ANNUAL QUALITY ASSURANCE REPORT

2020 – 2021

Government College of Engineering Vidyanagar, Karad

Dist. Satara, Maharashtra(India) – 415124

Tel.: 91-2164- 272415(P), 271713

Fax: 91- 2164- 271713

Web Site: http://www.gcekarad.ac.in

Email : principal@gcekarad.ac.in

Part – A

AQAR for the year: 2020- 2021

1. Details of the Institution	
Name of the Institution	Government College of Engineering Karad
Address	Vidyanagar, Karad , Dist. Satara
City/Town	Karad, Dist. Satara
State	Maharashtra
Pin Code	415124
Institution e-mail address	principal@gcekarad.ac.in
Contact Nos.	91-2164- 272415(P), 271713
Name of the Head of the Institution	Dr. A. T. Pise
Tel. No. with STD Code	91-2164- 272415(P), 271713, Fax: 91 2164 271713
Mobile	9422526362
Does the Institution function from own campus	Yes
2 . Institutional Status	
Autonomous Status (Provide date of Conformant of Autonomous Status)	2015-16 (30/06/2016)
Type of Institution	Co-education
Location	Rural
Financial Status	State Government
Name of the IQAC co-ordinator/Director	Dr. U. V. Patil
IQAC e-mail address	deanacad@gcekarad.ac.in
Mobile no.	9403090395
Registered Email	principal@gcekarad.ac.in
Alternate Email	patil_uv@yahoo.com/deanacad@gcekarad.ac.in
3. Website Address	
Web-link of the AQAR:(Previous Academic Year)	http://www.gcekarad.ac.in/uploaded_files/AQAR_19-20_table_separateupdated_1615364266.pdf
4. Whether Academic Calendar prepared during the year	Yes
if yes, whether it is uploaded in the institutional website: Web link	http://www.gcekarad.ac.in/uploaded_files/Academic_Calender_2020_21_1615443656.pdf

5 . Accreditation Details

Cycle	Grade	CGPA	Year of Accreditation	Validity	
NAAC is not done hence NBA cycles are reported.				Period From	Period To
				30/06/2016	30/06/2019

Branch	Course	NBA 1 Cycle	NBA 2 Cycle
Civil Engineering	UG	2007-2012	2015-30 June 2019
Mechanical		2007-2013	2015-30 June 2019
Elect		2007-2014	2015-30 June 2019
ENTC		NA	2015-30 June 2019
IT		NA	
Construction Management	PG		2015-30 June 2019
Structural Engineering			2015-30 June 2019
Heat Power Engineering			2015-30 June 2019
Production Engineering			2015-30 June 2019
Electrical Power System			2015-30 June 2019

6 . Date of Establishment of IQAC	**NAAC Letter dated 14th June 2016** First Meeting of IQAC is on 19th Dec 2016

7 . Internal Quality Assurance System

Quality initiatives by IQAC during the year for promoting quality culture

Item /Title of the quality initiative by IQAC

1. Implementation and utilization of smart classroom
2. Initiative for IOT and AI/ML lab
3. Improvement in laboratory practices
4. Scope for project sponsorship for 6 months in industry
5. Participation of students in National level project competition

8 . Provide the list of Special Status conferred by Central/ State Government UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.

Institution/Department/Faculty	Scheme	Funding Agency	Year of award with duration	Amount

9. Whether composition of IQAC as per latest NAAC guidelines:	**Yes**
Upload latest notification of formation of IQAC	http://www.gcekarad.ac.in/uploaded_files/2020-21_GCEK_IQAC_composition_1615033275.pdf
10. Number of IQAC meetings held during the year	(2020-21 :- 8 meetings)
The minutes of IQAC meeting and compliances to the decisions have been uploaded on the institutional website	Yes
11. Whether IQAC received funding from any of the funding agency to support its activities during the year?	Institute facilitate and support for all activities
12. Significant contributions made by IQAC during the	• Implementation and utilization of smart classroom

current year (maximum five bullets)	• Initiative for IOT and AI/ML lab • Improvement in laboratory practices • Scope for project sponsorship for 6 months in industry • Participation of students in National level project competition
13. Plan of action chalked out by the IQAC in the beginning of the academic year towards Quality Enhancement and outcome achieved by the end of the academic year	
Plan of action	**Achievements/ Outcomes**
Conduction of FDP/STTP in New trends in technology	FDPs- 15 and beneficiaries- 1402
Testing and consultancy	Total consultancy- Rs.60 lacs approximately
FDP attended by faculty in other institutions/organizations	FDPs- 50
Patenting	Total filed - 21,Awarded - 2
Preparation of the Annual Quality Assurance Report (AQAR) to be submitted to Principal based on the quality parameters.	AQAR has been prepared for year 2019-20, uploaded on college website and process of preparation of AQAR for 20-21 is done.
14. Whether AQAR was placed before statutory body?	No
15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning?	No
16. Whether institutional data submitted to AISHE:	Yes
Date of Submission	
17. Does the Institution have Management Information system ?	Yes
If yes, give a brief description and a list of modules currently operational (maximum 500 words)	The data of faculty/ courses assigned to faculty and corresponding registered students has been stored in Management Information System (MIS). All theory and practical examination marks are entered in MIS. MIS stores and presents the overall result to each student individually. Online feedback of course delivery from each faculty is taken from every student at the end of semester through MIS as well as Moodle. Effective governance will be ensured through the process of automation by implementing intranet and MIS/ERP software in all administrative and academic processes.

Part – B (FOR A.Y. 20-21)

Criteria I- Curricular Aspects

1.1 Curriculum Design and Development

1.1.1 Program for which syllabus revision was carried out during the academic year

Name of Program	Program Code	Program Specialization	Date of Revision
BTech	600519110	Civil Engineering	11/12/2020
BTech	600529310	Electrical Engineering	25/05/2019(Academic Council 19-20)
BTech	600524610	Information Technology	07/02/2020
BTech	600561210	Mechanical Engineering	Second revision S.Y. B.Tech (Mech) Sem -IV revised as per AICTE & will be implemented from Feb 2021. TY B.tech (Mech) syllabus is revised as per AICTE norms & will be implemented in AY 2021-22 Term stated on 13 July, 2021
BTech	600537210	E & TC	04-03-2020
BTech	600524110	MCA	13-06-2020
MTech	600521010	Construction Management (Civil)	11/12/2020
MTech	600521210	Structural Engineering (Civil)	
MTech	600559610	Heat Power Engineering (Mechanical)	Second revision of M.Tech 01/07/2019
MTech	600560610	Production Engineering (Mechanical)	Second revision of M.Tech 01/07/2019
MTech	600529210	Power Systems (Electrical)	25/05/2019(Academic Council 19-20)
MTech	600524210	Computer Science and Engineering	Newly Introduced in 2019-20
MTech	600560110	Design Engineering	Newly Introduced in 2019-20

1.1.2 Programs/Courses focused on Employability/Entrepreneurship/Skill development during the academic year

Program	Program Specialization	Date of Introduction	Course
BTech	All Specialization	CTP - Employability test-	Corporate Training Program, Employability test, General Proficiency, AMCAT Test, Industrial Visits, Six month internship in Industry/Research Institute, Industry Expert Lectures
MTech	All Specialization		

1.2Academic Flexibility

1.2.1 New Programs/Courses introduced during the academic year

Program/Course	Program Specialization	Date of Introduction
BTech	NIL	
MTech	NIL	

MTech	Computer Science and Engineering	15/07/2019
MTech	Design Engineering	15/07/2019
1.2.2 Programmes in which Choice Based Credit System (CBCS)/Elective Course System implemented at the College level during the Academic year .		
Name of programs adopting CBCS	Program Specialization	Date of implementation of CBCS/Elective Course System
BTech	Civil Engineering	Open/Core electives/Interdisciplinary electives
BTech	Electrical Engineering	Open/Core electives/Interdisciplinary electives
BTech	Information Technology	- IT2401 Microprocessor and Microcontroller (03 Credits) - IT2406 Microprocessor and Microcontroller Lab (01 Credit) - OE641 Open Elective-Web Technology (03 Credits)
BTech	Mechanical Engineering	Open Elective ME2401: Industrial Instrumentation ME2501: Operational Research OE621: Industrial Automation Core electives ME2515: Non-Conventional Machining ME2525: Industrial Automation Interdisciplinary electives ME2802: Finite Element Analysis
BTech	E & TC	Open Elective OE651: Open Source Embedded Platform(03 Credits) Core Electives EX6*4:- Elective-I(3 Credits) : EX614 Random Signal Processing EX624 Computer Organization EX634 Image Processing EX644 Information Theory and Coding EX7*5:- Elective-II(4 Credits): EX715 Wavelets and Time-Frequency Decomposition EX725 Real time Systems EX735 Industrial Drives EX745 Linear Algebra EX8*3: Elective-III (4 Credits) EX813 Speech Processing EX823 Operating Systems EX833 PLC SCADA EX843 Probability and Stochastic Processes EX8*4: Elective- IV(4 Credits) EX814 Broadband Communication EX824 Satellite Communication EX834 Audio & Video Engineering

		EX844 Digital Signal Compression
BTech	MCA	NO
MTech	Construction Management (Civil)	Open/Core electives/Interdisciplinary electives
MTech	Structural Engineering (Civil)	Open/Core electives/Interdisciplinary electives
MTech	Heat Power Engineering (Mechanical)	Open Elective OE1158: Composite Material Core electives (EL-1) HP1113: Nuclear Engg (EL-2) HP1114: Air Conditioning System Design (EL-3) HP1213: Refrigeration & Cryogenics (EL-4) HP1124: Design of Solar & Wind System Interdisciplinary electives--Nil
MTech	Production Engineering (Mechanical)	Open OE1158: Composite Material Core electives (EL-1) PE1113: Adv. M/c Tool Design (EL-2) PE1114: Mathematical modeling & Simulation (EL-3) PE1243: Conditioning Monitoring (EL-4) PE 1244: Product life cycle management /Interdisciplinary electives--Nil
MTech	Power Systems (Electrical)	Open/Core electives/Interdisciplinary electives
MTech	Computer Science and Engineering	Open/Core electives/Interdisciplinary electives
MTech	Design Engineering	Open Elective OE1158: Composite Material Core electives (EL-1) DE:1133 Mathematical methods for Mechanics and dynamics (EL-2) DE:1134 Tribology or DE:1124 Fatigue, Fracture and Failure analysis (EL-3) DE:1213 Mechatronics and control system (EL-4) DE:1224 Condition monitoring

1.3 Curriculum Enrichment

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

Value Added Courses	Date of Introduction	Number of Students Enrolled
Professional Electives as mentioned on Institute website	**Civil engineering July 20** MOOCs course for Industry Mode Students MOOC I and MOOC III CE 1715: ASA (Ele.-I) CE 1725: Hydraulic Structures(Ele.-I) CE 1755: Traffic Engineering(Ele.-I) CE 1842: Advanced Engineering Geology (Ele.-II) CE 1843: Advanced Construction Techniques(Ele.-III)	69 Students from B.Tech (Civil)
Professional Electives as mentioned on Institute website(Electrical)	Ele-2-EE1823-Wind and Solar Power Ele-3-EE1824-Power Plant Engineering MOOC course For industry Mode Students	68 68 01

Open Electives as mentioned on Institute website(Electrical)	OE631-Industrial Electrical System	66 Students from T.Y B.Tech Civil, Mechanical, IT, Electronics were enrolled
	IT EL-1: ME1726-Operation Research (01/07/2019)	16 Students from B.Tech (IT) for Industry Mode
Information Technology	MOOC1 1. Certification course in Machine Learning. 2. Certification course in Deep Learning. 3. Certification course in Data Science/Analytics. 4. Certification course in Natural Language Processing. 5. Certification course in Reinforcement Learning MOOC2 1. Certification course in Digital Forensics/Ethical Hacking. 2. Certification course in Soft Computing. 3. Certification course in Blockchain Technology. 4. Certification course in Computer Vision. 5. Certification course in Big Data Analytics/Computing. Elective I-IT1714: Artificial Intelligence Elective I- IT1724 : Mobile Computing Elective I-IT1734: Human Computer Interface Elective II –IT1813: Soft Computing Elective II-IT1823: Bioinformatics Elective II-IT1833: Enterprise Resource Planning Elective-II-IT1843: Science of Design Elective III-IT1814: Parallel Computing Elective III-IT1824: Ethical Hacking and Digital Forensics Elective III-IT1834: Gaming Architecture and Design	16 students from final year Btech. For Industry Mode
Professional Electives as mentioned on Institute website (Mechanical)	EL-1: ME1726-Operational Research (13/07/2020) EL-1: ME1746- Adv. IC Engines (13/07/2020) EL-2: ME1717-Ind. Automation & Robotics (13/07/2020) EL-2: ME1727-Machine Tool Design (13/07/2020) EL-3:ME1844-Engineering Economics &Financial Management (08/02/2021)	72 Students from B.Tech (Mech) 04 Students from B.Tech (Mech) 26 Students from B.Tech (Mech) 50 Students from B.Tech (Mech) 76 Students from B.Tech (Mech)
Open Electives as mentioned on Institute website (Mechanical)	OE621: Industrial Automation (AY2020-21) Summer 2021 Exam	30 Students from Third Year Civil 29 Students from Third Year Electrical 06 Students from Third Year EnTC 04 Students from Third Year IT
1.3.2 Field Projects / Internships under taken during the year		
Project/Programme Title	Programme Specialization	No. of students enrolled for Field Projects / Internships
BTech (Mechanical)	Mechanical	Mechanical: Following no of students have done Industrial Training

