



"Empowerment through Quality Technical Education"

### Dr D Y Patil School of Engineering

DY Patil Knowledge City, Charholi (Bk), Via Lohegaon, Pune 412105

Affiliated to S. P. Pune University Pune, MSBTE, Approved by AICTE & DTE Accredited by NAAC, NABL & ISO 9001:2015 & 21001:2018 Certified Institute



**ACADEMIC YEAR 2019-20** 

### **ANNUAL REPORT**

**Submitted to** 



THE NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

### **INDEX**

SR. NO.	TITLE	PAGE NO.
	Vision, Mission, Quality Policy	
1.	About the Institute	1
2.	Glimpses of the Campus	2
3.	IQAC Plan of Action	4
4.	Curricular Aspects	6
5.	Teaching- Learning and Evaluation	7
6.	Research, Innovations and Extension	10
7.	Infrastructure and Learning Resources	19
8.	Student Support and Progression	21
9.	Governance, Leadership and Management	23
10.	Institutional Values and Best Practices	34
11.	Institute Plan of Action for the Next Academic Year	41



### Vision

Empowerment through quality technical education

### Mission

M1: To achieve excellence in teaching, learning and research

M2: To impart skill based education to meet the needs of industry and Society

M3: To excel as a center of excellence in technical education

M4: To inculcate social &ethical values among the students

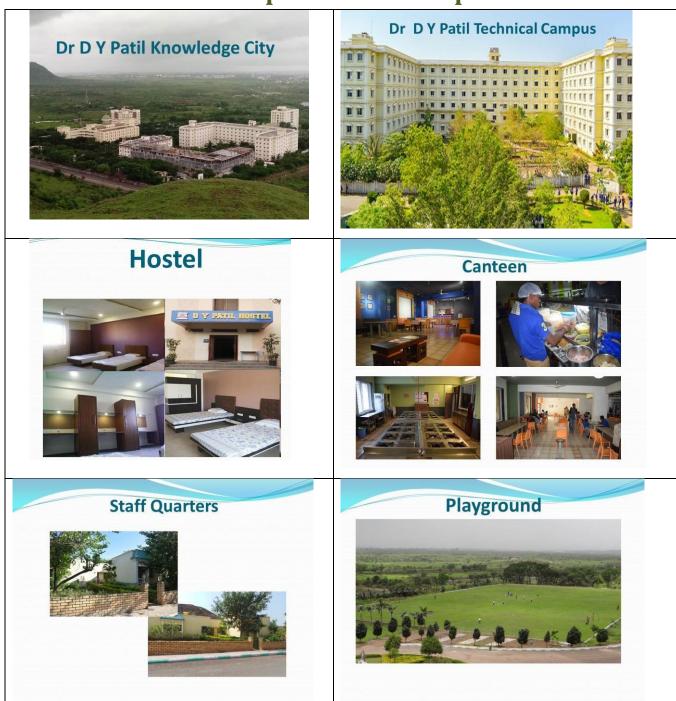
### Quality Policy

We strive to impart the quality technical education through academic excellence and provide best of facilities to satisfy the need & expectations of the students & stakeholders.

### 1. About the Institute

- ➤ Name of the Institute: Dr D Y Patil School of Engineering
- ➤ Address of the Institute: Dr D Y Patil Knowledge City, Charholi Bk., Via. Lohegaon, Pune 412 105
- ➤ Name of the Principal : Dr F. B. Sayyad
- **Contact Number :** Tel: 020-35037922
- > Website: www.dypsoe.in
- ➤ AICTE Permanent Approval Number: 1- 3847411
- **➤ College ID Number by Directorate of Technical Education, Maharashtra:** EN 6732
- ➤ Pune University College ID number: CEGP015720
- > AISHE ID: C-46648

### 2. Glimpses of the Campus



### **Indore Sports Facility**





# Outdoor Sports Facility

### **Auditorium**



### **Rain water Harvesting System**

Our campus landscape is design such a way that all rain water flow will
go towards the natural lake and also near Bore well which recharge our
Bore well naturally.

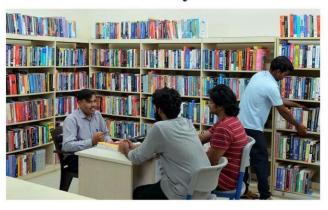


### **Solar Power System**

Hostel building roof installed solar system of KV
Installation of solar system on other building roofs is in process, order is placed already for vendor



### Library



### 3. IQAC Plan of Action

Sl No	Plan of Action Schedule		Monitoring Authority
NO			
1	A Meeting to discuss a plan of action prepared by IQAC for A. Y. 2019-20	of June 2019	IQAC coordinator
2	Approval of Plan of Action	Third week of July 2019	IQAC Coordinator
3	To prepare and allocate budget for academic and administrative activities	Third week of June 2019	IQAC coordinator in consultation with Budget Committee
4	Preparation and Checking of Course files and e- Content with CO-PO Mapping	June 2019	HoDs
5	Defining Pos, PEOs, and Mapping	June 2019	NBA Coordinator
6	Workshop on OBE	July 2019	NBA Coordinator
7	Initiate the process of NAAC Reassessment	July 2019	NAAC Coordinator
8	Review of result analysis and corrective action	July 2019	IQAC coordinator in consultation with HoDs
9	Stakeholders Feedback:  i) The students,  ii)The Teachers  iii)The parents,  iv)The alumni,  v)The employers, Industries	August 2019	IQAC Coordinator & i] HoDs ii] Alumni Coordinator iii] TPO
10	Conduct an Internal academic and administrative audit	SEM-I: SEP'19 SEM-II: JAN'20	IQAC coordinator in consultation with HoDs
11	Conduct an External academic and administrative audit	SEM-I: OCT'19 SEM-II: MAR'20	IQAC coordinator in consultation with HoDs
12	To conduct a minimum two internal examination for each subject for indirect assessment and for continuous assessment.	During Semester	HoDs
13	To register and complete at-least two relevant MOOC courses or one FDP or industrial training (not less than 5 days) or online NPTL certificate courses (minimum 4 weeks) by all teaching faculty per year	A. Y. 2019-20	IQAC coordinator in consultation with HoDs
14	To publish a minimum two papers by each faculty with the name of institute in the affiliation	During A. Y. 2019-20	IQAC coordinator in consultation with HoDs
15	To initiate consultancy in relevant field by each department for revenue generation.	During A. Y. 2019-20	IIIC and IQAC coordinator in consultation with HoDs
16	To initiate start-ups through IPR commercialization	During A. Y. 2019-20	TBI, EDC and IQAC coordinator in consultation with HoDs

