DTE Code : **EN6315**



ENGINEERING & TECHNOLOGY INSTITUTE, PANHALA
Sanjeevan Knowledge City, Somwar Peth-Injole, Panhala, Tal. Panhala, Dist. Kolhapur.
Pin-416 201 (Maharashtra) Phone: 9146999500

O Approved By AICTE, New Delhi O Recognized by Govt. of Maharashtra & DTE O Permanent Affiliation by Dr. Babasaheb Ambedkar Technological University, Raigad

Annual Report 2021-22







1. ACADEMIC INFORMATION

Program code	Course code	Course Name	Year of Introduction	Sanctioned intake
	631519110	Civil Engineering	2009	60
EN6315	631524210	Computer Science & Engineering	2009	60
ENOSIS	631529310	Electrical Engineering	2010	60
	631561210	Mechanical Engineering	2009	60
ME6315 631590410		Mechanical Engineering Design (PG)	2012	18

2. Students: A. Y. 2021-22 Number of student's Branch wise: 1021

Branch	First Year	Second year	Third Year	Final Year	M. Tech
Mechanical Engineering	11	70	45	63	05
Computer Science Engineering	63	77	68	68	
Civil Engineering	15	70	56	73	
Electrical Engineering	16	72	61	66	
Electronics & Telecommunication Engg.	!		17	56	
Automobile Engineering	-		15	34	
Number of student's =1021					

3. Teachers

Number of teaching staff / full time teachers: 65

Designation	Total
Professor	01
Associate Professor	03
Assist. Professor	60
T.P.O.	01







Branch	Number of Teachers
Mechanical Engineering	16
Computer Science Engineering	10
Civil Engineering	10
Electrical Engineering	08
Electronics & Telecommunication Engg.	06
Automobile Engineering	07
General	08
Total	65

4. Number of students enrolled in Certificate/ Value added courses: 185

Name of Add on /Certificate /Value added programs offered and online MOOC programs like SWAYAM, NPTEL etc. programs offered	Year of offering	No. of times offered during the same year	Duration of course	Number of students enrolled in the year	Number of Students completing the course in the year
Induction Programme	2021-22	23rd December 2021- 27th December 2021	5 Days	91	91
Workshop on "Introduction to PLC & Programming"	2021-22	4th to 8th April 2022	One Week	42	42
One week Training Program on "Python: Basic To Advanced"	2021-22	6th June -10th June 2022	One Week	42	42
Ready Engineer Course	2021-22	2021-22	Throughout Academic Year	25	10

5. Percentage of students undertaking project work/field work/ internships: 99.41 %

Number of students undertaking project work/field work / internships: 1015

Sr. No.	Branch	FY	SY	TY	Final Year
1	Civil Engineering	15	70	56	73
2	Mechanical Engineering	11	71	45	63
3	Computer Science Engineering	63	77	68	68
4	Electrical Engineering	16	71	61	66
5	Electronics & Telecommunication Engineering			17	56
6	Automobile Engineering			15	34







6. Enrolment percentage: 39.92 %

Number of seats filled (first year admissions): 103

Number of sanctioned seats: 258

Programme name	Programme Code	Number of Students admitted	Number of seats sanctioned
Civil Engg	631519110	15	60
Computer Sci & Engg	631524210	60	60
Electrical Engg	631529310	16	60
Mechanical Engg	631561210	11	60
M.Tech Mech Engg Design	631590410	1	18
Total Admitted	Students	103	258

7. Percentage of seats filled against reserved categories (SC, ST, OBC etc.) first year admission: 19.04 %

Number of actual students admitted from the reserved categories: 24

Programme name	Programme Code	SC	ST	OBC	Others
Civil Engg	631519110	1	0	0	0
Computer Sci & Engg	631524210	5	0	4	8
Electrical Engg	631529310	2	0	0	1
Mechanical Engg	631561210	1	0	2	0
M.Tech Mech Engg Design	631590410	1	0	0	0
Number of actual students admitted from the reserved categories			•	24	•

8. Number of seats earmarked for reserved category as per GOI/ State Govt rule: 126

Programme name	Programme Code	SC	ST	OBC	Others
Civil Engg	631519110	9	4	11	6
Computer Sci & Engg	631524210	9	4	11	6
Electrical Engg	631529310	9	4	11	6
Mechanical Engg	631561210	9	4	11	6
M.Tech Mech Engg Design	631590410	2	1	2	1
Number of seats earmarked for reserved category as per GOI/ State Govt rule				126	







