Yeshwantrao Chavan College of Engineering, Nagpur

Strategic Plan 2018-19 to 2022-23

Yeshwantrao Chavan College of Engineering, Nagpur is run by a trust Nagar Yuwak Shikshan Sanstha since 1984. The college is recognized by the Government of Maharashtra and is affiliated to the Rashtrasant Tukadoji Maharaj Nagpur University. The college is an approved institution by the All India Council for Technical Education, New Delhi, which is an apex body for regulating the technical education in India.

The college has a pleasant campus of 14 acres on the green hills of Wanadongri, Nagpur, and the ambience is perfect for the education purposes. The college boasts of experienced and committed faculty, state of art infra-structure including the library and computing facility. The Institute is a recognized center by RTM Nagpur University for Higher Learning and Research. The Institute has grown to become a center of excellence in engineering education and a preferred destination for parents, students and leading software & core companies for recruitment of students.

Vision

To become the most preferred institution providing innovative, research and value based, professional education for the society at large.

Mission

YCCE is committed to:

- Attract best talent and create learning ambiance
- Practice Innovative teaching-learning & research
- Integrate Industry-Institute Collaborations
- Nurture students towards holistic Development and right career

Quality Policy

YCCE strives for excellence through continual improvement in teaching, learning and research.

YCCE Core Values

- Discipline
- Transparency
- Team Work
- Passion
- Professionalism

YCCE Punch Line

"Commitment Towards Excellence"

YCCE runs 09 undergraduate programs and 07 post graduate programs. The annual intake is 1020 at undergraduate level and 133 at post graduate level.

The curriculum implemented at YCCE for all UG and PG programs is designed by Yeshwantrao Chavan College of Engineering, Nagpur under the mandate given to it by University Grants Commission and RTM Nagpur University under the academic autonomy. The Scheme of Examination, the syllabi and the evaluation systems for all undergraduate and post graduate programs are designed, and executed by YCCE.

Five batches of UG and Seven batches of PG programs have successfully completed the curriculum under autonomy.

All departments of YCCE are recognized as approved research centers by RTM Nagpur University. Around 68 scholars are registered in various departments for doctoral research work. 40 scholars have submitted thesis to RTMNU for award of Ph.D., 63 scholars have completed their doctoral research successfully and have been awarded the coveted Doctor of Philosophy (Ph.D.) degree by RTM Nagpur University.

The current faculty position at YCCE is shown in the table below:

Cadre	2018-19	2019-20	2020-21	2021-22	2022-23
Professors	26	25	21	21	17
Associate Professors	50	46	38	37	30
Assistant Professors	168	167	190	254	281
Total	244	238	249	312	328

The Strategic Plan

The Strategic Plan of YCCE for 2018-19 to 2022-23 shall achieve the following 05 goals:

Goal 1: Be among the preferred institutions in the country for undergraduate and post graduate studies in Engineering and Technology

Goal 2: Promote research, consultancy, innovation, and entrepreneurship activities to address the future challenges and opportunities

Goal 3: To create an environment for the students to succeed at their highest level through high quality academic programs, co-curricular and extra - curricular activities and community outreach programs

Goal 4: Recruit, retain and enable a community of exceptional faculty and staff

Goal 5: To establish and maintain facilities and infrastructure; governance and administration that support the achievement of the college's vision, mission and values

GOAL 1: Be among the preferred institutions in the country for undergraduate and post graduate studies in Engineering and Technology

Objectives	Strategies	Action Plan	Outcomes				
			2018-19	2019-20	2020-21	2021-22	2022-23*
1.1 Benchmark the pedagogy with that of the top `tier I Institutions in the Country	Encourage innovative teaching learning and assessment methods	Innovative T-L Methods (Flipped classroom teaching, Learning from Peers, Online examination, Open Book Test, Code Relay etc.)	Innovative T-L.:42	Innovative T-L.: 47	Innovative T-L.: 54	Innovative T-L.: 57	Innovative T-L.: 39*
		MOOCS/ NPTEL Videos	MOOC: 3	MOOCs: 3	MOOCs: 3	MOOCs:4	MOOCs: 4
		Innovative Projects Pedagogy programmes (for Junior faculty)	Kalam Impact FDP	Kalam Impact FDP	--	--	Kalam Impact FDP
	Enhance faculty and student interaction with reputed institutions/organizations through training programmes, workshops and collaborative projects	Visiting Professor Scheme: 1 per dept. per year	07	03	--	--	--
		No. of Joint Projects with Reputed Institutions= 50 per year	60	67	79	94	95
		No. of Training Programme/ Workshops/STTP/FDP for faculty= 90% of faculty will attend it per year	97%	96%	98%	96%	67%*
		No. of students to be sent to IIT/NIT for competitions= 10 students per dept. per year	52	67	85	107	93*
	Initiate internships and student exchange programmes at reputed Institutions	No. of students sent for credit transfer to reputed institutions= 10 students per year from 2019-20	00	00	00	00	17
	Introduce finishing school programmes	Get Set Go, Functional English, Remedial grammar, Introduction to PL for non-CT/IT branches, CRT, Personality and communication development prog.	YES	YES	YES	YES	YES