17	To file a minimum two Patents/IPR/Copyright per department with the name of the institute in affiliation	During A. Y. 2019-20	IPR and IQAC coordinator in consultation with HoDs
18	To initiate international collaborations with various organization	During A. Y. 2019-20	Principal & IQAC coordinator
19	To organize a minimum one/two week STTP / FDP by all departments.	During A. Y. 2019-20	IQAC coordinator in consultation with HoDs
20	To organize international conference (interdisciplinary)	During A. Y. 2019-20	IQAC coordinator in consultation with HoDs
21	To achieve 95% campus placement of eligible & interested candidates with good package.	During A. Y. 2019-20	TPO in consultation with HoDs
22	To organize at least two common skill-development programme for non-teaching and the supporting staff	November 2019	Registrar
23	To sign MoUs with Institutions & Industries and keep the existing MoUs active & functional and audit the MoU outcomes	During A. Y. 2019-20	IQAC coordinator in consultation with HoDs
24	To submit research proposals and patents per department for receiving grants	During A. Y. 2019-20	Dean R&D in consultation with HoDs
25	To install surveillance cameras at vantage points in all the departments in Phase-I and Wi-Fi in Campus	During A. Y. 2019-20	Infrastructure Team in consultation of Principal.
26	Prepare AQAR 2018-19 and submit to NAAC	September 2019	IQAC Coordinator
27	Submission of NIRF 2021 to MHRD	January 2020	IQAC coordinator in consultation with Principal
28	Review of result analysis and corrective action	February 2020	Dean Academics in consultation with HoDs

### 4. Curricular Aspects

#### **Curriculum Enrichment**

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

Value Added Courses	Date of Introduction	Number of Students Enrolled
Employability Skill Development by Inspiring Indeed InfoTech	04/07/2019	65
Study Abroad Opportunities, IELTS and Scholarship by IDP Education	05/07/2019	50
Salesforce Career Awareness by CloudalyzeInfoTech	08/07/2019	120
Campus to corporate	09/01/2020	70
A personalized online	27/08/2019	65
Opportunities in Government Job Sector	17/09/2019	71
Introduction to Microsoft Certifications	01/07/2019	33
Time management	01/08/2020	38
Power of mind and future planning	02/04/2020	41
Power of Habit	01/09/2020	34

### 1.3.2 - Field Projects / Internships under taken during the year

Project/Programme Title	Programme Specialization	No. of students enrolled for Field Projects / Internships
BE	Mobile Resue Robot(Mythos Technology)	4
BE	Automatic Quality Assessment using Echocardiograms(Doctospek Software's Pvt.Ltd., Karve Nagar, Pune)	4
BE	Security for Mobile Applications using Mobile Sensors(Virtue Sky Technologies)	4

BE	Railway Track Crack Detection(VST INFOTECH)	4
BE	System for Heartbeat and Teperature Monitoring with Location Tracking for Solders (Mythos Technologies)	4
BE	Framework for Detecting Dyslexia (Indeed Inspiring Infotech)	4
BE	Fingerprint vehicle security system (L&D Infotech, Narhe)	4
BE	Android Application to detect and provide Post Accident Services (Mythos Technlogies)	4
BE	Wasserstein CNN : Learning Invariant Features for NIR-VIS Face Recognition (Global Hub Technology)	4
BE	Smart Drone for Delivering Medicines (Softech Data Securities)	4

### **5. Teaching- Learning and Evaluation**

#### **Teaching - Learning Process**

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

Number of Teachers on Roll	Number of teachers using ICT (LMS, e- Resources)	ICT Tools and resources available	Number of ICT enabled Classrooms		E-resources and techniques used
95	95	9	16	1	7

### **Parameters of Outcome Based Planning**

Performance Parameters	<b>Expected outcome</b>
Learners Academic Performance	100% Students should get First Class
<b>Best Academic Performance</b>	75% Students should get First Class with distinction including <i>University Toppers</i>
On Campus and Off Campus Placement	85% Students should get placed through campus in a reputed organization
Entrepreneurs	5% Alumni should create Jobs
<b>Competitive Examinations</b>	7% Students should join the Engineering Services, Public Sector Services, Civil Services
Arts, Sports, Cultural etc	<b>3%</b> Students should find the field of their interest.