		69 Students: of S. Y. B.Tech 10 Students of Lateral entry 68 Students of T. Y. B. Tech 66 Students of B.Tech
BTech	All Specialization	E & TC: - --- 03 students for Industry Mode MCA: - ---- IT: - 16 students for Industry Mode Civil: - 8 students Industry Mode 700+ students are registered on portal for internship Total offers - ---- Total - Research Projects:- ----
MTech	All Specialization	

1.4 – Feedback System	
1.4.1 – Whether structured feedback received from all the stakeholders.	
Students	Yes
Teachers	Yes
Employers	Yes
Alumni	Yes
Parents	Yes
1.4.2 – How the feedback obtained is being analyzed and utilized for overall development of the institution? (maximum 500 words)	
Students are required to give feedback for courses regarding the teaching process once in a semester. Online feedback of course delivery from each faculty is taken from every student at the end of semester through MIS as well as moodle. Some of the parameters included in a feedback form are lesson planning, course evaluation, coverage of course content, basic knowledge of a course, usage of audio-visual tools, etc. It mainly focuses on faculty/ instructor's performance in conducting a particular course. The purpose of the feedback questionnaire is to gather information on the learning experience, as well as students' responses to the course and the faculty. The questions reflect subjective perceptions of students on various aspects of the course and the faculty involved in the course. The information provided is useful for the faculty as well as to the higher authorities in the ongoing efforts to enhance the quality of education at the Institute. This data is analyzed to improve the course delivery, and thus to attain course/programme outcomes. The feedback is treated as confidential. The responses of students is communicated to the concerned faculty through the Head of the Department. The course teachers whose performance indicators are low; they are counseled by Heads of respective departments.	

CRITERION II – TEACHING- LEARNING AND EVALUATION

2.1 – Student Enrolment and Profile

2.1.1 – Demand Ratio during the year

Name of the Programme	Programme Specialization	Number of seats available	Number of Application received	Students Enrolled
BTech	Civil Engineering	60	Admission process is centrally managed by state govt.	60/67
BTech	Electrical Engineering	60		69
BTech	Information Technology	60		70
BTech	Mechanical Engineering	60		68

BTech	E & TC	60		67/67
BTech	MCA	30		35
MTech	Construction Management (Civil)	25		12/28
MTech	Structural Engineering (Civil)	25		/27
MTech	Heat Power Engineering (Mechanical)	25		/04
MTech	Production Engineering (Mechanical)	25		/03
MTech	Power Systems (Electrical)	25		03/04
MTech	Computer Science and Engineering	18		/01
MTech	Design Engineering	18		11/13

2.2 – Catering to Student Diversity

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

Year	Number of students enrolled in the institution (UG)	Number of students enrolled in the institution (PG)	Number of fulltime teachers available in the institution teaching only UG courses	Number of fulltime teachers available in the institution teaching only PG courses	Number of teachers teaching both UG and PG courses
2020-21	FE(all dept)-341 SE(all dept)-340 TE(all dept)-380 BE(all dept)-344	FY(all dept)-115 SY(all dept)-92 TY(MCA)- 25/27	57 E & TC:21, Civil=9 ,Geology=1,App.Mech=4 Mech-----,Elect. 12,IT-10,MCA04,Phy,chem,maths -----	5 (M Tech Construction Management)	57

2.3 – Teaching - Learning Process

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

Number of Teachers on Roll	Number of teachers using ICT (LMS, e-Resources)	ICT Tools and resources available	Number of ICT enabled Classrooms	Number of smart classrooms	E-resources and techniques used
Total- 57 (needs to be updated) E & TC :-21, Civil=16,Geology=1,App.Mech=7 Mech-----,Elect. 12, IT--15, MCA--04, Phy, chem, maths-----	95% appr. LCD Projectors, Smart Board, Multi media system, Digital Pad, Webcam, Peripherals (Cisco	100%	03 21 Digital Boards	01 Total- 11	100% NPTEL Video Lectures, Moodle, e-library facility, MOOCs / Swayam / NPTEL courses

	webex platforms, computers, laptops, wi-fi etc)				

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

Mentoring and counselling system is implemented for technical and overall student development for four year UG courses. Mentors are allotted in the first year for 20 student group. Respective Department allot mentors from second year onwards for the group of 20 to 25 students. They often meet students to ask their problems (both technical and personal) and monitor their performance. Faculty advisor meets the students frequently and discusses various issues including class room lectures, laboratory performances, participation of seminar / conferences and technical event, any academic difficulty faced and career development. Thus, they try to resolve the problems which students face during their graduation studies.

Number of students enrolled in the institution	Number of fulltime teachers	Mentor : Mentee Ratio
(FE to BE) BTech- Civil (FY-SY) Mtech CM (FY- TY) MCA—60/88 IT (FE to BE) BTech- 297 IT (FY-SY) Mtech 2 FE to BTech 1405 (all branch students) FY-SY Mtech 146 (all branch students)	Civil Regular - 10 Civil Contractual, Adjunct and Visiting-13 MCA Regular - ----04 MCA Contractual, Adjunct and Visiting - --05 IT Regular 10 IT Contractual, Adjunct and Visiting **7**	Only with regular staff 1:30.4 With all staff 1:12.67 Only with regular staff 1:15 With all staff 1:06 Only with regular staff 1:24 With all staff 1:12
(FE to BE) Btech (Mech) = 297 (FY-SY) Mtech (Mech) = 40	Regular (P / AP/ Assist) = 2+2+9 = 13 (Mech) Contractual = nil (Mech), Adjunct = 01 (Mech) Visiting = 08 (Mech) POP: 01 (Mech) WS: 01 (Regular)	Only with regular staff 1:26 With all staff 1:15

2.4 – Teacher Profile and Quality

2.4.1 – Number of full time teachers appointed during the year

No. of sanctioned positions	No. of filled positions	Vacant positions	Positions filled during the current year	No. of faculty With Ph. D
UG – 13 PG - 3	UG- 10 PG- 0 MCA PG- 04	UG =3 PG =3 PG- --04	0 (need to be updated) NIL	3 (need to be updated) MCA 02

2.4.2 – Honors and recognition received by teachers (received awards, recognition, fellowships at State, National, International level from Government, recognized bodies during the year)

Year of Award	Name of full time teachers receiving awards from state level, National level, International level	Designation	Name of the award, fellowship, received from Government or recognized bodies
2020-21	Nil		

2.5 – Evaluation Process and Reforms

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

Programme Name	Programme Code	Semester/ year	Last date of the last semester-end/ year end examination	Date of declaration of results of semester end/ year- end examination
BTech	All Courses	2020-21	Odd Sem: 30/01/2021 Even Sem: 28/06/2021	Odd Sem: 03/07/2021 Even Sem: 28/07/2021
MTech	All Courses			

2.5.2 – Average percentage of Student complaints/grievances about evaluation against total number appeared in the examinations during the year

Number of complaints or grievances about evaluation (Nil)	Total number of students appeared in the examination	Percentage 0%
		Enquired in exam cell—no complaints

2.6 – Student Performance and Learning Outcomes

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

2.6.2 – Pass percentage of students

Programme Code	Programme Name	Programme Specialization	Number of students appeared in the final year examination	Number of students passed in final year examination	Pass Percentage
600519110	BTech	Civil Engineering	69	68	98.55
600529310	BTech	Electrical Engineering	69	69	100
600524610	BTech	Information Technology	71	71	100
600561210	BTech	Mechanical Engineering	77/76	77/76	100
600537210	BTech	E & TC	66	66	100
600524110	BTech	MCA	25/26	25/26	100
600521010	MTech	Construction Management (Civil)	50	50	100
600521210	MTech	Structural Engineering (Civil)			
600559610	MTech	Heat Power Engineering (Mechanical)	0	NA	NA
600560610	MTech	Production Engineering (Mechanical)	5	Exam in Sept /Oct	100

				2021	
600529210	MTech	Power Systems (Electrical)			
600524210	MTech	Computer Science and Engineering			
600560110	MTech	Design Engineering	16	Exam in Sept / Oct 2021	100

2.7 – Student Satisfaction Survey
2.7.1 – Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the questionnaire) (results and details be provided as weblink)
Program Exit survey available

CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION

3.1 – Promotion of Research and Facilities

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

Yes (TEQIP)

Name of the teacher getting seed money

For AY 20-21: Mechanical Dept: Dr S P Deshmukh, INR 3, 20,000. "Development of portable torque sensor". Small scale portable torque sensor is developed. Based on performance of small scale proposed torque sensor we need develop large scale portable torque sensor. Currently in-depth experiments are in process and will complete these experimentations soon.

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

Type	Name of the teacher awarded the fellowship	Name of the award	Date of award	Awarding agency
		nil		
	Mechanical:- Nil			

3.2 – Resource Mobilization for Research

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

Nature of the Project	Duration	Name of the funding agency	Total grant sanctioned	Amount received during the year
Minor Projects	90 days	TEQIP		
Major Projects	360Days	TEQIP		

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

03 RPS / 14 Teachers
1 MODROB- Dr.S.J.Wagh (Sanctioned 9 Lakh)
03-RPS from AICTE Total Rs 29 lakhs

1. RPS Title: Enhancement of Heat Transfer inside a single horizontal tube during evaporation of Refrigerants with

Turbulent Promoters.
Principal Investigator: Dr. R. K. Shrivastava
Grant in aid Sanctioned amt: Rs 800000 Amt to be Released Rs 788000 during 2019-20

2. RPS Title: Design & Development of 3D object Manufacturing System: Waste paper as Raw material
Principal Investigator: Dr. S. P. Deshmukh
Grant in aid sanctioned: 1998039/-
Amt to be released during 2019-20 Rs. 1968068/-
RPS Project is active and currently required equipment purchasing is in process. Further design of proposed 3D printer is finalized and is in manufacturing stage. We have purchased following equipment

1) dSPACE DS1104 microcontroller
XYZ Scanning Mechanisms

3.3 – Innovation Ecosystem

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

Title of workshop/seminar	Name of the Dept.	Date
	Civil Engineering	0
Nil please check	Electrical Engineering	
	Mechanical Engineering	Nil
Pre placement Training Vikrant Sukhtankar , Gyanteerth Pune	Information Technology	24 Sept. 2020 to 08 Oct. 2020
IoT Practical Lab, Mr. Arun Patokar		21,23,24 August 2020
Cyber Security, Mr. Ajinkya Lohakare		19-20, December 2020
Full Stack Web Development	E & TC	1st July 2020 to 15th July 2020
Artificial Intelligence I & Machine Learning		1st July 2020 to 15th July 2020
Image Processing		August 2020-September 2020
Two-week Industrial Training Program For students on Data Science and Machine Learning	MCA	18/06/2020 to 28/10/2020
Organized Two Days Workshop for Students on Soft Computing" from under TEQIP III		9 th July 2020 to 10 th July 2020.
International Conference on Machine Intelligence and Smart Computing		21st-22nd May, 2020

One Week Online FDP on "Digital Forensics and Security Research"		25-29 April 2020

attachments (1) TEQIP\Seminar.xlsx

3.3.2 – 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
E & TC-Nil				
IT: 1	Excellence Award	Smart India Hackathon	July-2020	**Software**
Mechanical Department				
1.TIFAN 2020: TEAM Pratham	Roshan Deshmukh [BE] Captain Ojas Sonar [BE] Aishwarya Dhekale [BE] Bhushan Kakade [BE] Rahul Sagar [TE EnTC] Siddhiraj Jadhav [TE] Hritik Burungale [TE] Vaibhav Drakshe [BE] Vaishnavi Biradar [BE] Digamber Narwar [BE] Pallavi Vanase [BE IT] Sonali [BE IT] Snehashri [BE IT] Kartikeah Baghmare [BE] Jay Chadi [BE] Tejas Chaudhari [BE] Niraj Mali [TE] Tushar Deomare [TE] Akshay Khade [TE] Vishwajeet Patil [TE] Satyajit Tondre [BE] Ankush Aher [BE] Harshal Jadhav [TE] ***Satff Advisor:*** Dr. U. V. Pise	**SAE*INDIA*** **T**echnology **I**nnovation **F**orum **F**or **A**gricultural **N**urturing (TIFAN- 2020)	7th April 2021	Best innovation Category Cash Price: 25,000/ + First Runner-up Team TIFAN 2020 Cash Price: 1,00,000/-
2. SAEBAJA 2020: TEAM DEMONS	Parth Belwalkar [T.E Mech] (Captain) Onkar Kamble [TE] (VC) Mahesh Mohalkar [SE]	**SAE*INDIA*** Chitkara University, Punjab Event date:		All India Rank: 24