9. Student Teacher Ratio

Student - Full time Teacher Ratio: 15.70 %

Number of Students	1021
Number of Teacher	65

10. Percentage of full time teachers with NET/SET/SLET/ Ph. D./D.Sc. /

D.Litt./L.L.D.: 13.84 %

Number of full time teachers with NET/SET/SLET/Ph. D./ D.Sc. / D.Litt./L.L.D: 09

Sr. No.	Name of full time teacher with Ph.D./D.M/M.Ch./D.N.B Superspeciality/D.Sc./D'Lit.	Qualification (Ph.D./D.M/M.Ch./D.N.B Superspeciality/ D.Sc./D'Lit.) and Year of obtaining
1	Shri. Vanarotti Mohan B.	Ph.D
2	Shri. Aravinda Kumar S. G.	Ph.D
3	Shri. Koli Gajanan Chandrashekhar	Ph.D
4	Shri. Deokar Vinayak Hindurao	Ph.D
5	Shri. Potdar Sachin Sitaram	Ph.D
6	Shri. Ghodake Shivaji Laxman	Ph.D
7	Shri. Patil Vishal Subhashrao	Ph.D
8	Shri. Ingavale Ranjit Anantrao	Ph.D
9	Shri. Maske Ajay Krishna	Ph.D

11. Passing Percentage of final year students: 94.90 %

Number of final year students who passed the university examination: 335

Number of final year students who appeared for the university examination: 353

Sr. No	Program Name	Program Code	Number of students passed in final year examination	Number of final year students who appeared for the university examination	%
1	Automobile Engineering	631560210	34	34	100
2	Civil Engineering	631519110	73	73	100
3	Computer Engineering	631524210	67	69	97.10
4	Electrical Engineering	631537210	62	66	93.93
5	Electronics and Telecommunication	631529310	50	55	90.90
6	Mechanical Engineering	631561210	49	56	87.5
	Number of final year stu	335	353	94.90	







12. Total number of workshops/seminars/conferences including programs conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship: 11

Sr. No.	Name of the workshop/ seminar/ conference	Number of Participants
1	One day workshop on , ""From Ideas to Assets Maximum Value Through Intellectual Property" Conducted by Civil Dept	15
2	One day workshop on , ""Strategies for success- Leveraging Intellectual Property Rights" Conducted by Civil Dept	30
3	One day Seminar on IPR Conducted by CSE Dept	70
4	One day Seminar on IPR Conducted by CSE Dept	67
5	One day Seminar on Research Methodology"Conducted by CSE Dept	70
6	One day workshop on , "Invention Kinds & Trademarks" Conducted by Electrical Dept	31
7	One day workshop on , "Industrial Design" Conducted by Electrical Dept	30
8	One day workshop on , "Copyright & Geographical Indiacation" Conducted by Electrical Dept	29
9	Seminar on "IPR Awareness" Conducted by Mechanical Dept	32
10	One day workshop on "IPR and Patents" Conducted by Mechanical Dept	15
11	Workshop on "Indian Patent Filing procedure" Conducted by Mechanical Dept	25







13. Research Publications and Awards:

Number of research papers published: 28

Title of paper	Name of the author/s	Department of the teacher	
Design and Analysis of a Gearless Multi angled Transmission system Employing variety of materials	Dr. G. C. Koli	Mechanical Engineering	
Multi-channel Dense-Net Architecture for classification of mammographic breast density in Breast Cancer Detection	Dr. Suhas G. Sapate	Computer Science and Engineering	
Experimental Study on Structural Light Weight Concrete for Partial Replacement to Coarse Aggregate by Sintered Fly Ash Aggregate	AMIT C.THOKE	CIVIL	
Flexural Strengthening of Light Weight Reinforced Concrete Beams by Using Glass Fiber Reinforced Polymer	AMIT C.THOKE	CIVIL	
Smart Irrigation System	Metkari V T	Electrical	
Reverse Recovery of Motor	Gurav P B	Electrical	
SMART BLIND STICK	N. S. Jadhav	Electrical	
11-STAGE MULTILEVEL INVERTER	Naik Y R	Electrical	
EV CHARGING STATION	Gurav P B	Electrical	
TRANSMISSION LINE MONITORING SYSTEM USING IOT	A.M.Bhandare	Electrical	
"Facial Emotion Recognition with Music Recommendation"	Prof. R.S. Nejkar	CSE	
"A VIDEO BASED VEHICLE DETECTION, COUNTING AND CLASSIFICATION SYSTEM"	Prof. R.S. Nejkar	CSE	
"Smart Green House with Farmers Plaza"	Prof. P.D. Patil	CSE	
"Digi Card"	Prof. P.D. Patil	CSE	
"MODI Lipi Handwritten character Recognition using CNN and Data Augmentation Techniques"	Prof. S. A. Babar	CSE	
"The Analysis of Share Market using Random Forest & SVM"	Prof. S. A. Babar	CSE	
"Video Trasnscript Summarization in Marathi"	Prof. S. A. Babar	CSE	
"E-Health Care Cloud Solution"	Mr.V.A.Shevade	CSE	
CHAIN BASED SECURE DATA STORAGE ON CLOUD"	Mr.V.A.Shevade	CSE	
"A survey on Enhancements in Speech Recognition"	Mrs.T.V.Deokar	CSE	
E-Commerce Website "City Kart"	Mrs.T.V.Deokar	CSE	
Traffic Analysis using Image Processing to Alert	Ms.S.S.Kumbhar	CSE	
"THE VIRTUAL DRESSING ROOM"	Ms.S.S.Kumbhar	CSE	
Analyzing and Exploring the Effectiveness of Each Element of 7Ps of Marketing Mix	Dr. Sanjeev n Jain	Electronics	
Studying Contemporary and Efficient Noise Filtering Methods	Dr. Sanjeev n Jain	Electronics	
EVALUATION OF SNR WITH WIRELESS ECGSIGNAL ACROSS DISTANCE	Dr. Sanjeev n Jain	Electronics	
Review of development & deployment of wireless ECG monitoring systems	Dr. Sanjeev n Jain	Electronics	
Studying Contemporary and Efficient Noise Filtering Methods	Dr. Sanjeev n Jain	Electronics	