### **Teacher Profile and Quality**

Honours and recognition received by teachers (received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the year )					
Year of Award  Name of full time teachers receiving awards from state level, national level, international level  Name of the award, fellowship, received from Government or recognized bodies					
2019	Vikram M Ghule	Assistant Professor	Dronacharya Award in AIRC4		

#### **Student Performance and Learning Outcomes**

#### Student Performance and Learning Outcomes Pass percentage of students Programme Number of Number of Pass Percentage Programme Programme Specialization Code Name students students passed in final year appeared in the final year examination examination 673219110 BE Mechanical 193 189 98 Engineering 673237210 E&TC 46 45 97.82 BE Engineering 98 673224510 BE Computer 145 142 Engineering Engineering 673261210 BE Civil 65 62 95 Engineering



### 6. Research, Innovations and Extension

#### **Resource Mobilization for Research**

Research funds sanctioned and received from various agencies, industry and other organisations

Nature of the Project	Duration	Name of the funding agency	Total grant sanctioned	Amount received during the year
Minor Projects	730	Aspire,SPPU Pune	2	1
Major Projects	1095	DBT,India	81.95	44

#### Innovation Ecosystem

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

Title of workshop/seminar	Name of the Dept.	Date
INTELLECTUAL LEARNING SOLUTIONS PROGRAM	Civil Engineering	08/01/2020
Artificial Neural Networks and its Applications in Civil Engineering	Civil Engineering	02/08/2019
Guest lecture on courses offered by Cranfield university, UK	Civil Engineering	15/01/2019
Interaction with students for guiding them to increase their skills and potential.	Civil Engineering	08/01/2020
Data Science with Python	Computer Engineering	29/01/2020
Career Guidance for Research Project Development	Computer Engineering	17/01/2020
Internship Aptitude Test for Advanced Courses	Computer Engineering	14/02/2020

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

Title of the innovation	Name of Awardee	Awarding Agency	Date of award	Category
Best Teacher	Prof. Uday Kakade	Ajeenkya D.Y.Patil Group	22/12/2020	Best Teacher
Best paper	Khushal Patil, Prem Kakade, Shubham Taywade, Deepak Panchal, Prof. Vandana Chavan	Innovation 2020 E- Conference	22/04/2020	Best paper
Dronacharya Award	Prof. Vikram Ghule	AIRC 4	08/02/2020	Dronacharya Award

#### No. of Incubation centre created, start-ups incubated on campus during the year

Incubation Center	Name	Sponsered By	Name of the Start-up	Nature of Start- up	Date of Commencement
Technology Bussiness Incubation Center	Technology Bussiness Incubation Center	Nil	NA	NA	21/12/2019
IPR-Cell	IPR-Cell	PSP-IP	TCSC Cell	Consultancy	01/01/2019

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

Туре	Department	Number of Publication	Average Impact Factor (if any)
International	Mechanical	4	1
International	civil	16	0.5
International	E TC Engineering	9	1
International	Computer	73	0.5

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

Department	Number of Publication
Civil Engineering	2
Mechanical	6

h-Index o	f the Institutiona	l Publications du	ring the year. (ba	ased on Scopus/	Web of science	)
Title of the Paper	Name of Author	Title of journal	Year of publication	h-index	Number of citations excluding self citation	Institutional affiliation as mentioned in the publication
Design of composite I-Beam section to prevent web-flange junction failure and improving its axial load carrying capacity	Dr Sayyad, F.B.	Internat ional Journal of Innovative Technology and Exploring Engineerin g	2019	4	Nill	Dr. D. Y. Patil School of Engineerin g, Pune, India
The mechanics and snap in force estimation of cantilever snap fit joint of lock plate by FEA	Dr Sayyad, F.B.	Internat ional Journal of Innovative Technology and Exploring Engineerin g	2019	4	Nill	Dr. D. Y. Patil School of Engineerin g, Pune, India
Double loop decoupled proportion al controller for dynamic and kinematic	Dr Sayyad, F.B.	Internat ional Journal on Emerging T echnologie s	2019	4	Nill	Dr. D. Y. Patil School of Engineerin g, Pune, India

	<del></del>	-				
Micromec hanical modelling of SiC reinforced in 8090Al- Li alloy metal matrix composite	Dr Sayyad, F.B.	Internat ional Journal of Advanced Science and Technology	2020	4	Nill	Dr. D. Y. Patil School of Engineerin g, Pune, India
Evaluation of Trends and Techniques of Flexible, Wearable and Waterproof Antenna for Wireless C ommunicati on: A Survey	Ramiz Shamlik and Sanjay Koli	Lecture Notes in Electrical Engineerin g Vol.570, Springer, Singapore	2019	4	Nill	Dr. D. Y. Patil School of Engineerin g, Pune, India
Transfor mation of Video Signal Processing Techniques from 2D to 3D: A Survey	Sanjay Koli and Ramiz Shamlik	Lecture Notes in Electrical Engineerin g Vol.570, Springer, Singapore	2019	4	Nill	Dr. D. Y. Patil School of Engineerin g, Pune, India
Loss Dif ferentiate d Channel Aware Rate Adaption for IEEE 802.11n Wireless Links	Purandare, S. P.	An International Journal - Wireless Personal Communicati on (WPC), Springer U.S.	2019	4	Nill	Dr. D. Y. Patil School of Engineerin g, Pune, India

Automatic Accident Detection Techniques using CCTV Surveillan ce Videos: Methods, Data Sets	Shilpa Jahagirdar and Sanjay Koli	Internat ional Journal of Engineerin g and Advanced Technology (IJEAT)	2020	4	Nill	Dr. D. Y. Patil School of Engineerin g, Pune, India
Emergence and Functi onality of 3D Videos	Rameez Muneer Shamlik and S. M. Koli	Internat ional Journal of Engineerin g and Advanced Technology (IJEAT)	2020	4	Nill	Dr. D. Y. Patil School of Engineerin g, Pune, India
Identifi cation of Sugarcane Foliar Diseases: Methods and Datasets	Swapnil Dadabhau Daphal and S. M. Koli	Internat ional Journal of Engineerin g and Advanced Technology (IJEAT)	2020	4	Nill	Dr. D. Y. Patil School of Engineerin g, Pune, India