	Gaurav Shinde [SE] Vaishnavi Gavhane [SE] Abhishek Igave [TE] Shivam Gautre [SE] Pratiksha Patil [SE] Rathin Agre [SE] Rutvik Bunjkar [SE] Deepak Gudekar [TE] Digvijay Sathe [TE] Shreyas Jadhav [SE] Shraddha Lotake [SE Electrical] Rutvik Thale [SE] Chinmay Pathak [TE] Swapnil Barhate [TE] Prasad Joshi [SE] Utkarsha Salunkhe [SE] Rushikesh Bhopale [TE] Avinash Kusalkar [TE] Amit Giramkar [TE] Atharva Sanglikar [SE] Prajyot Patil [SE] ***Staff Advisor:*** ***Dr. U. V. Pise*** ***Prof. K. S. Gharge***	5th – 9th March 2020		
1 Efficycle 2020 Team Hurricane	**Rushikesh Kadbhane (Captain) TY Mech** Mahesh Kumbhar (Vice-Captain) SY Mech Sarthak Navale (TY) Rushikesh Shinde (TY) Chetan Hukare (TY) Pranav Koli (SY) Kartik Chainpure (SY) Rahul Talekar (SY) Pranjali Jadhav (SY) Tejaswi Shinde (SY) Vardhan Gudage (SY) ***Staff Advisor:*** ***Dr. U. V. Pise*** ***Prof. K. S. Gharge***	**SAE*INDIA*** hosted by Lovely Professional University, Jalandhar, Punjab		All India Rank 3
4. Air conditioned PPE Kit (Personal Protection Equipment Kit)	1. Charudat Prashant Jagtap (BE-2021) 2. Nikhil Bhise (BE-2021)	AICTE Delhi Name of Award: AICTE National Level	5 September 2021	Awarded with 1st Prize (certificate & Cash Prize of Rs 51,000/-) in the category "Working Conditions; Ensuring Occupational Health & safety

	3. Akshay Gawade (M.Tech) ***Mentor:*** *Dr R K Shrivastava* *Dr S P Deshmukh*	Chhatra Vishwakarma Award 2020		Issues" for presenting a prototype / innovative solution of "Portable Air Conditioning Apparatus" under the theme "India's Economic Recovery Post Covid; Reverse Migration and Rehabilitation Plan to support "Atmanirbhar Bharat"

3.3.3 – No. of Incubation center created, start-ups incubated on campus during the year

Incubation Center	Name	Sponsored By	Name of the Start-up	Nature of Start-up	Date of Commencement
Yes CIIS	Center for Innovation, Incubation and startups	GCEK		To facilitate, promote and nurture entrepreneurship	
please check	Institute sponsored Start-up of OFFICIAL NETWORK ENTERPRISE please check				24/7/2020

3.4 – Research Publications and Awards

3.4.1 – Ph. Ds awarded during the year

Name of the Department	Number of PhD's Awarded/No of students
Civil Engineering	0
Electrical Engineering	
Information Technology	
Mechanical Engineering	Nil / 11
Applied Mechanics	
Mathematics	

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

Type	Department	Number of Publication	Average Impact Factor (if any)
International Journal	Civil Engineering Electrical Engineering Information Technology Mechanical Engineering E & TC MCA	Civil - 5 Electrical- 02 IT - 50 Mech- 12 (from June 2020) E & TC- 5 MCA-05	3.5

International Conference	Civil Engineering Electrical Engineering Information Technology Mechanical Engineering E & TC MCA	Civil - ---- Electrical- 10 IT - 30 Mech- 11 E & TC- 0 MCA-02	
National Journal	Civil Engineering Electrical Engineering Information Technology Mechanical Engineering E & TC MCA	Civil - ---- Electrical-00 IT - Mech- Nil E & TC- 2 MCA-----	
National Conference	Civil Engineering Electrical Engineering Information Technology Mechanical Engineering E & TC MCA	C Civil - 0 Electrical- 00 IT -- 22 Mech- Nil E & TC- 0 MCA-----	

3.4.3 – 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	0
Electrical Engineering	12
Information Technology	Book - 1, Total Publications - 52.
Mechanical Engineering	1. Shewale M.S., Razban A., Deshmukh S.P., Mulik S.S., Patange A.D., "Characterization and System Identification of XY Flexural Mechanism Using Double Parallelogram Manipulator for High Precision Scanning" In: Kumar A., Mozar S. (eds) ICCCE 2019. Lecture Notes in Electrical Engineering, Volume 570. Springer, Singapore, First Online 02 August 2019, https://doi.org/10.1007/978-981-13-8715-9_47 2. **Wani P. R.** (2020) Connecting Rod. In: Lakshminarayanan P., Agarwal A. (eds) Design and Development of Heavy Duty Diesel Engines. Energy, Environment, and Sustainability. Springer, Singapore.First Online: 06 November 2019, https://doi.org/10.1007/978-981-15-0970-4_13 3. **Wani P. R.** (2020) Critical Fasteners, Highly Loaded Bolted Joints. In: Lakshminarayanan P., Agarwal A. (eds) Design and Development of Heavy Duty Diesel Engines. Energy, Environment, and Sustainability. Springer, Singapore.First Online 06 November 2019, https://doi.org/10.1007/978-981-15-0970-4_14

4. **Wani P. R.** (2020) Crankshaft. In: Lakshminarayanan P., Agarwal A. (eds) Design and Development of Heavy Duty Diesel Engines. Energy, Environment, and Sustainability. Springer, Singapore.First Online 06 November 2019,https://doi.org/10.1007/978-981-15-0970-4_15
5. Sameer S. Gajghate, **Anil R. Acharya**, Swapan Bhaumik "Experimental Studies on Energy Conservation in Pool Boiling Heat Transfer Using Eco-friendly Additive" In: Biswal B., Sarkar B., Mahanta P. (eds) Advances in Mechanical Engineering. Lecture Notes in Mechanical Engineering. Springer, Singapore. pp 949-961. First online: 17 Jan 2020. https://doi.org/10.1007/978-981-15-0124-1_85
6. Milind A. Pelagade, Madhavi S. Harne, Ramakant Shrivastava, "Multi-objective Optimization of Performance and Emissions Characteristics of CI Engine Using Cottonseed Oil as an Alternative Fuel" Chapter 62. In Dr. Suneet Singh, Dr. Venkatasailanathan Ramadesigan (Editors) Advances in Energy Research, Vol. 2 Selected Papers from ICAER 2017, Printed by Springer Singapore, pp 689-699, First online 1 May 2020. https://doi.org/10.1007/978-981-15-2662-6_62
7. Ganesh Dinde **G. S. Dhende**, "Optimizing Parameters for Wet Turning of Super-Duplex Stainless Steel UNS S32760 Adopting Taguchi "Methodology" In Mohit Tyagi, Anish Sachdeva, Vishal Sharma (eds), Optimization Methods in Engineering: Select Proceedings of CPIE 2019, Lecture Notes on Multidisciplinary Industrial Engineering, Publisher Springer, Singapore. pp 403-415, First Online: 06 June 2020. DOI: https://doi.org/10.1007/978-981-15-4550-4_24
8. Ganesh Dinde, **G. S. Dhende**, "Multi-response Optimization of Process Parameters During Wet Turning of Super Duplex Stainless Steel UNS S32760 Using Taguchi-Grey Relational Analysis" Chapter. In Mohit Tyagi, Anish Sachdeva, Vishal Sharma (eds) Optimization Methods in Engineering: Select Proceedings of CPIE 2019, Lecture Notes on Multidisciplinary Industrial Engineering, Publisher Springer, Singapore. pp 417-428. First Online: 06 June 2020. DOI: https://doi.org/10.1007/978-981-15-4550-4_25
9. Akshay S. Nangare and V. S. Jadhav, "Optimization of Process Parameters for Machining of EN8 Steel on CNC Vertical Milling Machine" Chapter. In Mohit Tyagi, Anish Sachdeva, Vishal Sharma (eds) Optimization Methods in Engineering: Select Proceedings of CPIE 2019, Lecture Notes on Multidisciplinary Industrial Engineering, Publisher Springer, Singapore, pp 503-511. First Online: 06 June 2020. DOI: https://doi.org/10.1007/978-981-15-4550-4_31
10. Ganesh Dinde, **G. S. Dhende**, "Study of Machining Parameters for Wet Turning of F55 Stainless Steel Using Grey Relational Analysis for Improvement in Surface Roughness" Chapter. In Mohit Tyagi, Anish Sachdeva, Vishal Sharma (eds) Optimization Methods in Engineering: Select Proceedings of CPIE 2019, Lecture Notes on Multidisciplinary Industrial Engineering, Publisher Springer, Singapore. pp 567-578. First Online: 06 June 2020. DOI: https://doi.org/10.1007/978-981-15-4550-4_36
11. Sushant B. Patil, Swarup S. Deshmukh, Vijay S. Jadhav, Ramakant Shrivastava" Modeling and Parametric Optimization of Process Parameters of Wire Electric Discharge Machining on EN-31 by Response Surface Methodology", Lecture Notes in

Mechanical Engineering, pp. 51-65, 2021C Springer Nature Singapore Pte. Lt. 2021 First Online: 20 August 2020 DOI: https://doi.org/10.1007/978-981-15-4745-4_6

12. Yogiraj Bhumkar, A. R. Acharya, A. T. Pise, "Experimental Investigation of Unsteady State Heat Transfer Behaviour of Nanofluid", In: Akinlabi E., Ramkumar P., Selvaraj M. (eds) Trends in Mechanical and Biomedical Design. Lecture Notes in Mechanical Engineering. Springer, Singapore, pp 543-554. First Online 21 August 2020, https://doi.org/10.1007/978-981-15-4488-0_45
13. Saurabh B. Dhone, A. T. Pise, "Waste Heat Recovery (WHR) of Diesel Engine Using Closed-Loop Pulsating Heat Pipe" In: Akinlabi E., Ramkumar P., Selvaraj M. (eds) Trends in Mechanical and Biomedical Design. Lecture Notes in Mechanical Engineering. Springer, Singapore. pp 765-764 First Online: 21 August 2020 https://doi.org/10.1007/978-981-15-4488-0_64
14. Vishal Godase, Ashok Pise, Avinash Waghmare, "Development of the Latent Heat Storage System Using Phase Change Material with Insertion of Helical Fins to Improve Heat Transfer Rate", In: Pandey V.C., Pandey P.M., Garg S.K. (eds) Advances in Electromechanical Technologies. Lecture Notes in Mechanical Engineering. Springer, Singapore. pp 843-853. First Online 25 September 2020, https://doi.org/10.1007/978-981-15-5463-6_75
15. Nilesh K. Kadam and A. R. Acharya, "Experimental Investigation of Helical Coil Tube in Tube Heat Exchanger with Microfins Using Al2O3/Water Nano Fluid" In V. C. Pandey, P. M. Pandey, S. K. garg (eds), Advances in Electromechanical Technologies: Select Proceedings of TEMT 2019, Part of Lecture Notes in Mechanical Engineering book series, , pp 855-871. First Online 25 September 2020 https://doi.org/10.1007/978-981-15-5463-6_76
16. Himanshu Kalbandhe, Anil Acharya, and Sumedh Nalavade, "Improvement in Starting Characteristics of a Hermetic Reciprocating Compressor by Offset Cylinder Arrangement" In V. C. Pandey, P. M. Pandey, S. K. Garg (eds), Advances in Electromechanical Technologies: Select Proceedings of TEMT 2019, Part of Lecture Notes in Mechanical Engineering book series, pp 1005-1016. Online 25 September 2020 https://doi.org/10.1007/978-981-15-5463-6_89
17. Baban Suryatal, Suhas Deshmukh, Sunil Sarawade (2021) Development of DLP-Based Stereolithography System. In: Gascoin N., Balasubramanian E. (eds) Innovative Design, Analysis and Development Practices in Aerospace and Automotive Engineering. Lecture Notes in Mechanical Engineering. Springer, Singapore. Pages 199-207 **First Online:** 27 September 2020 https://doi.org/10.1007/978-981-15-6619-6_21
18. T. Jagadeesha, V. G. Salunkhe, R. G. Desavale, P. B. Patil, M. B. Kumbhar, A. R. Koli, "Investigation of Crack Detection Technique in a Rotating Shaft by Using Vibration Measurement" In: Arockiarajan A., Duraiselvam M., Raju R. (eds) Advances in Industrial Automation and Smart Manufacturing. Lecture Notes in Mechanical Engineering. Springer, Singapore, pp 631-645. First Online: 21 October 2020 https://doi.org/10.1007/978-981-15-4739-3_54