14. Total number of books and chapters in edited volumes/books published and papers in national/international conference proceedings: **02**

Sl. No.	Name of the teacher	Title of the book/chapters published	Title of the paper	
1	Dr. S. G. Sapate		Dynamic Trust Management for community-based application using IoT	
2	Dr. S. G. Sapate		A Second Order Energy Consumption Model For Improving Performance Of 802.15.4 MAC	

15. Number of extension and outreach Programs conducted in collaboration with industry, community, and Non- Government Organizations through NSS/ NCC etc., : **04**

Sr. No.	Name of the activity	Organising unit/ agency/ collaborating agency
1	Tree Plantation	Sanjeevan Engineering & Technology Institute
2	Har Ghar Tiranga	Sanjeevan Engineering & Technology Institute
3	Felicitation of Scholar and Placed students	Sanjeevan Engineering & Technology Institute
4	Legal awareness program	Pan India







16. Number of functional MoUs/linkages with institutions/ industries: : 16

Sl. No.	Name of the MoU / linkage	Name of the institution / industry with whom the MoU / linkage is made, with contact details	
1	MOU with GTT Foundation	GTT Foundation, Pune	
2	MOU with Friends Union for Engineering Lives (FUEL)	Friends Union for Engineering Lives (FUEL), bhugaon, Pune	
3	MOU with Tata Technologies, Pune	Tata Technologies, Pune	
4	MOU with Walstar Technologies Pvt. Ltd., Kolhapur.	Walstar Technologies Pvt. Ltd., Kolhapur.	
5	MOU with SIBIC	SIDDHAM INNOYATION AND BUSINESS INCUBATION CENTER.SIBIC	
6	MOU with Big casting Pvt. Ltd.,	Big casting Pvt. Ltd., Plot No. 75 KIADB, Honaga Industrial area, Belgavi- 591113, Karnataka	
7	MOU with Rubicon Skill Development Private Limited, Pune	Rubicon Skill Development Private Limited, Pune	
8	MOU with Tambave Services, Kolhapur	Tambave Services, Kolhapur	
9	MOU with Mahatma Phule Magaswargya Sahakari Sut Girni Ltd. Vadgaon	Kailasir T-olver. 4th 11oor, Asserrbly Road, Kolirapu	
10	MOU with Hari Om Flexipack Industries, Kolhapur		
11	MOU with Wisdom Foundation, Kolhapur	Wisdom Foundation, Kolhapur	
12	MOU with Yashswi Academy, Kolhapur	Yashswi Academy , Kolhapur	
13	MOU with Walchand College of Engineering ,Sangli	Walchand College of Engineering ,Sangli	
14	MOU with Deep industries, kagal- Hatkanagale	Deep industries, kagal- Hatkanagale	
15	MOU with KPCO Machines, Gokul Shirgaon	KPCO Machines, Gokul Shirgaon	
16	MOU with SPARKLAB, IT Solution gadhinglaj	SPARKLAB, IT Solution gadhinglaj	