Faculty participation in Seminars/Conferences and Symposia during the year :						
Number of Faculty International National State Local						
Attended/Semi nars/Workshops	22	102	56	62		
Presented papers	102	Nill	Nill	Nill		
Resource persons	Nill	Nill	4	Nill		

#### **Extension Activities**

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

Title of the activities	Organising unit/agency/ collaborating agency	Number of teachers participated in such activities	Number of students participated in such activities
Fit India Movement	DYPSOE	3	16
Celebration of Mahatma Gandhis 150th Birth Anniversary	DYPSOE	7	50
Tree Plantation	DYPSOE	20	10
Blood Donation	DYPSOE	30	170
Savitribai Phule Jayanti	DYPSOE	25	50
Road Safety Campaign for the DYPSOE Students	DYPSOE	2	50
Road Cleaning at Degugaon	DYPSOE	3	30
Indrayani river side area cleaning	DYPSOE	3	30
Tree plantation at malhargadh vitthalwadi, Dehugaon	DYPSOE	3	30
Celebration of the 5th International Day of Yoga	DYPSOE	3	30
Continuous Contour Trenches formation at Shree Bhandara Dongar	DYPSOE	3	30

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

Name of the activity	Award/Recognition	Awarding Bodies	Number of students Benefited
Special Camp	Participation	Grampanchayat	28
2019-20	Certificate	Maval	

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

Name of the scheme	Organising unit/Agen cy/collaborating agency	Name of the activity	Number of teachers participated in such activites	Number of students participated in such activites
Covid help activity	PMC	Social Activity	1	1
ZILHA PARISHAD SCHOOL, HARANTALE	Civil Dept. SOE	Distribution of stationary and shoes to school children on occasion of Honorable Chairman's birthday	1	25

#### Collaborations

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

Nature of activity	Participant	Source of financial support	Duration
Industrial Visit to LNDINFOTECH and A3 Logics India Ltd., Jaipure	Students and Staff	Selfsupport basis	5

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

Nature of linkage	Title of the linkage	Name of the partnering institution/ industry /research lab with contact details	Duration From	Duration To	Participant
Internship Program	Internship	DOCTOSPEK Softwares Pvt. Ltd. Pune	08/11/2019	30/06/2020	Rupali Waghmare, Rajeshree Gh anwat,Pooja Khaire, Komal Jagtap
Internship Program	Internship	VIRTUSKY IT Pvt. Ltd., Pune	14/12/2019	30/06/2020	Amey Shimpi, Charudatt Pawar, Sanket Sakore, Sejwal Lad

Internehin	Internehin	мутное	11/11/2019	30/06/2020	Bharti
-	Internanth		11/11/2019	30/00/2020	Mekhla,
Flogram					Bhartiya
		rune			Relanchal,
					Beauty
					Kumari,
					Samadhan
					Chavan
Internship	Internship		06/12/2019	30/06/2020	Prabharkar
Program		Technology			Satpute,Kuld
		LLP, Pune			eeps ingh
					Rajput,
					Satish
					chavan,
					Prajakta
					Jagdale
Internship	Internship	Softtech	08/11/2019	30/06/2020	Neha
Program		Data			Shinde,
		Security,			Onkar
		Pune			Saswade,
					Priti
					Panchal
Internship	Internship	Source	08/11/2019	30/06/2020	Pratik
Program	•	Code			Deore,
		Technology			Rutuja
		52			Khadebharad,
					Priyanka
I			ı l		_
I					Patil,
	Internship Program	Internship Program  Internship Program  Internship Internship Program  Internship Internship	Internship Program  Internship Program  Internship Internship Technology LLP, Pune  Internship Program  Internship Softtech Data Security, Pune  Internship Program  Internship Program  Internship Code	Internship Program  Internship Program  Internship Softtech Data Security, Pune  Internship Program  Internship Source Code  Technology 106/12/2019  O6/12/2019  O6/12/2019  O6/12/2019  O6/12/2019  O6/12/2019  O6/12/2019	Program  Technology, Pune  Internship Techoyug Technology LLP, Pune  Internship Program  Internship Data Security, Pune  Internship Program  Internship Source Code  O8/11/2019 30/06/2020

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

Organisation	Date of MoU signed	Purpose/Activities	Number of students/teachers participated under MoUs
Yogeshwar Associates, Dadadji vasti Lohegaon, Pune	20/03/2019	To train student in handling survey work using the high ended equipment like total station and radar related to road, highways and building.	5
Stalwart BIM studio, Gangadham, Pune	20/03/2019	To conduct following software training program to make student employable	35

Dr Nanasaheb parulekar sakal charity trust (Refered by APG learning	21/08/2019	share knowledge, new technologies, business activities, placement guidance	82
CADCAMGURU Solutions Private Limited, Pune	22/11/2019	To provide industrial training to students and staff, To provide mentoring to students and to ptepare them for interviews	36



### 7. Infrastructure and Learning Resources

## Library as a Learning Resource Library is automated {Integrated Library Management System (ILMS)} Name of the ILMS Nature of automation (fully version or patially) Year of automation

2

Fully

Library Services

iCloudEMS

Library Service Type	Exis	ting	Newly	Added	To	tal
Text Books	11223	3930196	30	19404	11253	3949600
Reference Books	2143	136780	2	955	2145	137735
e-Books	380	100300	Nill	Nill	380	100300
Journals	94	370100	Nill	Nill	94	370100
e- Journals	1034	226542	Nill	Nill	1034	226542
CD & Video	322	Nill	Nill	Nill	322	Nill
Weeding (hard & soft)	12	1500	Nill	Nill	12	1500
Others(s pecify)	259	Nill	Nill	Nill	259	Nill

