studies, Environmental Engineering, Solid waste management, Remote Sensing, Natural Resources Mapping, Business Ethics, Internet of Things, Business analytics, cyber security, Project Management, Business Environment and Corporate Social Responsibility are included in the curriculum. Guest Lectures/Industrial Visits Celebration of world Environment Day/Water Day/Earth Day E Waste collection, separate plastic waste collection, paperless communication etc. are also encouraged.

Students admitted to the Institute come from highly diverse backgrounds, capabilities and the requirement of their learning is greatly influenced by their aptitude, abilities, background and other personal attributes. There are Slow Learners and Advanced Learners. The curriculum is designed such that it balances between
the requirements of slow learners and advanced learners.

For critical First Year subjects like Mathematics, Engineering Mechanics, Physics, Introduction to Computer Programming, Electrical Engineering for all the students remedial classes are arranged. During the Semester, for identified Slow Learners from all lateral entry students lectures are arranged. Also there is summer term immediately after the end-term examination of second semester. This provides additional time and examination for Slow Learners and improves the transition rate.

Program for Advanced Learners includes development of critical solving skills through thought provoking questions in internal assessment tests, Assignment of challenging projects on latest technologies, Encouragement to students to appear for competitions, credit transfer and QEEE, NPTEL and MOOC courses. These efforts lead to: Improvement in overall passing percentage, increase in the number of students securing high grades, Awards won in various state and national level competitions, Students securing admission for higher education in premier Institutes / Universities at National and International levels. Foreign language courses are conducted in the institute with the help of resource persons. Advanced learners can take more courses and earn more credits.

Institute employed teaching learning process that addresses the needs of all the four types of learners. The Institute practices following student centric methods for enhancing learning experience thereby facilitating effective learning. All faculty use ICT. (All faculty are provided with facility and all classrooms have LCD projectors, Campus is Wi-fi enabled). It is emphasized that engineering courses are to be learnt through experiential learning. Experiential learning is the process of learning through hands-on experience. The tools employed are Laboratory Experiments, Workshops, Field Trips and Industrial Visits, Internships, Projects (final year) etc. Mini projects in a few disciplines have been introduced to encourage project based learning (PBL). Some teachers employ PBL methodology for their courses. Persons from industry with vide experience are being invited for delivering talks/lectures. These efforts are in addition to strengthening academics and for sharing their experiences to bridge/reduce the gap between Industry and Academia. We have also established an Innovation laboratory for providing experiences of multiple disciplines to students where students undertake multidisciplinary projects and learn. Summer Internships for SY and TY and project internships in industries for final year students form the essential component of the curriculum. Social summer internships have been introduced for making students aware of actual problems in society and think on providing better solutions to these problems or create products which will improve quality of human life. This will have impact on providing indigenous solutions leading to participation in “MAKE IN INDIA” movement. Institute also encourages Self Learning. Students are encouraged to use E-resources on our LMS. They are encouraged to enroll and get certification for add-on online courses conducted by prestigious National and International Onganisations like QEEE,

NPTEL, MIT OCW, Coursera, Edx etc. Group assignments, group discussions, problem solving in groups is a usual feature of this institute, which enhances the active and participative learning of the students. The tools include Presentations, Group Projects, Mini projects, Role Plays, Debates, Group discussions, Flipped Classroom, Management Games, Business Simulations etc. LMS allows students to share, discuss and debate ideas based on the uploaded content participating in competitions. Co-Curricular and Extra-Curricular Teaching learning processes include activities like sports, Yoga camp, NSS, Zenith – annual sport festival, Dream Marathon, Utsav – Annual social gathering, Pragyaa – the technical festival of our Institute, participation in national level competitions such as Baja, Hackathons etc. Academic Calendar is prepared and adhered to by taking inputs from all stake holders like students, faculty and circulated much before the start of academic year. The academic calendar is planned for 15 weeks of academics.

Teachers keep ready their teaching plans (for 45 lectures- 4 credits and 25 lectures -credits), course materials and evaluation plans (like quizzes, assignment, problems, mini-projects, presentation, discussions and industrial visits) plans of the courses assigned to them (usually two). For practical courses laboratory manuals and experimental setups are kept ready. Some teachers use LMS like Google Classroom and MOODLE for course management. Also, some teachers help students to make use of video lectures, open course wares of prestigious institutes. Mid-Course and Exit-course feedback is collected from the students and is analyzed to orient the teaching in such a way that average student attains the outcomes to an expected level. Evaluation Schedule of In-Semester Evaluation (ISE) of 20 marks is decided by the course coordinators after discussion with students. Mid semester Evaluation (MSE) and End Semester Evaluations (ESE) are uniform for all courses offered in the institute for 30 and 50 Marks respectively. The evaluation of theory courses is kept transparent. After Mid-semester evaluation, the answer books are shown to the students. Any valid discrepancy reported by the student assessment is rectified before finalizing the marks. Students can apply and see the end-semester evaluation. Grade Moderation Committee moderates the grades on relative scale. The students failing to acquire pass grade in any of the courses are permitted to reappear whenever the course is offered or during summer term.