	19. Satpal C Babre, Kumudini S Gharge, "Exergy Analysis of Cogenerative Steam Power Plant" In L. M. Das, Naveen Kumar, Rohit Singh Lather, Pramod Bhatia (eds), Emerging Trends in Mechanical Engineering: Select Proceedings of ICETMIE 2019, Part of Lecture Notes in Mechanical Engineering book series, Springer, Singapore. PP 299 – 308, First Online: 12 December 2020. DOI https://doi.org/10.1007/978-981-15-8304-9_22. 20. Swarup S. Deshmukh, Arjyajyoti Goswami, Ramakant Shrivastava, Vijay S. Jadhav, "Parametric Study and Optimization of Parameters in Powder Mixed Wire-EDM Using Taguchi Analysis" Chapter. In Satya Bir Singh, Prabhat Ranjan, Alexander V. Vakhrushev, A. K. Haghi (editors) Mechatronic Systems Design and Solid Materials: Methods and Practices, Published by Taylor & Francis Group, Imprint *CRC* Press (Boca Raton), First e-Published 10 May 2021. https://doi.org/10.1201/9781003045748-1 21. M. B. Kumbhar, P. E. Lokhande, U. S. Chavan, V.G. Salunkhe, "A Global Scenario of Sustainable Technologies and Progress in a Biodiesel Production" Chapter 7 In: Inamuddin, Mohd Imran Ahamed, Rajender Boddula, Mashallah Rezakazemi (Book editors) Biodiesel Technology and Applications, John Wiley & Sons, Inc. First published: 18June 2021. DOI: https://doi.org/10.1002/9781119724957.ch7 22. Zubair A. Shaikh, Swarup S. Deshmukh, Dheeraj Kumar, Vijay S. Jadhav, Ramakant Shrivastava, "Optimization of Operating Parameters of Wire EDM", Chapter. In Kaushik Kumar, Divya Zindani, J. Paulo Davim (editors) Artificial Intelligence in Mechanical and Industrial Engineering, Published by Taylor & Francis Group, Imprint *CRC* Press (Boca Raton), First e-Published 21 June 2021. https://doi.org/10.1201/9781003011248-8 23. Awasthi Aditya Bachchan, sourabh Gahlot, Gopal Nandan, Satish Kumar, Ramakant Shrivastava , "Numerical Study of Twisted Tape with Circular Cutout and Triangular Cutout in a Circular Tube", Recent Trends in engineering design, Lecture notes in mechanical engineering book series, Springer publications, pp- 109-121, online since 16 July, 2021 https://link.springer.com/chapter/10.1007/978-981-16-2900-6_10 24. Awasthi Aditya Bachchan, Sourabh Gahlot, Gopal Nandan, Satish Kumar, Ramakant Shrivastava, "Numerical Study of Twisted Tape with Circular Cutout and Triangular Cutout in a Circular Tube", Chapter. In Bangarubabu Popuri, Amit Tyagi, N. R. Chauhan, Ashish Gupta (eds) , Recent Trends in Engineering Design: Select Proceedings of ICCEMME 2021, Part of the Lecture Notes in Mechanical Engineering book series, pp 109-121. Published by Springer, Singapore. First Online: 16 July 2021. DOI: https://doi.org/10.1007/978-981-16-2900-6_10
E&TC	1. Supriya S. Kadam, Dr. Yuvraj K. Kanase, Dr.Suhas S. Patil ," DFACTS for power quality improvement of grid connected inverter" PENSEE International Journal, SCOPUS active and GROUP- II approved journal, ISSN/eISSN:0031-4773, Volume 50, Issue 12,December 2020,Page No. 994-1000.

	2. Supriya S. Kadam, Dr. Yuvraj K. Kanase, Dr.Suhas S. Patil, "Pulse width modulation based three phase inverter using microcontroller LPC2148" ,World Academics Journal of Engineering Sciences, Vol.8, Issue.1, March 2021. 3. Santosh Chavan," Review on Cyber Security Incidents in IoT" International Journal of Innovative Research in Computer and Communication Engineering, IJIRCCE, e-ISSN- 2320-9801,p-ISSN-2320-9798,Volume 8,Issue 7,July 2020. 4. Amruta S.Salunkhe, Dr. Yuvraj K. Kanase, Dr.Suhas S. Patil ,"Study of Design Issues For Agriculture Module For Internet Of Things" PENSEE, ISSN No.-0031-4777, Volume 50,Issue 12. 5. Miss. Pooja S Tanurkar "A Review on Wireless IOT Based Industrial Security Robot", International Research Journal of Engineering and Technology (IRJET), Volume: 08 Issue: 05,May 2021 6. Miss. Pooja S Tanurkar, "A Review on Leaf Disease Detection and Classification Using Image Processing", International Research Journal of Engineering and Technology (IRJET) Volume: 08 Issue: 05 , May 2021. 7. Ms.Supriya S.Kadam, Megha Prasannan , Akansha Kapre, Nikita Shivarai,"Cricket Bowling Machine",IEEE Techanicokdown-2021, SIT, Lonavla,30 May 2021. 8. Shital Dawane, Kedar Kotkar, Siddharth Patil," Smart Grabage Monitoring System using IoT" IEEE Techanicokdown-2021, SIT, Lonavla, 30 May 2021. 9. Ms.Supriya S.Kadam, "An Embedded Controller for power quality improvement of an inverter with electrical grid",IEEE Techanicokdown-2021, SIT, Lonavla,30 May 2021.
MCA	01
Other Department	

3.4.4 – Patents published/awarded during the year

Patent Details	Patent status	Patent Number/Application Number	Date of Award
Artificial non stick film on toilets, urinal and wash basins.	Process	202021004724	
Cooling of personnel protection equipment's (PPE kit) kit	Process	202021034156A	
A device for Controlling microwave intensity	Process	202021020688A	
Cutting Dies for Kolhapuri Chappal	Process	202021020690	
Position Determining System	Process	US 11, 002, 526,B2	
Automatic Water Flushing	Process	358151	
A SYSTEM AND PROCESS FOR PREPARATION OF BETEL NUT SURFACTANT FOR ENHANCING POOL BOILING HEAT TRANSFER	Process	202110150	

Palm tree Inspired Blade design for Horizontal axis wind Turbines	Process	2021101098	
Portable Air Conditional Apparatus	Process	202021034156	
Micro Wave Water Heater	Process	364119	
attachments (1) TEQIP\Patent.xlsx details are attached herewith at the end in the appendix of Mechanical data			

3.4.5 – Bibliometric of the publications during the last academic year based on average citation index in Scopus/ Web of Science or PubMed/ Indian Citation Index

Name of Author	Title of journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citation excluding self-citation
Dr. Y.M. Ghugal	ASCE/Springer	2021	3.5	GCEK	
Dr. P. M. Joshi		2021	12	GCEK	
Dr. U. V. Patil		2021	13	GCEK	
Dr. A R Phadke		2021	10	GCEK	
Dr. S. H. Pawar		2021	06	GCEK	
Dr. S K Patil		2021	05	GCEK	
Prof. K K More		2021	02	GCEK	

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

Name of Author	Title of journal	Year of publication	h- Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self-citation
Dr. P. M. Joshi		2021	05	GCEK	
Dr. U. V. Patil		2021	06	GCEK	
Dr. A R Phadke		2021	09	GCEK	
Dr. S. H. Pawar		2021	03	GCEK	
Dr. S K Patil		2021	02	GCEK	
Prof. K K More		2021	01	GCEK	

3.4.7 – Faculty participation in Seminars/Conferences and Symposia during the year

Number of Faculty	International	National	State	Local
8				
MCA- 01	MCA- 02			
IT - 15	30	22		Mechanical: Nil

3.5 – Consultancy

3.5.1 – Revenue generated from Consultancy during the year

Name of the Consultant(s) department	Name of consultancy project	Consulting/Sponsoring Agency	Revenue generated (amount in rupees)
Civil Engineering			
Civil Engineering	Third Party inspection	Vrious Nagarparishad, Mahanagar palika, etc.	55,60,000/-
Civil Engineering			
Electrical	TPI of Electrical Installation in new Administrative Building Malkapur Nagparishad	Malkapur Nagarparishad	92040.00
	TPI Sound System, Nagarpalika , Satara	Nagarpalika Satara	36239.00
	TPI Highmast Installation, Koregaon	Nagarpanchyat, Koregaon	4672.00
	TPI Sound System	Nagarpalika, Islampur	23205.00
	TPI Electrical Installation	Nagarparishad, Rahimatpur	23711.00

Consultancy Data 2020-21 for Mechanical Department

Sr. No.	Date	Client Name	Work	Consultancy Title	Amount	person
1	19-Aug-20	Ghanshyam Engg. Ahmedabad	20 ltr Dustbin	Third Party Inspection & Testing	17670	S. P. Deshmukh
2	20-Oct-20	Dipesh Fabricators Pune	Gym Equipment	Third Party Inspection & Testing	33520	S. P. Deshmukh
3	20-Oct-20	Spavy Fitness EquipmentsSatara	Gym Equipment	Third Party Inspection & Testing	33512	S. P. Deshmukh
4	20-Oct-20	Shree Sadguru Enterprises, Pune	Gym Equipment	Third Party Inspection & Testing	33512	S. P. Deshmukh
5	20-Oct-20	V. R. S. Sports and Fitness Satara	Gym Equipment	Third Party Inspection & Testing	4012	S. P. Deshmukh
6	11-Dec-20	Chiplun Muncipal Council	Fire brigade vehicle	Third Party Inspection & Testing	44,000	K S Gharge
7	5-Jan-21	Rahimatpur Nagarpalika	JCB (Backhoe loader)	Third Party Inspection & Testing	33394	S. P. Deshmukh
8	5-Jan-21	Rahimatpur Nagarpalika	Shredder Machine	Third Party Inspection & Testing	23576	S. P. Deshmukh

9	27-Feb-21	Grampanchayat Govare, Tal. Karad	Pipe Inspection	Third Party Inspection & Testing	3540	S S Jadhav
10	16-March-21	Assistant Commissioner of Animal Husbandry Kolhapur	Animal Casting Unit	Third Party Inspection & Testing	5900	V. B. Raka
11	3-July-21	Grampanchayat Govare, Tal. Karad	Pipe Inspection	Third Party Inspection & Testing	3027	S S Jadhav
				Total	**2,35,663**	

MCA	-NIL----	---NIL----	---NIL----
Information Technology	Third party Technical Inspection Report of Installation of CCTV at various places within Municipal area for Swacch Survekshan 2019-20 for Pachgani Hill station, Municipal Council, Panchgani. Providing and installing CCTV system at Swachcha Bharat point for Panchgani Hill station, Municipal Council,Panchgani	Panchgani Giristhan Municipal Corporation Panchgani Giristhan Municipal Corporation	17,250/- 10,594/-

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

Name of the Consultant(s) department	Title of the program	Agency seeking /training	Revenue generated (amount in rupees)	Number of trainees
Civil Engineering				
Electrical Engineering				
Information Technology				
Mechanical Engineering	Nil	Nil		
E &Tc	-NIL----	---NIL----	---NIL----	---NIL---
MCA	-NIL----	---NIL----	---NIL----	---NIL---

3.6 – Extension Activities

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

Title of the activities	Organizing unit/agency/ collaborating agency	Number of teachers participated in such activities	Number of students participated in such activities
Blood Donation Camps	GCEK/NSS	5	NSS volunteers and FY/SY students

Tree Plantation	GCEK/NSS	8	NSS volunteers and FY/SY students
Cleanliness campaign	GCEK/NSS	10	NSS volunteers and FY/SY students
Voter Registration Camp & Poster Presentation	GCEK/NSS	4	NSS volunteers and FY/SY students
World NSS Day	GCEK/NSS	4	NSS volunteers and FY/SY students
Plastic free campus	GCEK/NSS	6	NSS volunteers and FY/SY students
Swachh Bharat Abhiyan	GCEK/NSS	3	NSS volunteers and FY/SY students

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

Name of the activity	Award/Recognition	Awarding Bodies	Number of students Benefited
MCA --NIL-	--NIL---	--NIL--	--NIL--

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

Name of the scheme	Organizing unit/Agency /collaborating agency	Name of the activity	Number of teachers participated in such activities	Number of students participated in such activities
MCA--NIL				

3.7 – Collaborations

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

Nature of activity/Particulars	Participant	Source of financial support	Duration/Grant Details
AICTE	All Departments MCA--NIL	AICTE	
RPS		RPS	
MODROB		MODROB	
UNNAT BHARAT		UNNAT BHARAT	
SWACH BHARAT		SWACH BHARAT	
STATE GRANTS		STATE GRANTS	
TEQIP		TEQIP	