E-content developed by teachers such as: e-PG- Pathshala, CEC (under e-PG- Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives & institutional (Learning Management System (LMS) etc

Name of the Teacher	Name of the Module	Platform on which module is developed	Date of launching e- content
Dr. Sunil Rathod	Data Structure, AI, ML Python	YOUTUBE	22/04/2020

2017

IT Infr	IT Infrastructure								
Tech	nology Up	gradation (o	verall)						
Туре	Total Co mputers	Computer Lab	Internet	Browsing centers	Computer Centers	Office	Departme nts	Available Bandwidt h (MBPS/ GBPS)	Others
Existin g	490	10	150	14	14	0	0	150	0
Added	0	0	50	0	0	0	0	50	0
Total	490	10	200	14	14	0	0	200	0
Band	dwidth avai	lable of inter	net connec	tion in the I	nstitution (Le	eased line)			



### **Playground**

200 MBPS/ GBPS



### 8. Student Support and Progression

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

Name of the capability enhancement scheme	Date of implemetation	Number of students enrolled	Agencies involved
Bridge courses	13/10/2019	174	Industrial Visit to Katraj Dairy,Pune
Bridge courses	10/10/2019	190	Industrial Visit to Hydropower Station, Dimbhe Da
Bridge courses	04/10/2019	174	Educational tour at Dr.D Y Patil Institute of Engineering and technology, Pimpri, Pune
Bridge courses	05/09/2019	163	Industrial Visit to Auto Cluster Development Research Institute,Pune
Bridge courses	30/08/2019	61	Seminar on Industrial Requirements by Azuko Technical
Bridge courses	08/07/2019	150	Salesforce Caree Awareness by Mr.Niranjan Mankam for TE BE Students
Bridge courses	18/07/2019	62	Microsoft Certification by Mr.Sandeep Jethani for TE Students
Bridge courses	25/07/2019	55	Guest lecture or various softwares
Bridge courses	30/01/2019	110	Seminar on GATE Examinations by ICE(Mr.Sandeep Gaikwad)
Bridge courses	05/07/2020	130	Study Abroad opporlunities, IELTS and Scholarship,, by IDp Education

Sports and cultural activities / competitions organised at the institution level during the year				
Activity	Level	Number of Participants		
Intercollegiate lawn tennis Event ,Pune district zone for men organized by Savitribai phule pune university 3	Zonal	10		
Intercollegiate lawn tennis Event ,Pune district zone for women organized by Savitribai phule pune university 3	Zonal	8		



### 9. Governance, Leadership and Management

### **Summary of Quality Initiatives taken by IQAC during A.Y. 2018-19**

### 7. Internal Quality Assurance System

Quality initiatives	by IQAC during the year for pro	moting quality culture
Item /Title of the quality initiative by IQAC	Date & Duration	Number of participants/ beneficiaries
IQAC Meeting on Criteriawise Presentation by Criteria Coordinatos [ CR-IV to CR-VI]	03-Oct-2019 1	11
IQAC Meeting on Criteria- wise Presentation by Criteria Coordinatos [ CR- I to CR-III]	30-Sep-2019 1	11
IQAC Meeting on Presentation of Action Plan by Cell Coordinators	14-Jun-2019 1	16
IQAC Meeting on Plan of Action for A.Y. 2019-20	10-Jun-2019 1	12
IQAC Meeting on Restructuring of IQAC	06-Jun-2019 1	6
Feedback from Stakeholders	06-Jul-2020 15	1252
Participation in NIRF	29-Nov-2019 10	260
R & D Cell- Received Rs.43.76 lakhs for multidisciplinary major research project from DBT New Delhi.	10-Jun-2019 1000	15

R & D Cell-Received Rs.1 lakh for minor research project to Mr Niraj Jadhav from SPPU under Aspire Scheme	17-Jul-2020 720	3
R & D Cell-Organized two days workshop on Outcome Based Education (15-16 October 2019)	15-Oct-2019 2	148

### list of funds by Central/ State Government- UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.

Institution/Departmen t/Faculty	Scheme	Funding Agency	Year of award with duration	Amount
Dr. Saniya Mukram Ansari & Dr. S. M. Khairnar	Water Cooperation India EU	DBT	2020 1000	8190000

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

NIRF participation

AISHE 201920 (Code: C46648)

AICTE -CII survey participation

Online/ MOOC / FDP/ Courses by teaching faculties

EDC, TBI, IPR and IIIC Cell functioning

Strategy Development and Deployment	Strategy Development and Deployment		
Quality improvement strategies adopted by the institution for each of the following			
Strategy Type	Details		
Admission of Students	The admission in the college is offered by the central admission process (CAP rounds) and system as decided by the apex bodies including		

DTE, AICTE, and Savitribai Phule Pune
University. The college also offers
Facilitation Center for the
professional course admissions under
DTE, Maharashtra. Institute level
admissions are on first come first
serve basis. Reservation policy is
strictly followed as per government
rules. Attempts are made to admit
students comprising all socioeconomic
backgrounds. Admission Advertisement is
published in local Newspaper with
highlighting features of college.
Admission committee guides student and
parents.

#### Industry Interaction / Collaboration

The dedicated team of faculty members is formed along with TP cell of college to fetch collaborative interactions with the industries working in the field of courses offered. The students are regularly sent for internship in addition to industrial training mandated under SPPU syllabus. The faculty members are also promoted to interact with industry staff members are properly credited through the performance based appraisal policy of college for interaction with industries. 'Memoranda of Understanding' (MoU) are made by various departments with industries for professional development of the students and staff members through the collaborative work. The industry people are requested to become part of examination system to evaluate the academic performance of the students. The industry experts with proven track in the subject approved by the University are normally deputed as resource persons for students. That benefits teachers as well.