Grading methodology used is statistical grading with seven pass grades (A+, A, B+, B, C+, C and D) equivalent to grade points of 10, 9,8,7,6,5 and 4 respectively and one Fail grade (F with a grade point of 0). Grades are awarded on the marks out of 100 obtained by the student in each course. F grade is awarded for a student getting less than 40 marks. Grade boundaries are decided on the basis of values of mean and standard deviation with a gap of 0.5*Standard deviation around mean. In any case A+ is awarded only for marks greater than 80.

Institute follows international standards of curricula design based on ABET's criteria. Curriculum is designed based on Outcome Based Education (OBE) strategy. Students of a particular discipline are made aware of programme structure, Programme Educational Objectives (PEO), Programme Outcome (PO), contents, Course objectives and expected outcomes for each course offered to them. Course Outcome (CO) Formulation is based on Bloom’s Taxonomy with knowledge and comprehension considered immediate outcomes acquired during the education. Application and analysis attainable during study with scope for improvement in long run. The outcomes like design, manufacture, evaluation and synthesis are achievable in long run. The course articulation matrix is prepared for all courses indicating mapping of course outcomes (COs) with mentioned program outcomes (POs) and program specific outcomes (PSOs) depicting strength of relations

28. Awards / Prizes won by faculty and students

- Prof. Y. V. Joshi and Prof. R. S. Holambe for being shortlisted in LEAP programme 2019 –Leadership for Academician Programme of PMMMNMTT (Pandit Madan Mohan Malviya National Mission on Teachers and Teaching) – flagship program envisaged by the MHRD, Government of India. LEAP is fully sponsored programme by MHRD.

  Prof. Y. V. Joshi will be attending the LEAP programme at IIT KGP and IFM Cambridge University;
  Prof. R. S. Holambe will be attending the LEAP Programme at IIT BHU and IFM Cambridge University.

- Shiradhonkar Vasundhara, Passout 2008 IE batch, Satellite Experiment Infrastructure Engineer at TERMA Group, Darmstadt, Hessen, Germany.
  She is the part of European Space Operations Centre, for preparation of interface between Experimentars and Processing Platform and make it secured Satellite Launching

- Participation of Phoenix Team from our institute in BAJA SAEINDIA ATV (All Terrain Vehicle) 2020 at Chitkara University, Ropar (Punjab).
  All India Rank 1, Prize Money - 540000/-
- Sumit Sriram Vijapure awarded with “India 500 Startup Award 2019”

29. Financial information:

Funds Received / Spent with Internal revenue generated

FUNDS RECEIVED	Amt. in Rs.		**RECURRING EXPENDITURE**	Amt. in Rs.	
FROM STUDENTS - FEES (EXCEPT TUTION FEES)	150478619.00				
OTHER FEES FROM STUDENTS	14632612.00		OFFICE CONTINGENCIES	23636934.00	
OTHER RECEIPTS	2021748.00	**167132979.00**	REPAIRS AND MAINTENANCE	12183112.00	
			OTHER EXPENDITURE (including contractual salary Rs.25176095)	75232261.00	
INTERNAL REVENUE GENERATED			OTHER ACTIVITY STUDENTS	8483933.00	119536240.00
CONSULTANCY - INSTITUTE SHARE	1517363.00				
TENDER FORM SALE	180750.00		**NON-RECURRING EXPENDITURE**		
INTERNAL IRG	384491.00				
FDR INTEREST	78749436.00		LABORATORY EQUIPMENT	16340172.00	
TUTION FEES	31357373.00	112189413.00	FURNITURE AND FIXTURES	2301000.00	18641172.00
	-				
			PROJECTS EXPENDITURE		
			QIP CENTRE EXPENDITURE	2588219.00	
			BRNS Project	130270.00	
			DCA (RPS- MKR)	98135.00	
			DCA (RPS - Instru)	588806.00	
			DCA (RPS -VRT)	5274.00	
			DCA (Modrob - PGJ)	551296.00	
			DCA (Modrob - RNJ)	345000.00	
			DCA (Modrob - Instru)	570273.00	
			DCA (Modrob - Textile)	1444000.00	
			Institute Research Scholarship Scheme	3556284.00	
			Vishwashvarya Ph.D. Scheme	2509579.00	
			Design and Development of Compuer	306409.00	12693545.00
		279322392.00			**150870957.00**