1.2 Institutional brand building	Ensure quality assurance through annual quality assessment	PQAI for UG Projects, DLA, AWL, Internal Autonomy Audit, Moderation of valued answer-sheets of ESE and QP		YES	YES	YES	YES	--
	Attain higher levels of achievements in co- curricular and extra -curricular activities	No. of students participating in co-curricular and extra - curricular activities in IIT, NIT, State level, National Level= 50 per year		63	137	186	207	183*
	Inspire social commitment of staff and students through outreach activities	Extension Activities (Social) = 10 per year		23	21	30	26	17*
	Ensure accreditation/ranking by various agencies	NIRF ranking in 100 within 2 years,		134	139	149	185	--
		NBA accreditation of all UG programmes (2 UG Prog. For 6 years in 3 years)		06/07	06/07	06/07	06/07	07/07
				Nil	Nil	Nil	Nil	--
		NAAC accreditation with A+ grade in next cycle		A++ (3.60) validity (2022 to 2027)				
	Enhance the role of stakeholders in decision making and establish structured feedback system from stakeholders for curriculum enrichment activities	CDW		YES	YES	YES	YES	YES
		Dept. Industry Board,		--	--	--	--	04
		BOS, Academic Council		YES	YES	YES	YES	YES
		IQAC, DQAC,		YES	YES	YES	YES	YES
		Parent Meet,		YES	YES	YES	YES	YES
		Industry Conclave,		--	--	--	--	-
	Industry Expert Guest Lectures:35 ▢ Co-guides for Projects: 96 ▢ Resource Person for FDP/ STTP, CDW: 41	Resource Person	Industry Expert	128	35	58	137	--
			Co-guides	95	96	91	74	102
			for FDP/ STTP, CDW	33	41	62	87	76*
	Monitor the effective implementation of the strategic plan	HOD, DAM, Principal, IQAC		**YES**				

	Evolve mechanisms to attract high quality students	Scholarship (Institute)	92	142	167	158	147
		Sem. Long industry internship	IT prog.	IT prog.	IT prog.	07 Prog.	07 Prog.
		Industry aligned professional elective	07	09	09	17	18
1.3 Promote alumni networking with students	Create a wide alumni network	Alumni Portal,	YES				
		Periodic alumni meets at various places	01 (USA)	--	--	--	--
	Attract alumni support in placements	No. of Alumni to be invited for placement= 05 per year	01	03	05	04	04*
	internships for students	No. of students to be sent for internship in Alumni Company= 10 per year	03	06	03	13	12
	Enhance the involvement of alumni as resource persons for technical workshops and invited talks	No. of Alumni to be invited as Resource person for workshop/ Guest Lecture/other programme = 03 per dept. per year	23	42	37	49	43*-
	Strengthen alumni involvement as innovator or entrepreneur in the campus start-up ecosystem	No. of Alumni involvement as innovator or entrepreneur in the campus start-up ecosystem= 01 per dept. per year	02	02	01	03	03

GOAL 2: Promote research, consultancy, innovation, and entrepreneurship activities to address future challenges and opportunities.