	<del></del>
Human Resource Management	The institute has recruited adequate number of faculty members, technical staff the class four staff members as per the guidelines mandated by the apex bodies.
Teaching and Learning	The process is monitored by the higher authority time to time through frequent meetings with teachers and also by requesting the feedback from the students. Meetings to discuss academic results of subject from respective department are also routine part of practice. Suggestion box department wise are available for
	system practices. In the meeting after rigorous discussion the proper suggestions to improve on the teaching learning practices are communicated to the concerned person for implementation and the loop is closed during the next meeting in same academic year or semester.
Curriculum Development	Being affiliated to University and non-autonomous college, we are not authorised to frame Syllabus by ourselves as such. As and when the opportunity is available the faculty members of respective subjects are deputed as subject experts by the college on University committee.  College also allows staff members to contest the elections for various positions in the University bodies including Board of Studies elections.  Also college provide platform for Curriculum development of university by hosting workshops and seminars at college as per the university guidelines.

### Being affiliated with SPPU we are not Examination and Evaluation the deciding authority. The teachers are promoted to be active member of central assessment program (CAP) of university regularly. The senior faculty members of college are also given 'On Duty leave' for exam related work like paper setting, online as well as practical and oral exam in campus off the camps. The college hosts university exam for all subjects offered as per scheduled by SPPU with adequate on site facilities necessary to conduct the examination effectively. Every single decision and policy observed by the college is student centric and is in their academic interests precisely. The Institute has Research and Research and Development Development Cell for promoting, strengthening and stimulating research and consultancy related activities. Administrative help, academic assistance and financial support is given to faculty and students for implementation of research projects, design and development of vehicles for various competitions such as SAE BAJA, Supra, Go-kart, Aero design etc. Every department has identified the thrust areas and available infrastructure is used optimally to obtain desired

Research outputs. Institute has received grants for various research projects from government and nongovernment agencies. Also, the institute regularly conducts workshops and Seminars on Intellectual Property Rights (IPR) and industry academia practices. The institute motivates faculties and students to publish their research work in peer reviewed journals and conferences. Institute has also stated code of ethics to check malpractices and plagiarism in research. There is significant boost in the research publications in reputed national and international journals and conferences. Faculty members and students are motivated for research activities and encouraged to file patents. Institute has well defined R D incentive scheme and also framed consultancy policy to encourage faculty members for research consultancy. Institute supports students to participate various technical and research activity/competitions to inculcate research component amongst them.

Library, ICT and Physical Infrastructure / Instrumentation

Institution has an adequate number of books, computer labs, internet connectivity, scientific instruments, and classrooms and play ground. E Library is made available for students. The purchase in library every year is also done in accordance with SPPU syllabus. Students and teacher are facilitated with user ID and password to access e journals. All labs classrooms are well equipped for interactive teaching learning. Up gradation as well as updating of all labs and classrooms is done in accordance to revised syllabus and Industry requirement. Every year the purchase is intended. For technical specifications the teachers are authorised and purchase is monitored by the management. All kind of maintenance work in college is monitored undertaken by workshop.

	Implementation of e-governance in areas of operations:					
П	E-governace area	Details				
	Planning and Development	All the mandatory disclosures as per apex bodies are in place				
	Administration	Institute always work together to				
		maintaining the utmost transparency in all the courses offered.				
	Finance and Accounts	In order to maintain transparency all the payments made or received are done online or through cheques. In order to meet the daily expenses to be incurred, petty cash facility is available with certain financial freedom delegated to the Principal.				
	Student Admission and Support	We follow the CAP round process laid down by the DTE Maharashtra and the other apex bodies. Information and status of admission is always updated online. College supports the admission process by hosting facilitation center.				
	Examination	The necessary Infrastructure and human resources are well in place at college for organizing the university examination either online or the manual examination. The state of the art system to support the entire examination process is established at the college, including dedicated server for examination work. Receiving the question papers, submission of student's performance evaluation report, remuneration bills towards examination work are observed using online system. The authorities believe e-governance help in transparency and trust worthy system of work.				

### **Faculty Empowerment Strategies**

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

	Year	Name of Teacher  Name of conference/ workshop attended for which financial support provided		Name of the professional body for which membership fee is provided	Amount of support
П	2019	Gaurav Tiwari	Linux	-	100
	2020	Ajita Mahapadi	IOT	-	1100
	2020	Chaitanya Bhosale	2 Days State Level Seminar on Cloud Computing Upcoming Technologies	-	500
	2019	Chaitanya Bhosale	Linux	-	100
	2020	Yogesh Mali	STTP on Software as a Service	-	1500
	2019	Amruta Chitari	Linux	-	100
	2019	Jayashree Chaudhari	Linux	-	100
	2019	Pallavi Shimpi	Linux	-	100
	2019	Dr.Sunil Rathod	AI- Search Methods	-	1100
	2019	Dr Pankaj Agarkar	Linux	-	100

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

Year	Title of the professional development programme organised for teaching staff	Title of the administrative training programme organised for non-teaching staff	From date	To Date	Number of participants (Teaching staff)	Number of participants (non-teaching staff)
2019	5 Days FDP on Python with Django	-	07/10/2019	11/10/2019	5	Nill
2020	MOOCs and Moodle Challenges and Opport unities in Higher Education	-	13/12/2019	13/12/2019	194	Nill
2019	-	One Day Linux Workshop	22/08/2019	22/08/2019	Nill	16
2019	-	Basics of computer f undamental for peon and sweeper	30/08/2019	30/08/2019	Nill	30