17. Student – Computer ratio-: 2.4

Number of computers available for students: 420

18. Percentage of students benefited by scholarships and free ships: 84.03 % (858/1021)

Name of the scheme	Governmen t/Non- government	Name of the individual/organis ation	Number of students benefited
SC Scholarship	Government	Maharashtra Government DBT	121
ST Scholarship	Government	Maharashtra Government DBT	1
VJNT Scholarship	Government	Maharashtra Government DBT	61
SBC Scholarship	Government	Maharashtra Government DBT	11
OBC Scholarship	Government	Maharashtra Government DBT	88
EBC Scholarship	Government	Maharashtra Government DBT	576

19. Percentage of students benefitted by guidance for competitive examinations: 46.03 % Number of students benefitted by guidance for competitive examinations and career counselling offered by the institution: 470

Sr. No.	Name of Activity	Number of students Participated
1	Preparation of Civil Services	169
2	Online Unacademy Competitive Exam Preparation 15-06-2022	93
3	Campus Awareness for All Branches	87
4	Lecture on career Awareness	121
Number of students benefitted by guidance for competitive examinations and career counselling		470







20. Percentage of placement: 9.37 %

Number of outgoing students placed: 33

Number of outgoing student's: 352

Sr. No.	Program Name	Number of outgoing students placed	Average Pay package (In INR per annum)
1	Computer Engineering	19	2.84
2	Mechanical Engineering	14	3.61
	Number of outgoing students placed	33	

21. Student Participation and Activities (Sports & Cultural):

Number of awards/medals for outstanding performance in sports/cultural activities: 02

Sr. No.	Name of the award/ medal	Team / Individual	University/State/Na tional/ International	Sports/ Cultural	Name of the student
1	Participation	Individual	University(all India)	Swimming	Nikhil Nilesh Misal
2	Runner-up	Individual	State	Volleyball	Pruthviraj Pratap Gaikwad







22. Number of sports and cultural programs in which students of the Institution Participate: 27

Date of event/activity (DD-MM-YYYY)	Name of the event/activity	Name of the student participated
	University (Lead college)	1
28/03/2022	Chess Boys Chess Girls	10
31/03/2022	Volleyball Boys Volleyball Girls	21
	Football	16
04/12/2022	Kabaddi Boys	14
04/08/2022	Basketball Boys Basketball Girls	21
13/04/2022	Kho-Kho Boys Kho-Kho Girls	20
30/12/2021	Football Volleyball	118
Jan-22	Cricket	1
	Volleyball Boys Vollyball Girls	105
	Basketball Boys Basketball Girls	101
	Football	103
25/03/2022 to	Cricket Boys Cricket Girls	129
27/03/2022	Kabaddi Boys Kabaddi Girls	109
	Individual GAMES	
	Carrom Boys Carrom Girls	53
	Chess Boys Chess Girls	28
06/05/2022	Box Cricket	65







23. Percentage of teaching staff participating in Faculty development Programmes organized by the institution: 30.76 %

Total number of teaching staff participating in Faculty development Programmes (FDP): 20

Sr. No.	Name of the participant	Title of the FDP /MDP/ professional development / administrative training program		
1	Vishal T. Metkari	MACHINE LEARNING		
		Internet of Things (IoT)		
2	Yogesh R. Naik	MACHINE LEARNING		
		Internet of Things (IoT)		
3	Prof.P.P.Kulkarni	Electric Vehicle design Master class		
	D 0 D 0 3 Y 11	FDP on "Python Data Science & ML"		
4	Prof. R.S. Nejkar	FDP on Deep learning & Computer Vision		
		FDP on "Deep Learning for NLP"		
5	Prof. S. S. Pujari	RESEARCH METHODOLOGY, RESEARCH PUBLICATIONS AND		
		PATENT FILING		
6	Prof. P.D. Patil	AICTE Sponsored STTP on "Machine Leaning"		
7	Prof. S. A.Babar	AICTE Sponsored STTP on "Machine Leaning"		
8	E.P. Salokhe	Strategic civil infrastructure		
9	A.C.Thoke	Eco-friendly engineering concecept trend		
10	S.S. chavan	Revet software 3D perspective		
		Electric Vehicles - The future of Mobility		
		3D Printing And Design		
11	Prof. A. N. Naik	Research Trends Design And Control Of Electric Vehicles		
11	1 101. A. IV. IVAIK	Materials and advanced manufacturing		
		Future Perspective Of Non- Conventional		
		Renewable and Clean Energy Resources		
		Research Methodology, Research publications And patent Filing		
		Simulation Tools for Research		
12	Prof. R. U. Urunkar	Eco Friendly Engineering Concept & Trends		
		Future Perspective of Non- Conventional Renewable and Clean Energy		
		Resources		
		Materials & Advanced Manufacturing		
		Future Perspective of Non- Conventional Renewable and Clean Energy		
13	Prof. S. B.	Resources		
13	Deshmukh	Management of Intellectual Property Uncertainty in Design and Manufacturing		
		for Electric Vehicle System		
		Emerging Trends and Development in Electric Vehicles		
1.4	Duef C D Menseus	Future Perspective of Non- Conventional Renewable and Clean Energy		
14	Prof. S. P. Nangare	Resources		
		Future Perspective of Non- Conventional Renewable and Clean Energy		
15	Prof. P. S. Atigre	Resources		
		Materials & Advanced Manufacturing		
1.0	D C D W D (1	Future Perspective of Non- Conventional		
16	Prof. D. V. Patil	Renewable and Clean Energy Resources		
1.7	D C 1 1 77 1	A new ERA of Manufacturing challenges and opportunities		
17	Prof. A. A. Katkar	Advance in Manufacturing and Materials		
1.0	D CXIXIXI	Future Perspective of Non- Conventional Renewable and Clean Energy		
18	Prof. V. V. Vanmore	Resources		
10	D CALAND:	Future Perspective of Non- Conventional Renewable and Clean Energy		
19	Prof. V. H. Deokar	Resources		
20	D 6 4 D 6	Nano Technology Synthesis ,Characterization and Application in Engineering &		
20	Prof. A. B. Chavan	Science		