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

Nature of linkage	Title of the linkage	Name of the partnering institution/ industry /research lab with contact details	Duration From	Duration To	Participant
Corporate Training Program, Employability test, Six month internship in Industry/Research Institute, Industry Expert Lectures	Job Training	Goldman Sach, TCS, Opsfuse Technology, Outscal Delhi	Even Semester of final year		All department students please check
Expert Lecture (Mechanical)					

Title	Expert	Date	Attendee	Organized by	Purpose
Civil service guidance session	Prasad Chougule MPSC Rank 1	30th June 2020	429	MESA (S. H. Patil)	
MPSC Civil service exam preparation	Mr. Sanket Kadam	11th July 2020	136	MESA (S. H. Patil)	
SSB Guidance session	Major Satyajit More J&KLI	29th august 2020	52	MESA (S. H. Patil)	
Thermal Power Plant	Arvind Paranjpe	15th Feb 2021	70 Students from TE & BE (Mech)	K. S. Gharge	
Opportunities in HVAC & R (online mode)	Mr. Sanjay kumar Verma, Mr. Mihir Sanghavi	4th Aug 2021	70 students from TE & BE (Mech)	Dr. R. K. Shrivastava	Placement opportunity as an HVAC & R expert in industry

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

Organization	Date of MoU signed	Purpose/Activities	Number of students/teachers participated under MoUs
Experts Hub Chennai	23/6/2020	Certification courses on Full Stack Developer Career guidance session Live session on full stack developer	70 students
Deltiin India Tech	13/08/2020	·Arranging training Programs, Workshops, certificate courses for students	2 to 3 workshops with whole class
Lean Campus Startups	09/08/2020	Lean Campus Start-ups is a new age Entrepreneurship and start up Support platform for today's students who want to gain meaningful opportunities in Start-up Space.	
Gyanteerth	15/09/2020	Arranging pre-placement training for students	100+
ExpertsHub, Chennai	1st july 2020 to 15th july 2020	Internship on Full stack development	All students and faculties
Infezeal, New Delhi	August 2020-September 2020	Internship on Image Processing	All students and faculties
	1st July to 15th July 2020.	Internship on AI & ML	All students and faculties
Space Development Nexus-SDNx New Delhi		Internship Program on Interstellar Telecommunication System, Model Rocketry and Drone Technology	
Centre for Wind Energy Technology (C-WET) & SRRA Site owner for setting up Solar Radiation Resource Assessment (SRRA) station	13th Day of May, 2011 (Valid as on Sept. 2021)	To collect solar Radiation Data in Satara District	Teachers: 01 Lab Assist: 01 Peon:03 (in rotation)
College of Engineering Pune and Govt. College of Engineering,		Academic, students Career and research Co-operation between all	All M. Tech Students

Karad		their departments for implementation of TEQIP	
Walchand College of Engineering Sangli and Govt. College of Engineering, Karad		Academic, students Career and research Co-operation between all their departments for implementation of TEQIP	All M. Tech Students
Veermata Jijabai Technological Institute, (VJTI, Mumbai) and Govt. College of Engineering, Karad		To promote and enhanced academic interaction, share and implement best practices for enhancing quality of teaching learning process, conduct FDP, Training program, provide internship opportunity to students, help in developing laboratories, reference material, laboratory manual etc.	All students and faculties
Krishna Institute of Medical Sciences "Deemed to be University", Karad & Govt. College of Engineering, Karad		Organize Technical Competition, conferences, workshops seminars etc Develop Laboratories, research centers, internships etc	All students and faculties
Centre for Wind Energy Technology (C-WET) & SRRA Site owner for setting up Solar Radiation Resource Assessment (SRRA) station		To collect solar Radiation Data in Satara District	Teachers: 01 Lab Assist: 01 Peon:03 (in rotation)
Thinkcell learning Solutions Pvt. Ltd. (Formerly GATEFORUM Educational Services Pvt. Ltd. 409, 4th Floor, Ashoka chambers, S. P. road, Secundarabad 500003 & Govt. College of Engineering, Karad		Provide GATE Coaching & Study material	All Final Year B. Tech (Mech.) students
Deltiin India Tech Ptvt.ltd		Arranging training Programs, Workshops, certificate courses for students Industrial Training for faculties	
Lean Campus Startups		Lean Campus Startups is a new age Entrepreneurship and startup Support platform for today's students who want to gain meaningful opportunities in Startup Space.	
Gyanteerth		Arranging pre-placement training for students	
CodeNautics		Internship on Data Analytics with Machine Learning Learning Latest Industrial Trends	

CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES

4.1 – Physical Facilities

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

Budget allocated for infrastructure augmentation	Budget utilized for infrastructure development

4.1.2 – Details of augmentation in infrastructure facilities during the year

Facilities	Existing or Newly Added
Campus Area	Existing
Class rooms	Existing
Laboratories	Existing
Seminar Halls	Existing
Classrooms with LCD facilities	Newly Created
Classrooms with Wi-Fi OR LAN	Newly Created
Seminar halls with ICT facilities	Newly Created
Digital Boards	Newly Added

4.2 – Library as a Learning Resource

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

Name of the ILMS software	Nature of automation (fully or partially)	Version	Year of automation
SLIM 9.0 software	fully	9.0	

4.2.2 – Library Services

Library Service Type	Existing	Newly Added	Total
Books / Volumes of Journals	Existing		74590/3995
National/ International Print Journals	Existing		93/35
e-Journals	Existing		1656+
e-Books	Existing		2510
Book Bank Facility (for SC / ST Students and OBC/EBC/OPEN Students)	Existing		Available Set of 6 books
Reading Hall Seating Capacity(Plus Periodical Section)	Existing		150
Reprographic Facility	Existing		Available
NPTEL Facility	Existing		Available
Library Working Hours	Existing		9.00 a.m. to 7.00 p.m.
Total Nodes / Computers with Networking Facility	Existing		50 Nodes
Digital library :	Existing		60 computers
IIT Bombay Library Membership	Existing		
Online Public Access Catalogue Facility	Existing	Online public access catalogue is available in the library	

(OPAC)Campus wide connectivity on intranet		and also available throughout the campus by Wi-Fi Connectivity. MOPAC-Mobile app also available.	
Wi-fi & structured network facility	Existing		
4.2.3 – E-content developed by teachers such as: e-PG- Pathshala, CEC (under e-PG - Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives & institutional (Learning Management System (LMS) etc			
Name of the Teacher	Name of the Module	Platform on which module is developed	Date of launching e content
please check	MOODLE	E Material	
please check	MOODLE	E Material	
please check	MOODLE	E Material	
	MOODLE	Youtube, E Material	
All Faculties	Academic Courses	MOODLE Google Classroom	Since March 2020
Dr. S. J. Wagh	1. Internet of Things 2. Computer Networks 3. Data Science	Smart Boards Spoken Tutorial Google Classroom Cisco Webex Moodle	
Dr. R. B. Kulkarni	1. Cloud Computing 2. Human Computer Interface 3. Artificial Intelligence	Smart Boards Spoken Tutorial Google Classroom Cisco Webex Moodle	
Prof. R. S. Mawale	1. Theory of Computation 2. Database Management Systems 3. Discrete Mathematical Structure	Smart Boards Spoken Tutorial Google Classroom Cisco Webex Moodle	
Prof. N. M. Mule	1. Digital System and Microprocessor 2. Advanced Microprocessor 3. Information System and Security		
Prof. Y. D. Chavhan	1. Data Structure and Algorithm 2. Object Oriented Design and Programming 3. Real Time Systems 4. Storage Networks	Smart Boards Spoken Tutorial Google Classroom Cisco Webex Moodle	
Prof. B. S. Yelure	1. Computer Network 2. Network Engineering 3. Distributed 4. Computing Internet Technology	Smart Boards Spoken Tutorial Google Classroom Cisco Webex Moodle	
Prof. A. B. Chaudhari	1. Operating System,	Smart Boards	

	2. Data Communication 3. Cyber Law	Spoken Tutorial Google Classroom Cisco Webex Moodle	
Prof. C. V. Andhare	1. Theory of Computation 2. Digital Systems	Smart Boards Spoken Tutorial Google Classroom Cisco Webex Moodle	
Prof. N. R. Shetty	1 Computer Networks 2 Information Security	Smart Boards Spoken Tutorial Google Classroom Cisco Webex Moodle	
Prof. N. S. Deokule	1. Software Testing and Quality Assurance 2. Artificial Intelligence 3. Gaming architecture and design	Smart Boards Spoken Tutorial Google Classroom Cisco Webex Moodle	
Prof. C. P. Garware	1. Computer Networks 2. Information Retrieval 3. Data Warehousing and Mining	Smart Boards Spoken Tutorial Google Classroom Cisco Webex Moodle	
Prof. K. R. Pawar	1. Advanced Database Management Systems 2. Computer Organization and architecture	Smart Boards Spoken Tutorial Google Classroom Cisco Webex Moodle	
Prof. A. V. Sathe	1. Microprocessor and microcontroller 2. Operating Systems	Smart Boards Spoken Tutorial Google Classroom Cisco Webex Moodle	
Prof. J. A. Adamane	1. Advanced software testing 2. Human Computer Interface	Smart Boards Spoken Tutorial Google Classroom Cisco Webex Moodle	
Prof. P. D. Sheth	1. Programming for Problem Solving 2. Data Structures and Applications	Smart Boards Spoken Tutorial Google Classroom Cisco Webex Moodle	

4.3 – IT Infrastructure

4.3.1 – Technology Upgradation (overall)

Type	Total Computers	Computer Lab	Internet	Browsing centers	Computer Centers	Office	Departments	Available Bandwidth (MBPS/ GBPS)
Existing	170	8	BSNL1GBPS, Railtel 100 Mbps	9	1	1	6	BSNL 1GBPS, Railtel 100 Mbps
Existing (Mech.)	Desktop: 67 Servers: 2 Laptop: 3 LCD Projectors: 5 Printers: 10 Zerox: 1 Smart White board: 1 Smart TV: 2 UPS: 4							
Added (Mech.)	Laptop: 3 White board: 1							

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

1GBPS

4.3.3 – Facility for e-content

Name of the e-content development facility	Provide the link of the videos and media centre and recording facility
YouTube Lecture series by	NPTEL
YouTube Lecture series by	NPTEL
Moodle Facility URL (Locally Hosted on College Server)	http://117.239.185.161/moodle/
Digital Library URL (Locally Hosted on College Server)	http://172.16.1.39:81/

4.4 – Maintenance of Campus Infrastructure

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

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

It is common practice to appoint housekeeping staff and sundry labors for casual repairs of buildings every year. Petty contractors are appointed for some of the works by calling quotations for the works. Usually, equipment is maintained through AMC with suppliers. However, if the equipment is need for calibration or repairs any service provider is consulted to set it right.

CRITERION V – STUDENT SUPPORT AND PROGRESSION

5.1 – Student Support

5.1.1 – Scholarships and Financial Support			
Financial Support	Name/Title of the scheme	Number of students	Amount in Rupees
Financial Support from institution	Dr. Punjabrao Deshmukh Vastigruh Nirvah Bhatta (DTE) **General**		
Financial Support from Other Sources	Rajarshi Chhatrapati Shahu Mahraj Shikshan Shulkh Shishyavrutti Yojna **(EBC)**		
a) National	Govermnent of India Post-Matric (Scholarship) **SC**		
b)International	Post matric scholarship **OBC, SBC, VJNT**		
	Tuition fees and Examination fees to **OBC, SBC, VJNT**		
	Vocational Education Fee Reimbursement		

5.1.2 – Number of capability enhancement and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc.,			
Name of the capability enhancement scheme	Date of implementation	Number of students enrolled	Agencies involved
Personal Counselling and Mentoring	13/7/2020	All Students	GCEK
Remedial coaching	13/7/2020 1hrs to 2hrs per week per class	20-30	GCEK
The Dias Club	18/07/20 – 19/07/20, 29/08/20 to 30/08/20, 06/03/21	350+	GCEK
Robo club			GCEK
Yoga club	27/07/2020 to 31 /07/20, 27/02/2021 to 28 /02/2021	100+	GCEK
Electro chasers club	26th July 2020, 02nd August 2020, August 2020-September 2020, 30thOctober 2020, 08th November 2020, 27th -28th February 2021, 14th March 2021, 21th March 2021, 28th -29th March 2021	300+	GCEK
Contriver club	26/07/2020,09/08/2020	150+	GCEK
Divine club	Nil		GCEK
Music Club	August - 2017	67	GCEK
Yoga club	11-05-2021 on Yoga Day	124	GCEK

5.1.3 – Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year				
Name of the scheme	Number of benefited students for competitive examination	Number of benefited students by career counseling activities	Number of students who have passed in the comp. exam	Number of students placed
MOOCS				
GATE coaching Academy (Video lecture software & GATE material is provided)	E &TC :- 73 All dept. students	E &TC :77 All dept. students	E & TC :4 Total GATE qualified- -----	E &TC :- --- Total students placed- 77