No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year

Title of the professional development programme	Number of teachers who attended	From Date	To date	Duration
Symposium on Internet of	1	02/11/2019	02/11/2019	01
Things				

5 Days FDP on Python with Django	18	07/10/2019	11/10/2019	05
Linux	6	23/08/2019	23/08/2019	01
Cyber Security FDP	1	19/08/2019	24/08/2019	06
Python	1	28/04/2020	04/05/2020	07
lweek FDP on Recent Research Development in Materials Engineering and Mechanical Design	1	01/06/2019	07/06/2019	07
STTP on Assessment on Evaluation under OBE1	1	10/06/2019	14/06/2019	05
NPTEL - E waste management	1	01/06/2019	01/11/2019	12
NPTEL AI- Search Methods	1	20/06/2019	30/06/2019	10
PPS FDP	1	25/07/2019	26/07/2019	2

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

Name of the non government funding agencies /individuals	Funds/ Grnats received in Rs.	Purpose
Indian Council of Social Science Research (ICSSR)	250000	National seminar entitled MOOCs and Moodle- Challenges and Opportunities in Higher Education

#### Internal Quality Assurance System

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

Audit Type	External		Internal	
	Yes/No Agency		Yes/No	Authority
Academic	Yes	Committee of Senior Faculties from other Institutes	Yes	IQAC Internal Assessment Committee
Administrative	Yes	Institute Appointed Charted Accountant ( Sadanand Shetty Company)	Yes	Admin office

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

 Standardisation of feedback forms. 2. Introduced Student satisfaction survey (SSS). Analysis of SSS was shared with the respective department for preparation of action plan in order to improve overall quality of the department and institute. 3. The institute has started Connect (individual industry institute Connect) program second semester of 201819. This year it is made mandatory for third year students to do internship after the end sem. examination under Connect program. 4. Started Technology Business Incubation Centre.

Number of C	Juality I	Initiatives	undertaken	during the	vear
Nullipel of C	zuanty i	IIIIIIIauves	unuenaken	uuiiiiu iiie	yeai

Year	Name of quality initiative by IQAC	Date of conducting IQAC	Duration From	Duration To	Number of participants
2020	Parent Teacher Meet	27/02/2020	27/02/2020	27/02/2020	30
2019	Ingeniuos 2k19	19/09/2019	19/09/2019	19/09/2019	175
2019	Centre of Excellence [Data Securities]	16/07/2019	16/07/2019	16/07/2019	48
2019	Microsoft Certificatio ns	18/07/2019	18/07/2019	18/07/2019	33
2020	Microsoft Certificatio ns	09/01/2020	09/01/2020	10/01/2020	70
2020	Centre of Excellence [CAD CENTRE]	18/08/2019	18/08/2019	18/08/2019	22

### 10. Institutional Values & Best Practices

#### Institutional Values and Social Responsibilities

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

Title of the programme	Period from	Period To	Number of F	Participants
			Female	Male
Gender equity promotion	23/09/2019	23/09/2020	56	6

Environmental Consciousness and Sustainability/Alternate Energy initiatives such as:

#### Percentage of power requirement of the University met by the renewable energy sources

Tree Plantation - Date: 22/02/2019 - No of participants- 33 Indrayani river side area cleaning - Date: 20/02/2019 - No of participants- 33 Road Cleaning at Dehugaon - Date: 19/02/2019 - No of participants- 33 Continuous Contour Trenches formation at Shree Bhandara Dongar - Date: 21/02/2019 - No of participants- 33 Percentage of power requirement of the University met by the renewable energy sources - NILL

#### Differently abled (Divyangjan) friendliness

Item facilities	Yes/No	Number of beneficiaries
Physical facilities	Yes	4
Provision for lift	Yes	500
Ramp/Rails	Yes	4
Braille Software/facilities	No	Nill
Scribes for examination	Yes	4
Special skill development for differently abled students	No	Nill

Inclusion and Situatedness							
Year	Number of initiatives to address locational advantages and disadvantages	Number of initiatives taken to engage with and contribute to local community	Date	Duration	Name of initiative	Issues addressed	Number of participating students and staff
2020	1	1	23/01/2 020	1	Road Safety Campaign for the DYPSOE Students	Road Safety	52
2019	1	1	29/08/2 019	1	Fit India Movement	Fitness	19

Human Values and Professional Ethics Code of conduct (handbooks) for various stakeholders						
Title	Date of publication	Follow up(max 100 words)				
Title  Code of conduct (handbooks) for various stakeholders	Date of publication 23/07/2019	Follow up(max 100 words)  Students Dress Code: both boys and girls have dress code of Trouser and Shirt in summer season and Trouser, Shirt and Blazer in winter season.  Students are not permitted to wear revealing clothes in the campus. Students Attendance: Every student must have to attended minimum 75 of the total number of lectures conducted in the class by the faculty and 100 of the total number of practical's conducted in the laboratory. Students are required to wear the Identity cards is				
		mandatory.				