Objectives	Strategies	Action Plan	2018-19	2019-20	2020-21	2021-22	2022-23
2.1 Strengthen research activities	Increase the number of external and internal research projects	No. of externally funded projects= 02, Amt. up to 20L per dept. per year	1+5 68.91 L	0+4 34.99 L	1+8 25.19 L	0+3 3.28 L	0+7-- 18.11 L
		No. of internally funded projects=03, Amt. up to 3L per dept. per year	87 8.6 L	24 1.7 L	18 2.46 L	46 6.3 L	14* 2.13 L
	Increase research publications and ensure the maintenance of quality	No. of Faculty publications in	**2018**	**2019**	**2020**	**2021**	**2022**
		SCI/Scopus/refereed Journals=30% of faculty per dept. per year	52/240= 21.67%	45/244= 18.44%	81/238= 34.03%	53/249= 21.28%	105/312= 33.65%
		No. of Faculty publications in other reputed Journals/Conferences=50% of faculty per dept. per year	137/240= 57.08%	150/244= 61.47%	35/238= 14.7%	91/249= 36.54%	155/312= 49.67%
	Encourage staff and students to organize/attend workshops, conferences, invited talks, seminars etc.	No. of STTP/FDP organized: 1 week=2 OR 2 week=1 per dept. per year	1 W: 8 2 W: 2	1 W: 10 2 W: 3	1 W: 16 2 W: 2	1 W: 12 2 W: 3	1 W: 6 2 W: 2
		No. of Seminar/Conference organized= 1 NC per year and 1 IC in 2 years	1 NC	1 NC	1 IC 1 NC	2 IC 1 NC	2 IC proposed. 01 NC
		No. of Guest Lectures/Invited talks organized=4 per dept. per year	34	42	47	51	27
		No. of Workshops organized= 3 per dept. per year	147	122	170	140	147
		No. of Workshop/Training Prog. Organized for support staff= 1 per dept. per year	07	27	07	08	14
	Continuously monitor and apply for financial aids given by central, state governments and various international organizations	No. of proposals to be submitted to various funding agencies= 25 per year	24+13 (Research +Non Research)	22+20	58+28	34+16	35+12

		No. of Review Meetings for monitoring financial aids given by funding agencies (Director R&D + HOD) = 1 in 3 months	YES				
	Become approved Research center of universities	No. of Ph.D. Completed	67	72	96	105	109
		No. of Research Scholars to be registered= 1 per supervisor per year	68/30= 2.26	61/29= 2.1	36/32= 1.12	30/36= 0.83	00/36* --
		HoD must ensure registration of every Ph.D. faculty as supervisor within 2 years	30/67	29/72	32/96	62/105	65/109
	Visibility of research work to the outside world	Publication of Institution Journal quarterly	Yes	Yes	Yes	Yes	Yes
		Indexing the journal within 2 years	--	--	--	DOAJ, DOI Google Scholar	Academia, Cite Factor, J-Gate, Crossref
		Updating research portal every 2 months	Yes	Yes	No	Yes	Yes
2.2 Establish productive partnership between industry/ reputed organizations for consultancy and internships	Nurture a culture of research and innovation excellence focusing on challenges of societal and economic importance	No. of Innovative projects undertaken= 1 per dept. per year	10	14	19	23	27
		No. of Societal and economic important projects undertaken=2 per dept. per year	27	32	17	33	30
		Paper writing and research methodology workshop = 2 per year	03	04	08	06	08
	Establish consultancy cell and pursue consultancy activities	No. of Consultancy Projects= 1 per dept. per year Amount of Consultancy= 4 L per dept. per year	26.32 L	42.22 L	29.37 L	34.46 L	23.00 L
	Sign MoUs and establish industry institute linkages with reputed	No. of MoUs signed with industries=2 per dept. per year	30	15	53	80	82

	industries and organization to undertake joint projects, training and internships	No. of MoUs signed with Academic/ Research Institutions=1 per dept.	02	03	03	05	05
		No. of Joint Projects with Industries=4 per dept. per year	66	72	56	97	103
		No. of Joint Projects with Research Organizations=1 per dept. per year	08	06	05	07	09
		No. of Students undergoing Industry Internship= 10-20% per year	72	88	927	1591	1313
		No. of Faculty undergoing Industry Internship=1 per dept. per year	--	--	--	--	03 (15-16 to 17-18)
		No. of Training programme organized by industry person=1 per dept. per year	12	14	17	28	18*
	Establish industry supported lab.	No. of Industry supported lab.=1 per dept. in 2 years	04	04	07	07	05
2.3 Foster an entrepreneurial ecosystem in the campus	Facilitate the development and protection of intellectual property rights	No. of IPR activities organized= 2	03	05	05	03	13
		No. of Patents filed=2 per dept.	10	10	36	35	20
		No. of Patents Published=1 per dept. per year	07 00	02 02	21 16	14 33	07 (Pub) 19 (Grant)
		No. of Copyrights submitted=10 per dept. per year	129/172	94/111	97/124	83/86	13/74*
	Development of Innovation Gallery	Addition of 10 innovative projects per year	12	-	-	25	-
	Develop incubation and meet-up spaces	As per MSME BI and TBI guidelines	6000Sq. feet				
	Conduct training programmes / workshops / events / competitions focused on innovation and entrepreneurship	No. of Training programme organized on startups and entrepreneurships= 5 per year	06	11	09	17	04
		No. of Competition organized on startups and entrepreneurships= 1 per year	--	01	01	03	01

GOAL 3: To create an environment for the students to succeed at their highest level through high quality academic programs, co-curricular and extra - curricular activities and community outreach programs.