	IT :- 60+	IT :60+	IT : 9 Total GATE qualified	IT :- 54 Total students placed
	Number of Students in Final year B. Tech (Mech.) = 77 Number of Students in T.Y. B. Tech (Mech.) = 68		GATE 2021(Mech.) For B.Tech (Mech) Total Strength = 77 Enrolled = 44 Appeared = 22 Qualified (Mech) = 7 Success rate = 31.82 % For T.Y. B.Tech (Mech) Total Strength = 68 Enrolled = 31 Appeared = 25 Qualified (Mech) = 2 Success rate = 8 %	

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

Total grievances received	Number of grievances redressed	Avg. number of days for grievance redress
0	0	0

5.2 – Student Progression

5.2.1 – Details of campus placement during the year

On campus			Off campus		
Name of organizations visited	Number of students participated	Number of students placed	Name of organizations visited	Number of students participated	Number of students placed
Capgemini,congnizant,emerson,TCS,Wipro,Accenture,Tata Motors,Mindtree,Amdocs etc.	B.Tech. (Mechanical) B.Tech. (IT) B.Tech. (E&TC) B.Tech (Civil) B.Tech. (Electrical)	47 51 44 38 23			
IT-- 26 organizations	IT-- 60	IT--54			

5.2.2 – Student progression to higher education in percentage during the year-nil

Year	Number of students enrolling into higher education	Program graduated from	Department graduated from	Name of institution joined	Name of program admitted to
2020-21		B.Tech	Civil Engineering	IITs NITs	M.Tech
2020-21	01	B.Tech	Electrical Engineering	IIT Kanpur	M.Tech (Power Engineering)

2020-21		B.Tech	Information Technology	IIM	MBA
2020-21		B.Tech	Mechanical Engineering		MS
2020-21		B.Tech	E & TC Engineering	nil	

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

Items	Number of students selected/ qualifying
GATE	E&TC- 4 Total GATE qualified IT- ----Total GATE qualified- 9 Mechanical - ----Total GATE qualified- ------ 09 (7 From Final Year & 2 from Third Year)
CAT	
GRE	

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

Activity	Level	Number of Participants
	National	
Sports Carnival	Institute	nil
Music Classical Solo, Group Song, Western Solo etc.	District, Central	------
please check	please check	

5.3 – Student Participation and Activities

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

Year	Name of the award/medal	National/ International	Number of awards for Sports	Number of awards for Cultural	Student ID number	Name of the student

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

The student's representatives serve in almost all academic and administrative bodies of the college such as the departmental board of studies, departmental associations and various clubs, student's council, Anti Ragging Cell, Anti sexual harassment cell, Placement, and Career Guidance Cell, NSS, Gymkhana Committee, Library committee, etc. Role of Student Representatives Disseminate the information from the college administration to all students. Organize technical, non-technical and social events. Conduct Quiz Competitions on current affairs. Organize programs in NSS. Arrange study tour and Environmental Studies field trip. To maintain conducive and anti-ragging ambiance in hostel and college premises. Any additional information regarding Student Support and Progression, which the institution would like to include. List of associations and clubs at Govt. College of Engineering, Karad ? CESA (Civil Engineering Students Association): MESA (Mechanical Engineering Students Association): EESA (Electrical Engineering Students Association): ELESA (Electronics Engineering Students Association)

5.4 – Alumni Engagement

5.4.1 – Whether the institution has registered Alumni Association?

Yes

Yes, the college has a registered Alumni association. The Alumni association contributes actively to the welfare of the institution. The alumni meeting is organized once / twice a year by all the departments. Illustrious and prominent alumni are invited to deliver special lectures, motivating the students to go for higher education and to find the means for job opportunities. All the departments have the alumni as members of their BOS. Their valid suggestions are taken into consideration in designing and updating the curriculum.
5.4.2 – No. of registered Alumni :
2020-21 - 2400
5.4.3 – Alumni contribution during the year (in Rupees) :
25000
5.4.4 – Meetings/activities organized by Alumni Association :
1 every year

CRITERION VI – GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 – Institutional Vision and Leadership

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

The overall progress and development of the college are headed by the Governing body followed by the Director, Registrar, the Deans and the HOD's looking after the various portfolios. The College Development Committee, Finance Committee, and the Academic Council are Intermediary but important bodies that mentor the Director in taking decisions regarding institutional development, financial issues and Academic related implementations, respectively. However, all major decisions are ratified by the Administrative Council.

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

Yes

6.2 – Strategy Development and Deployment

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

Strategy Type	Details
Teaching and Learning	The classroom teaching is well supported by smart boards, and LCD projectors. The academic calendar is strictly followed and monitored for delivering course contents define by every course teacher in course delivery plan. Penalty based attendance system is followed. Opportunity for students to learn at other institutes of repute is provided through credit transfer scheme. There is scope for industry oriented projects for both UG and PG students. Moodle is effectively used for effective teaching–learning. The inputs are taken from learners through feedback every semester and are used to address the issues related to teaching learning. Remedial classes during the semester and summer term are conducted. The industrial and field visits, expert lectures for contents beyond syllabus are organized regularly.
Curriculum Development	Regular revamping of curriculum through involvement of academicians and industry personnel. The process is monitored at various levels within department and institute. Outcome based, choice-based and student centric policies are given more thrust in curriculum design. More focus on professional and open electives. Internal academic audits with intradepartmental auditors are regularly conducted twice a year. Total credits and academic requirements recommended by AICTE model curriculum are strictly adhered to for both UG and PG programmes. Students encouraged undergoing courses available on SWAYAM

6.2.2 – Implementation of e-governance in areas of operations:

E-governance area	Details
Planning and Development	MIS, Moodle
Administration	MIS

Finance and Accounts	Tally
Student Admission and Support	
Examination	Moodle

6.3 – Faculty Empowerment Strategies

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

Year	Name of Teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support
2020-21	All Faculty--IT	ICMISC 2020	AICTE	
2020-21				
2020-21				

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

Year	Title of the professional development programme organized for teaching staff	Title of the administrative training program organized for non-teaching staff	From date	To Date	Number of participants (Teaching staff)	Number of Participants (non-teaching staff)
2020-21	International Conference on "Machine Intelligence and Smart Computing"		21/5/20	22/5/20	52 Papers	
2020-21	Online FDP on Network & IoT Simulation Platform		27/8/20	31/8/20	335	
2020-21	Industrial Training Program on "Containers, Kubernetes & Open shift Red Hat"		19/10/20	29/10/20	18	--
2020-21	One week STTP on "Experimental Methods in Engineering", Organised by Mechanical Dept, GCE Karad. Duration: 5th – 9th July, 2021 Under TEQIP-III		5th July, 2021	9th July 2021	120	Nil
2020-21						--

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

Recent Trends in VLSI Technology and Digital ASIC design using CMOS EDA Tool	10	11th November 2020	16th November 2020	6 days
FDP on Emerging Techniques in Library and Information Management in Digital Era organized by Government College of Engineering, Karad during 8th June 2020 to 12th June 2020.	10	8th June 2020	20th June 2020	13 days
Professional Development Training	3	28/10/2020	30/10/2020	Three Days Training
One week online webinar series on "Advance CNC & VMC Programming" organized by Mechanical Dept, KIT College of Engg, Kolhapur in association with Indian Machine Tool Manufacturer's Association (IMTMA)	Dr. Ranadhir R. Landge	2nd June 2020	6th June 2020	One Week
One Week online FDP on "Futuristic Technologies in Mechanical Industries" organized by Mechanical Dept, D. Y. Patil Institute of Engineering, Management & Research, Akurdi, Pune-44	Prof. (Mrs) S. S. Jadhav	5th June 2020	9th June 2020	One Week
One week online	Prof. V. B. Raka	15th June 2020	19th June 2020	One Week

FDP on “Advances in Civil and Structural Engineering (ACSE-2020)” Organized by Civil Dept, Govt. College of Engineering, Karad (TEQIP-III)				
Three day online workshop on “Importance of Mathematics in science and Engineering” Organized by PES’s CoE, Phaltan	Prof. N. V. Sali	20th June 2020	22nd June 2020	3 Days
One week online FDP on “Research Opportunity in Advanced Manufacturing Processes” organized by Mechanical Dept, Bharati Vidyapeeth CoE, Pune	Prof. Sushant H. Patil	22nd June 2020	28th June 2020	One Week
Webinar on “How to Conduct Virtual Labs” organized by Electronics & Telecommunication dept, AISSMS Institute of Information Technology, Pune	Prof. Swati S. Jadhav	24th June 2020	-	1 day
One week online FDP on “Nanotechnology & its Applications in Mechanical Engg” Organized by Mechanical Dept, K.D.K. College of Engineering, Nagpur	Prof. V. B. Raka	25th June 2020	1st July 2020	One Week

One Week online Training program on "Implementation of Multi Objective Optimization Algorithm (NSGA-II) using MATLAB" organized by Electrical Dept, under RIT Center for Teaching and Learning	Prof. S. H. Patil	29th June 2020	3rd July 2020	One week
One week online FDP on "Solar Energy & it's Application, Economical Implications in Indian Scenario after COVID-19" organized by Mechanical Dept, Prof. Ram Meghe Institute of Technology & Research, Badnera Amravati	Prof. (Mrs) S. S. Jadhav	15th June 2020	19th June 2020	One Week
Just entered few details for mech.dept.- details are enclosed in appendix at the end				

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

Teaching		Non-teaching	
Permanent	Full Time/Part Time	Permanent	Full Time/Part Time
MCA 04	Full Time- -----, Visiting 05, Adjunct- ----	Class 2 – 02 Class 3 – 62 Class 4 - 37	

6.3.5 – Welfare schemes for

Teaching	Non-teaching	Students
Staff Welfare Fund	Staff Welfare Fund	Student Welfare Fund

Approved AICTE AQIS application details are as follows :-

AQIS Application Id	AQIS Schemes	Faculty Id	Faculty Name	Academic Year
Mech Nil				2020-21

6.4 – Financial Management and Resource Mobilization

6.4.1 – Institution conducts internal and external financial audits regularly (with in 100 words each)
Yes. The college has been appointing internal and external auditors annually. The external auditor is a statutory auditor. The internal auditor makes quarterly balance sheets. The statutory audit or carries out half-yearly and yearly audits. In addition to this for the grant related fund provided by the state government, a separate audit is carried out by the region al office of the Directorate of Technical Education and by "Audit General (AG)" of the state government.

6.4.2 – Funds / Grants received from management, non-government bodies, individuals, philanthropies during the year (not covered in Criterion III)		
Name of the non-government funding agencies / individuals	Funds/ Grants received in Rs.	Purpose
Data will be available with Finance department		

6.4.3 – Total corpus fund generated

6.5 – Internal Quality Assurance System

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

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Agency
Academic	Yes	University Affiliation Committee NBA expert committee	Yes	HOD
Administrative	Yes	External Auditor, TEQIP Auditor, University Affiliation Committee NBA expert committee	Yes	Director and Registrar

6.5.2 – Activities and support from the Parent – Teacher Association (at least three)
1. During First Year Students Induction Program, Parents are invited and addressed in orientation session.2. Parent-Teacher Meet is conducted each year and feedback from parents is collected.3. Parents are invited on Graduation Day Function.

6.5.3 – Development programmes for support staff (at least three)

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

6.5.5 – Internal Quality Assurance System Details

a) Submission of Data for AISHE portal	No
b) Participation in NIRF	Yes
c) ISO certification	No
d) NBA or any other quality audit	Yes NBA Accreditation from 2021-2024

6.5.6 – Number of Quality Initiatives undertaken during the year

Year	Name of quality initiative by IQAC	Date of conducting IQAC	Duration From	Duration To	Number of participants
2019-20					

CRITERION VII – INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 – Institutional Values and Social Responsibilities

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

Title of the program	Period from	Period To	Number of Participants(Male, Female)
GUEST LECTURE BY Dr.Vijya Kadam			

Daily Session of Yoga			
Daily Session of aerobics and Zumba			
CAKE Making Workshop			

The institute has implemented solar technology for generating alternate nonconventional sources of electricity of 12MWh which is connected to the Electricity board grid. The electricity generated contributes to saving 30 of conventional energy.

7.1.3 – Differently abled (Divyangjan) friendliness

Item facilities	Yes/No	Number of beneficiaries
Physical facilities	Yes	
Provision for lift	Yes	
Ramp/Rails	Yes	
Scribes for examination	Yes	

7.1.4 – 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							

7.1.5 – Human Values and Professional Ethics

Title	Date of publication	Follow up (max 100 words)
Chapter 16. Discipline and Conduct		Any act of misconduct by any stakeholder of the institute is considered violating institute ethical and professional culture, and is subjected to disciplinary action. Such cases have to face an investigation or enquiry and the action taken by the Disciplinary committee is recorded and implemented. A few cases related to unethical practices in examinations and student misbehavior have been handled by the relevant committee and action taken is documented.