### 7.1.6 – Activities conducted for promotion of universal Values and Ethics

7.1.6 – Activities conducted for promotion of universal values and Ethics							
Activity	Duration From	Duration To	Number of participants				
Teacher's day celebration by Computer Dept	05/09/2019	05/09/2019	200				
Helping Hands Collection for Flood Affected People	13/08/2019	13/08/2019	350				
Parents Meet by Computer Department	18/07/2019	18/07/2019	250				
Guru Pournima Celebration 2019	16/07/2019	16/07/2019	350				
Celebration of Mahatma Gandhis 150th Birth Anniversary	02/10/2019	04/10/2019	57				
Blood Donation	22/12/2019	22/12/2019	200				
Savitribai Phule Jayanti	01/01/2020	01/01/2020	75				
Cyber crime and cyber safety	18/02/2020	18/02/2020	33				
Celebration of the 5th International Day of Yoga	21/06/2020	21/06/2020	33				
Discipline and 10/07/2019 Carrier Couselling sessions		19/02/2020	451				

### BEST PRACTICE-I Enrichment of Teaching & Learning Process [ETLP]

Mentoring to address all issues for better grooming of the Learner

{Academic & financial issues, non-academic issues, stress & emotional related issue}

Knowing the Learner Better to Serve Better

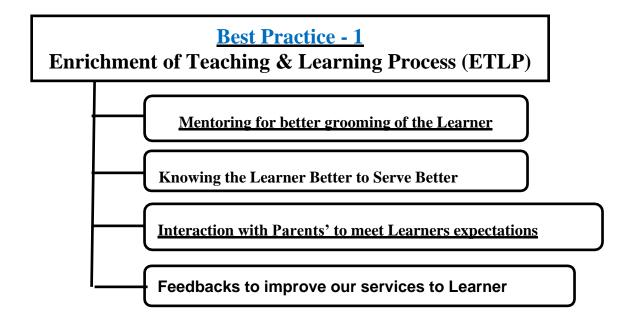
{Identification the learning levels of students and conduct need based activities}

 Interaction with Parents to meet Learners expectations

{ Progress of Learner, corrective action based on students & Parents suggestions}

Feedbacks to improve our services to Learner

{ Students, Parents , Teachers, Alumni, Employers feedback + 360 Degree Feedback}



### BEST PRACTICE-II Holistic Approach to Support Learner [HASL]

### Financial Support

{ Earn & Learn Scheme, Fee Concession & Scholarship, Participation in national/international conferences, professional skill development program, Support for extracurricular, co-curricular & sports activities }

### Stress Free Learning

{Yoga Classes, Guest Lectures, Personal Counselling from certified professionals }

### Professional & Entrepreneurship Skill Development

{Expert lectures/webinars on GATE, UPSC, Higher education, Communication, Employability, Skill development workshops}

### Social Connect

{National Service Schemes & Extension Activities }

A holistic approach pays attention to learners physical, personal, social, & emotional wellbeing as well as cognitive aspects of learning.



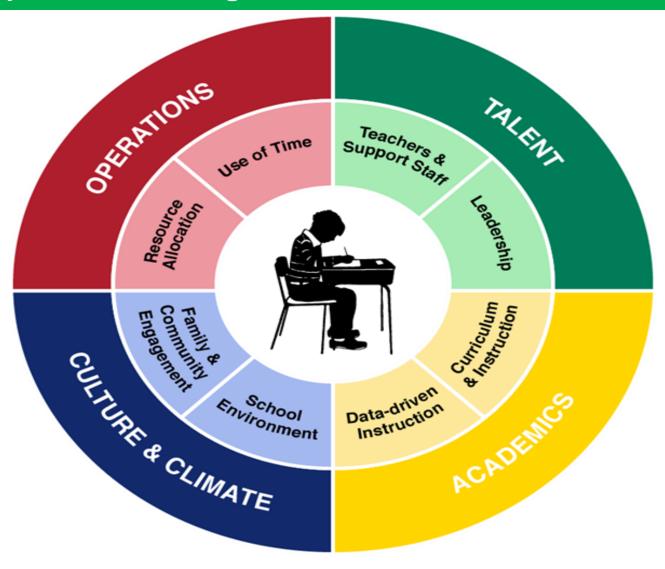


### **Institutional Distinctiveness**

### **ECO-FRIENDLY CAMPUS**

- ~ A state-of-the-art infrastructure and gorgeous, green and eco-friendly campus.
- ~ There is no direct source of air pollution in the campus.
- ~ The campus is maintained very clean and plastic free by maintaining rigorous regime.
- ~ The campus has sound planning of water use and management of water resources.
- ~ Initiative towards carbon neutrality by promoting Electrical bike facility within campus movement
- ~ The campus is full of Biodiversity about 30 different floras are planted for beautification and different types of birds and insects are observed. ~ Eco-Friendly Committee
- ~ At most care is taken for Health and Safety Management.
- ~ For the entire stakeholders, the campus is like second home.

### **Ecosystem for Attaining Academic & Administrative Excellence**





Principal



### 11. The institute's plan of action for the next academic year 2020-21

### The plan of action for the academic year 2020-2021 includes the following:

- 1]To enhance the number of smart classrooms in the academic departments.
- 2] To introduce a full e-governance system for academic departments, different administrative processes like admission, academic administration, etc.
- 3] To strengthen the liaison among the stakeholders like students, teachers, parents, employers, alumni, etc.
- 4] To enhance collaborative research among the departments and to take the initiative for Interinstitutional collaboration
- 5] To conduct more seminars, conferences, and workshops of National and International importance at our campus.
- 6] To fulfill our social obligations.
- 7] To arrange a staff development program for non-teaching staff.
- 8] To protect the environment. Conduct an Environmental Audit.
- 9]To strengthen industry linkages.
- 10]To strengthen National and International linkages.
- 11] To strengthen alumni engagement.
- 12] To improve the ratio of PhD faculty members keeping in view the requirement of both Indian and International accreditation.
- 13] To submit major research proposals to various funding agencies for fetching research grants.
- 14] Initiate e-documentation for IQAC
- 15] To increase campus placement number.
- 16] IEEE / Science Direct Journals in the library.
- 17] Language lab
- 18] Appraisal system for teaching non-teaching.
- 19] 2F and 12 B recognition.