24. Green Audit: Conducted Successfully and Certificate Received.

Observations and Conclusions:

This section gives the overviews of all the audits.

1. Water Section:

Institute has provision of rain water harvesting; hence huge amount of water is conserved and saved. Another good point is that the rain water collected at various section and is used to ground.

2. Wastewater Section:

SETI doesn't have any wastewater treatment facility till now as all the waste is directly sent to sewers. But the institute has planned for CWs i.e. constructed wetland systems for both the grey and black water treatment. Institute has also planned for hazardous waste management. The waste water generated through chemistry lab will also be treated and then led of onto sewers.

3. Solid waste management:

Proper method such as separate bins for wet waste and dry waste which leads to source segregation is followed by SETI.

4. E-waste:

Electronic waste is generated from many sections viz. physics lab, computer lab and applied science section. Institute collets the E waste centrally and is send to vendors for proper disposal means.

5. Sustainable water practices:

Institute has a fresh source of water i.e. river water. Water is recycled and used.

6. Energy:

Institute has followed good means by installing sustainable source of energy viz. solar energy and wind power generation. They have taken good measures by installing LED lights and solar sensor lights in the campus which are proving to be energy efficient.





Electricity consumption on the academic year 2021-2022

Sr. No.	Month	Consumption (Kw)	Demand (KVA)	Bill Amount
1	April 21	28145	144	343723
2	May 21	15197	144	226738
3	June 21	15811	144	236172
4	July 21	19617	144	279024
5	August 21	40182	144	443843
6	September 21	52739	144	575502
7	October 21	50330	144	544899
8	November 21	34237	144	407939
9	December 21	45054	144	500568
10	January 22	35836	144	407891
11	February 22	38318	144	433992
12	March 22	44358	144	508969

Alternative Energy initiatives such as:

1. Percentage of annual power requirement of the Institution met by the renewable energy sources

Power Requirement met by Renewable	Total Power requirement	Renewable energy sources	Renewable energy generated	Energy Supplied to the
energy sources			and used	grid
Generated 93000 KWH	321465 KWH	Solar & Wind	Installed	NIL
and Remaining		Hybrid		
Installation under process		Solar PV panel	Installation Under	NIL
			Process	







A] Present energy generation by renewable energy sources:

- I) solar power plant capacity: 70 kW
- II) Hybrid (Solar + Wind) power plant capacity: 50 kW

Total Capacity = 70kW + 50kW = 120 kW

Total Energy generation by both plant from 1st July 2020 to 30th June 2021 is 93000 kWh

Total Energy requirement from 1st July 2020 to 30th June 2021 is 321465 kWh

Percentage of energy met by the renewable energy sources as per same year energy requirement

- = (93000 kWh/321465 kWh) * 100
- = 28.93 %

B) Proposed energy generation by renewable energy source

I) Solar power plant proposed capacity: 180 kW

Approximately power generation by same plant is 162000 kWh

Total power will be generated by the whole renewable sources in a year is 255000 kWh

Percentage of energy will be met by the renewable energy sources

- = (255000 kWh/321465 kWh) * 100
- = 79.32 %

Dr. G. C. Koli Dean IQAC

Submitted to: Principal