7.1.6 – Activities conducted for promotion of universal Values and Ethics

Activity	Duration From	Duration To	Number of participants

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

1. The rich vegetation within the campus facilitates a lower temperature (3-4°C) in the campus as compared to the external campus temperature.
2. The campus is well protected and is a home to various domesticated animals, rabbits, birds of various species and reptiles thus exhibiting balance in the ecosystem.
3. Use of Plastic is strictly banned in the campus.
4. Solar Lighting on the streets within the campus is implemented.
5. The college caters to accommodate approximately 765 students in 254 rooms distributed over 5 hostels, about 30 families of the faculty/staff staying in staff quarters which are exclusively maintained by the college.
6. Institute developed Eco-friendly and energy efficient campus by implementing Rain water harvesting, Recycling of resources, Solar roof tops for major buildings,
7. Waste to energy, Biogas plants, Sewage treatment plant (STP), etc.

7.2 – Best Practices
7.2.1 – Describe at least two institutional best practices
1. Institute promotes several clubs like NCC, Cultural Club etc. for educational, societal and technical development of the students. 2. Institute runs induction program for First Year Students
Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link
http://www.gcekarad.ac.in/DisplayPage.aspx?page=ciaesc&ItemID=cma
7.3 – Institutional Distinctiveness
7.3.1 – Provide the details of the performance of the institution in one area distinctive to its vision, priority and thrust in not more than 500 words
The Vision, Mission and Objectives of the institution clearly points towards a value based education based on the curriculum of the affiliating university combining it with the core values. The college which completed its 62 years of existence in 2021 has a strong bonding with the local people as we have Third Generation students studying in this college. This includes a number of minorities and marginalized section students. The college successfully implemented the autonomy system. The focus is on skill development, career oriented programs, industry visit, industry - academia interaction and college have brought all these aspects under curriculum implementation and enrichment. Special attention is given to weak students. The students of College are not only guided to achieve excellence in education but are thoroughly equipped with the knowledge of social perseverance and environmental sustainability. College in its endeavor to implement its curriculum incorporating its mission and vision with contemporary issues has evolved a number of best practices like Morning Assembly, Annual Theatre - Avishkar, Annual Technical Event, Various clubs, Induction program, TPO activities etc. just to name a few of them.
Provide the web-link of the institution
http://www.gcekarad.ac.in/
8 .Future Plans of Actions for Next Academic Year

Appendix: - Details about mechanical dept. data

Research Publications (Mechanical Department) AY2020-21 only

International Journal (Mechanical)

1. Amit Jomde, Virendra Bhojwani & Suhas Deshmukh, “Challenges in implementation of a moving coil linear compressor in a household refrigerator”, International Journal of Ambient Energy, Taylor & Francis. Published online: 25 Aug 2019. https://doi.org/10.1080/01430750.2019.1653972
2. Pralhad Tipole, Karthikeyan, Virendra Bhojwani, Suhas Deshmukh, Harshal Babar and Bharati Tipole, “Examining the impact of magnetic field on fuel economy and emission reduction in I.C. engines”, International Journal of Ambient Energy, Taylor & Francis. Published online: 19 Sep 2019. https://doi.org/10.1080/01430750.2019.1667434
3. Roshan P. Motghare, Swati S. Jadhav, “Review on Use of Twisted Tapes and Nano-particles in Heat Exchangers”, International Journal of Innovations in Engineering and Science, Volume 4, No. 8, pp 43-48, Nov. 2019. Part of National Conference on "Recent Advances in Engineering and Technology" SAMMANTRANA 19 Organized by Government College of Engineering, Nagpur. http://www.ijies.net/finial-docs/finial-pdf/100519M-11.pdf
4. A. R. Acharya, Ram Kadam, A. T. Pise, “Heat Transfer Enhancement in Separation Process of Ethanol from Ethanol Water Mixture by Using Surfactants”, Journal of Fine Chemical Engineering, volume 1, issue 1, Published on 18 January 2020, pp 9 – 14, Universal Wiser Publisher, DOI: https://doi.org/10.37256/fce.112020212.9-14

5. Shewale M, Razban A, Deshmukh Suhas, Mulik S. Design, Development and Implementation of the Position Estimator Algorithm for Harmonic Motion on the XY Flexural Mechanism for High Precision Positioning. Sensors. 2020; 20(3):662. Published: 24 January 2020 https://doi.org/10.3390/s20030662
6. Manuraj Dhawle, K. S. Gharge, A T Pise, "Review paper on post processing of turmeric rhizome" International Research Journal of Engineering and Technology, Volume 7, Issue 3, PP 4800 – 4803, March 2020.
7. Sonali Rajendra Pansare, Nitin Sali, "A Review on Experimental and Numerical Analysis of Thermally Stratified Storage Tank" International Research Journal of Engineering and Technology (IRJET), Volume 7, Issue 4, PP 2679 - 2681. April 2020. https://www.irjet.net/archives/V7/i4/IRJET-V7I4514.pdf
8. Shridevi K. Mane, Swati S. Jadhav, "Review on Different Passive Methods on Heat Exchanger", International Research Journal of Engineering and Technology (IRJET), Volume 7, Issue 4, PP 5862 - 5866. April 2020. https://www.irjet.net/archives/V7/i4/IRJET-V7I41104.pdf
9. Mahesh Antad, Manish Sharma, Ramakant Shrivastava, "Stability Behaviour of Natural Circulation Studies for Unusual Orientations in a Rectangular Loop using Relap5/Mod3.2 Computer Code", International Research Journal of Engineering and Technology (IRJET), Volume 7, Issue 4, PP 6576 - 6584. April 2020. https://www.irjet.net/archives/V7/i4/IRJET-V7I41237.pdf
10. Shailesh S. Parkhe, Prof. G. S. Dhende, "To Study the Effect of Different Tool Profiles on Aluminium Aa3103 By Friction Stir Welding", International Research Journal of Engineering and Technology, Volume 7, Issue 5, PP 1179 – 1184. May 2020. https://www.irjet.net/archives/V7/i5/IRJET-V7I5228.pdf
11. Lokhande Suraj, K.S.Gharge, Atul Kamtikar, "Performance Enhancement of Hot Water Generator Fuelled With Diesel and Bio-Diesel" International Research Journal of Engineering and Technology, Volume 7, Issue 5, PP 3840 – 3845. May 2020. https://www.irjet.net/archives/V7/i5/IRJET-V7I5734.pdf
12. Swati Sadik Jadhav, Manoj yelpale, Ramakant Shrivastava, "A Review on Heat Transfer Enhancement and Associated Pressure Drop During Flow Boiling of Refrigerant Using Twisted Tape as Turbulent Promoter", ELK's Indian Journal of Mechanical Engineering, Volume 6, Issue 1 (Jan – June 2020) pp 12-18,
13. Avadhut Anant Kulkarni, Nitin Vasant Sali, "Thermal Analysis of Hermetic Reciprocating Compressor: A Review", International Journal of Advanced Research in Science, Engineering and Technology, Volume 7, issue 8, pp 14695-14701, Aug 2020. http://www.ijarset.com/upload/2020/august/20-AvadhutKulkarni-22.pdf
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3.4.3 – Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year	
Department	Number of Publication
Mechanical Engineering	1. Shewale M.S., Razban A., Deshmukh S.P., Mulik S.S., Patange A.D., "Characterization and System Identification of XY Flexural Mechanism Using Double Parallelogram Manipulator for High Precision Scanning" In: Kumar A., Mozar S. (eds) ICCCE 2019. Lecture Notes in Electrical Engineering, Volume 570. Springer, Singapore, First Online 02 August 2019, https://doi.org/10.1007/978-981-13-8715-9_47 2. **Wani P. R.** (2020) Connecting Rod. In: Lakshminarayanan P., Agarwal A. (eds) Design and Development of Heavy Duty Diesel Engines. Energy, Environment, and Sustainability. Springer, Singapore.First Online: 06 November 2019, https://doi.org/10.1007/978-981-15-0970-4_13

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4. **Wani P. R.** (2020) Crankshaft. In: Lakshminarayanan P., Agarwal A. (eds) Design and Development of Heavy Duty Diesel Engines. Energy, Environment, and Sustainability. Springer, Singapore.First Online 06 November 2019,https://doi.org/10.1007/978-981-15-0970-4_15
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9. Akshay S. Nangare and V. S. Jadhav, "Optimization of Process Parameters for Machining of EN8 Steel on CNC Vertical Milling Machine" Chapter. In Mohit Tyagi, Anish Sachdeva, Vishal Sharma (eds) Optimization Methods in Engineering: Select Proceedings of CPIE 2019, Lecture Notes on Multidisciplinary Industrial Engineering, Publisher Springer, Singapore, pp 503-511. First Online: 06 June 2020. DOI: https://doi.org/10.1007/978-981-15-4550-4_31
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18. T. Jagadeesha, V. G. Salunkhe, R. G. Desavale, P. B. Patil, M. B. Kumbhar, A. R. Koli, "Investigation of Crack Detection Technique in a Rotating Shaft by Using Vibration Measurement" In: Arockiarajan A., Duraiselvam M., Raju R. (eds) Advances in Industrial Automation and Smart Manufacturing. Lecture Notes in Mechanical Engineering. Springer, Singapore, pp 631-645. First Online: 21 October 2020 https://doi.org/10.1007/978-981-15-4739-3_54

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3.4.4 – Patents published/awarded during the year

Patent Details	Patent status	Patent Number	Date of Award
Patent Details (Mechanical Department)			
Artificial Non Stick Film on Toilets, Urinals and Wash Basin Inventors:	Filling Date: 3rd Feb, 2020	Patent no Appln no: 202021004727	Granted on: 6th March, 2020

Sushant H. Patil Shubham Sunil Hawaldar (BE) Avadhoot Anandrao Patil (BE) Shriram Hanuman Satish (BE) Bajare Shivam Sanjay (BE) Musmade Rutuja Rajendra (BE) Patent no 1: Mech			
Automatic Water Flushing System Inventors: Dr. Suhas Deshmukh Shubham Hawaldar (BE) Milind Killedar Subhada Hawaldar Patent no 2: Mech	Filing Date: 11th April, 2020	Patent no: 358151 Appln no: 202021015780	Granted on: 11th April, 2020
Microwave stove for cooking in open atmosphere Inventors: 1. Anil R. Acharya 2. Ashok T. Pise 3. Hawaldar Shubham Sunil 4. ChavanVipul Ganesh 5. Mali Bhushan Bhaskar 6. Biradar Vaishnavi Baswaraj 7. Patil Avadoot Anandrao 8. Bedre Rushikesh Sudhir 9. Shriram Hanuman Satish Patent no 3: Mech	Filling Date: 16th May 2020	Publication no: 25/2020 Appln no: 202021020688	Granted on: 19th June, 2020
Microwave water heater Inventors: 1. Pise Ashok Tukaram 2. Acharya Anil Ramchandra 3. Hawaldar Shubham Sunil 4. Patil Avadoot Ananadrao 5. Shriram Hanuman Satish 6. Bajare Shivam Sanjay 7. Musmade Rutuja Rajendra Patent no 4: Mech	Filling Date: 16th May 2020	Publication no: 25/2020 Appln no: 202021020689	Granted on: 19th June, 2020
A device for controlling microwave intensity Inventors: 1. Anil R. Acharya 2. Ashok T. Pise 3. Hawaldar Shubham Sunil 4. Chavan Vipul Ganesh 5. Mali Bhushan Bhaskar	Filling Date: 16th May 2020	Publication no: 25/2020 Appln no: 202021020690	Granted on: 19th June, 2020

6. Biradar Vaishnavi Baswaraj 7. Patil Avadoot Anandrao 8. Bedre Rushikesh Sudhir 9. Shriram Hanuman Satish Patent no 5: Mech			
Portable Air Conditioning Apparatus Inventors: Dr. R. K. Shrivastava Dr. S. P. Deshmukh Charudatta Jagtap Nikhil Bhise Akshay Gavade Patent no 6: Mech	Appln. Date 10/08/2020	Appln no: 202021034156A	Published on: 6th Nov. 2020
Australian Patent: Palm tree inspired blade design for Horizontal Axis Wind Turbine Inventors 1. Siddharth Suhas Kulkarni 2. Anil R. Acharya Patent no 7: Mech	Filing Date: 2nd March, 2021	2021101098	Granted on 2nd March, 2021
Australian Patent: A System and Process for Preparation of Betel-Nut Surfactant for Enhancing Pool Boiling Heat Transfer Inventors: 1. Sameer Sheshrao Gajghate (ME HPE) 2. Anil R. Acharya 3. Ashok Tukaram Pise Patent no 8: Mech	Filing Date: 4th March, 2021	2021101150	Granted on 28th April, 2021
US Patent: Position Determining System Inventors: 1. Hrishikesh Balasaheb Zambare, Waterloo, IA (US); 2. Ali Razban, Carmel , IN (US); 3. Suhas Pandurang Deshmukh , Pune (IN); 4. Mahesh Shivaji Shewale , Pune (IN) ; 5. Sharad S . Mulik, Pune (IN) Patent no 9: Mech	Filed: 19th Dec, 2018	US 2019/0195612 A1	Pub. Date 11 May, 2021

Australian Patent: A system for dynamic vibration absorber and method of operation thereof Inventors: 1. Jagadeesha T. 2. Pankaj B. Patil 3. Mahadev B. Kumbhar 4. Avinash V. Borgaonkar Vishal G. Salunkhe 5. Shital B. Potdar Patent no 10: Mech	16 June 2021	2021102312	Granted on: 16 June 2021
Foot Exercise Device for Bed ridden Patient Inventors: Dr. Sanjana Zad Dr. Mansi Yadav Dr. Sanjana Yadav Dr. R. K. Shrivastava Manisha H. Yadav Ganesh M. Chandane Patent no 11: Mech	Filled on 20 July 2021	202121039216	Status: Filled

Consultancy Data 2020-21 for Mechanical Department

Sr. No.	Date	Client Name	Work	Consultancy Title	Amount	person
1	19-Aug-20	Ghanshyam Engg. Ahmedabad	20 ltr Dustbin	Third Party Inspection & Testing	17670	S. P. Deshmukh
2	20-Oct-20	Dipesh Fabricators Pune	Gym Equipment	Third Party Inspection & Testing	33520	S. P. Deshmukh
3	20-Oct-20	Spavy Fitness EquipmentsSatara	Gym Equipment	Third Party Inspection & Testing	33512	S. P. Deshmukh
4	20-Oct-20	Shree Sadguru Enterprises, Pune	Gym Equipment	Third Party Inspection & Testing	33512	S. P. Deshmukh
5	20-Oct-20	V. R. S. Sports and Fitness Satara	Gym Equipment	Third Party Inspection & Testing	4012	S. P. Deshmukh
6	11-Dec-20	Chiplun Muncipal Council	Fire brigade vehicle	Third Party Inspection & Testing	44,000	K S Gharge
7	5-Jan-21	Rahimatpur Nagarpalika	JCB (Backhoe loader)	Third Party Inspection & Testing	33394	S. P. Deshmukh
8	5-Jan-21	Rahimatpur Nagarpalika	Shredder Machine	Third Party Inspection & Testing	23576	S. P. Deshmukh
9	27-Feb-21	Grampanchayat Govare, Tal. Karad	Pipe Inspection	Third Party Inspection & Testing	3540	S S Jadhav
10	16-March-21	Assistant Commissioner of Animal Husbandry Kolhapur	Animal Casting Unit	Third Party Inspection & Testing	5900	V. B. Raka
11	3-July-21	Grampanchayat Govare, Tal. Karad	Pipe Inspection	Third Party Inspection & Testing	3027	S S Jadhav
				Total	**2,35,663**	

6.3.3 – No. of teachers attending professional development programmes, viz., Orientation Program, 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
One week online webinar series on "Advance CNC & VMC Programming" organized by Mechanical Dept, KIT College of Engg, Kolhapur in association with Indian Machine Tool Manufacturer's Association (IMTMA)	Dr. Ranadhir R. Landge	2nd June 2020	6th June 2020	One Week
One Week online FDP on "Futuristic Technologies in	Prof. (Mrs) S. S. Jadhav	5th June 2020	9th June 2020	One Week

Mechanical Industries" organized by Mechanical Dept, D. Y. Patil Institute of Engineering, Management & Research, Akurdi, Pune-44				
Two day webinar on "Pumps – Operation & Maintenance" organized by Mechanical Dept, Bharti Vidyapeeth CoE, Pune	Prof. (Mrs) S. S. Jadhav	11th June 2020	12th June 2020	2 Days
One Week online FDP on "Applications of Finite Element Analysis (FEA) & CFD using Ansys" Organized by Mechanical Dept, Govt. College of Engg, Karad & REC, Azamgarh (U.P.) (Under Twining activity of TEQIP_III)	Prof. (Mrs) K. S. Gharge Prof. V. B. Raka Prof. (Mrs) S. S. Jadhav Prof. Sushant H. Patil Prof. Prakash R. Wani Dr. Ranadhir R. Landge	13th June 2020	17th June 2020	One Week
One week online FDP on "Solar Energy & it's Application, Economical Implications in Indian Scenario after COVID-19" organized by Mechanical Dept, Prof. Ram Meghe Institute of Technology & Research, Badnera Amravati	Prof. (Mrs) S. S. Jadhav	15th June 2020	19th June 2020	One Week
One week online FDP on "Advances in Civil and Structural Engineering (ACSE-2020)" Organized by Civil Dept, Govt. College of Engineering, Karad (TEQIP-III)	Prof. V. B. Raka	15th June 2020	19th June 2020	One Week
Three day online workshop on "Importance of Mathematics in science and Engineering" Organized by PES's CoE, Phaltan	Prof. N. V. Sali	20th June 2020	22nd June 2020	3 Days
One week online FDP on "Research Opportunity in Advanced Manufacturing Processes" organized by Mechanical Dept, Bharati Vidyapeeth CoE, Pune	Prof. Sushant H. Patil	22nd June 2020	28th June 2020	One Week
Webinar on "How to Conduct Virtual Labs" organized by Electronics & Telecommunication dept, AISSMS Institute of Information Technology, Pune	Prof. Swati S. Jadhav	24th June 2020	-	1 day
One week online FDP on "Nanotechnology & its Applications in Mechanical Engg" Organized by Mechanical Dept, K.D.K. College of Engineering, Nagpur	Prof. V. B. Raka	25th June 2020	1st July 2020	One Week
One Week online Training program on "Implementation of Multi Objective Optimization Algorithm (NSGA-II) using MATLAB" organized by Electrical Dept, under RIT Center for Teaching and Learning	Prof. S. H. Patil	29th June 2020	3rd July 2020	One week
One Week online FDP on "Recent Trends in Mechatronics & Automation" organized by Mechanical Dept & E&TC dept, NBN Sinhgad School of Engineering, Ambegaon, Pune	Prof. (Ms) G. S. Dhende	30th June 2020	4th July 2020	One Week
One week online Multi disciplinary FDP on "Product Development & Industrial Research- 2020" Organized by Mechanical Dept, Govt. College of Engg, Aurangabad (TEQIP-III)	Dr. U. V. Pise	6th July 2020	10th July 2020	One Week
One week online FDP on "Research in Energy Technologies" organized by Mechanical Dept, Bharati Vidyapeeth CoE, Pune	Prof. (Mrs) S. S. Jadhav	6th July 2020	11th July 2020	One Week
Webinar on "Successful Research Papers: Concepts to	Prakash R. Wani	9th July 2020	-	1 Day

Submission" Organized by Central Library, GCE, Karad				
One day webinar on "Introduction to HVAC" organized by Mechanical Dept, Oriental institute of science & Technology, Bhopal	Abhinandan Jha	9th July 2020	-	1 Day
One week online STTP on "Applications of Mathematical Sciences" Organized by Dept of Applied Sciences & Humanities, K.D.K. College of Engineering, Nagpur	Prof. N. V. Sali	13th July 2020	18th July 2020	One Week
One week online FDP on "Digital Transformation & Pedagogies" under AICTE Margadarshan Scheme, Organized by Govt. College of Engg, Karad & Walchand College of Engg., Sangli	Dr. U. V. Pise V. B. Raka	10th Aug. 2020	14th Aug. 2020	One Week
6 Day AICTE sponsored STTP series 1 of 4 on "Recent Advances in Tribology and Surface Engineering: Introduction to Tribology & Surface Engg" Organized by Mechanical Dept, SAINTGIS CoE, Kottayam, Kerela	Prof. V. B. Raka Mr. Sanin Alisab Shaikh Ms. Priyanka M. Teli Mr. Abhijeet P. Sabale Mr. Suraj U. Bhosale	17th Aug. 2020	22nd Aug. 2020	6 Days
6 Day AICTE sponsored STTP series 2 of 4 on "Recent Advances in Tribology and Surface Engineering: Tribology of Machine components & Applied Tribology" Organized by Mechanical Dept, SAINTGIS CoE, Kottayam, Kerela	Prof. V. B. Raka Ms. Snehal V. Warake Ms. Priyanka M. Teli Ms. Siddhi R. Shelke Mr. Shubham A. Kudale	14th Sept. 2020	19th Sept. 2020	6 Days
One day online webinar on "Cryogenics – Space Applications" organized by Mechanical Dept, Don Bosco CoE, Fatorda Goa in Association with ISHRAE Mechanical Student Chapter	Prakash R. Wani	15th Sept, 2020	-	1 Day
4 Days Online Proficiency Improvement Programme (oPIP) on "ALTERNATIVE FUEL" organized by The Automotive Research Association of India (ARAI), Pune	K. S. Gharge	6th Oct 2020	9th Oct 2020	4 Days oPIP
6 Day AICTE sponsored STTP series 3 of 4 on "Recent Advances in Tribology and Surface Engineering: Introduction to Special topics like nanotrobology, Biotribology, Space Tribology etc" Organized by Mechanical Dept, SAINTGIS CoE, Kottayam, Kerela	Prof. V. B. Raka Mr. Suraj Bhosale Ms. Priyanka M. Teli	12th Oct. 2020	17th Oct. 2020	6 Days
One week Professional Development Training Programme for Faculty & Administrators of Project Institutions of TEQIP-III (Virtual Mode), Organised by IIM, Raipur	Dr. S. P. Deshmukh	26th Oct, 2020	28th Oct. 2020	3 Days
Short Term course on "Computational Fluid Dynamics for incompressible Flows", conducted by Mechanical Dept, IIT Guwahati (TEQIP)	Abhinandan Jha	9th Nov 2020	13th Nov 2020	One Week
Online FDP on "Recent Trends in Advanced Materials for Engineering and Technology" jointly organized by Science Dept, Govt. College of Engg, Karad & Science & Humanity Dept, REC, Azamgarh, UP (Under Twinning activity of TEQIP-III)	Dr. U. V. Pise Manisha H. Yadav	11th Nov. 2020	15th Nov. 2020	One Week
One week Professional Development Training Programme for	Dr. S. P. Deshmukh	17th Nov, 2020	19th Nov. 2020	3 Days

Faculty & Administrators of Project Institutions of TEQIP-III (Virtual Mode), Organised by IIM, Vishakapatanam				
6 Day AICTE sponsored STTP series 4 of 4 on "Surface Characterisation & Treatments in Tribology" Organized by Mechanical Dept, SAINTGIS CoE, Kottayam, Kerela	Prof. V. B. Raka	23rd Nov. 2020	28th Nov. 2020	6 Days
One week Professional Development Training Programme for Faculty & Administrators of Project Institutions of TEQIP-III (Virtual Mode), Organised by IIM, Vishakapatanam	Prof. V. S. Jadhav	7th Dec, 2020	9th Dec. 2020	3 Days
e-Training FDP on "Artificial Intelligence and Machine Learning" organized by IIT Indore (under TEQIP-III)	Abhinandan Jha	7th Dec, 2020	17th Dec, 2020	Two weeks
Management Development Program (MDP) on "Professional Development Skills" Organized by IIM, Kozhikode, Kerala (TEQIP-III) (virtual mode)	Prof. V. B. Raka	11th Jan 2021	15th Jan 2021	One Week
One week online STTP on "Electric Vehicles" Organized by S P CoE, Andheri (W) Mumbai & REWA CoE M.P in collaboration with IIE & SAEINDIA.	Abhinandan Jha	20th Jan 2021	25th Jan 2021	One Week
One week AICTE-ISTE sponsored Induction / Refresher Programe Phase-I (Online Mode) on "Environmental Challenges-Process & Pulp Industry" organized by Mechanical Dept, Govt. CoE, Chandrapur	Prof. Swati S. Jadhav	23rd Feb 2021	1st March 2021	One week
Three Days online FDP on "Written Communication for Digital Teaching, Administration & Research" organized by BATU Lonere & Matoshri Pratishthan Group of institute, School of Engg, Khupsar Wadi, Nanded	Devidas M. Kolse	22nd March 2021	24th March 2021	3 Days
AICTE sponsored one week STTP on "Innovations and Challenges in Industry 4.0 Automation and Smart Manufacturing" organized by Mechanical Dept, Kallam Haranadhareddy Institute of Technology, Guntur, Andhra Pradesh	Geetanjali S. Dhende	7th June 2021	12th Jun 2021	One week
e- STTP on "Experimental Methods in Engineering", Organized by Mechanical Dept, Govt. CoE, Karad under TEQIP-III	Swati Swapnil Jadhav	5th July 2021	9th July 2021	One week
FDP on "Advanced Engineering Surfaces for Phase Change Heat Transfer Application", organized by Chemical Engg Dept, NIT, Calicut, Kozhikode, Kerala (under Continuing Education Programme)	Abhinandan Jha	12th July 2021	16th July 2021	One Week