Objectives	Strategies	Action Plan	2018-19	2019-20	2020-21	2021-22	2022-23
3.1 Ensure quality teaching and learning	Streamlining academic processes	Finalization of academic and activity calendar at the start of session and periodic review	Yes	Yes	Yes	Yes	Yes
	Ensure OBE implementation	Periodic review and assessment of OBE Faculty training on OBE in every year	Yes	Yes	Yes	Yes	Yes
	Introduce and implement the use of ICT for teaching and learning	Faculty development prog on ICT=1	02	05	09	06	03*
		Use of PPT in TL= 20-30 %,	Yes	Yes	Yes	Yes	Yes
		Use of Moodle website, MOOC	Yes	Yes	Yes	Yes	Yes
		Use of Impartus Software=2 per dept. per	Yes	-	-	-	-
		Use of smart boards= 3 in each dept. per	--	--	--	--	1 per dept.
	Empower students' personal and professional development through academic and professional advising, peer-to-peer mentoring etc.	No. of personality development prog=1 per dept per year,	07	08	10	13	17
		Participation in IIT/NIT/reputed organization=100 per year,	63	137	186	207	103*
		Implementation of shadow teaching in each dept.	Yes	Yes	Yes	Yes	Yes
	Regular audit on effectiveness of both UG & PG curriculum	Employer Feedback Alumni Feedback. Exit Feedback, Course Completion Report	Yes	Yes	Yes	Yes	Yes
	Strengthen the quality and impact of the M Tech programs	PG Mentor,	No	No	No	No	No
		1 yearlong industry internship,	Yes	Yes	Yes	Yes	Yes
		No. of PG students placed=60%	41/47= 87.23%	42/42= 100%	47/49= 95.91%	42/48= 87.50%	--/24*= --

3.2 To prepare students for successful placements and/or higher studies	Enhance career guidance and placement activities to attract core companies	CRT,	1223	1155	1195	1224	1313
		Use of AMCAT,	Yes	Yes	Yes	Yes	Yes
		1 Certificate course offered by each dept	00	00	00	01	01
	Arrange skill based and industry relevant continuing education programmes	Industry aligned elective=1-2 per dept.,	04	05	05	11	09
		Industry/Site visits= 4 per dept. per year,	34	37	15	45	22*
		Use of software for Aptitude testing	Yes	Yes	Yes	Yes	Yes
	Train students to get admissions in top ranking institutions in India & abroad.	GATE/GRE guidance, Guidance on Competitive exams	92/139	86/115	100/134	97/137	--/119*
	Take measures to improve the student pass percentage by appropriately addressing the related issues	Allotment of good faculty for difficult subjects,	Yes, Senior Faculties teaching to first year and second Year Courses				
		More assignments for difficult	Yes	Yes	Yes	Yes	Yes
		Remedial classes for slow learner,	Yes	Yes	Yes	Yes	Yes
		sharing LRM through Moodle	YES	YES	Whatsapp Groups, Email		
		Imparting domain knowledge by dept. 15 days before visit of co.,	Yes	Yes	Yes	Yes	Yes
		No. of students to be placed in core co.=20% of eligible students from core branches	76/448= 16.96%	60/377= 15.91%	82/373= 21.98%	144/446 =32.28%	136/394 =34.51%
		No. of students with package of Rs. 5 Lakh and above=5% of eligible students	32/1248= 2.5%	38/1115= 3.4%	47/1193= 3.9%	105/1235= 8.5%	124*/912= 13.59%
		Overall placement=80% of eligible	806/1248= 64.58%	835/1115= 74%	847/1193= 71%	913/1235= 74%	730*/912= 80*
3.3 Develop a culture to serve the society	Motivate student projects relevant to society and to provide	1-2 per dept. per year	32	27	15	29	34
	Arrange inspirational activities	No. of Community activities undertaken =2 per dept. per year	12	21	06	09	14

3.4 Provide an environment for the holistic development of students	Providing Value added courses	4 courses per dept. per year	20	22	25	32	14*
	Expand extra-curricular, co-curricular activities and club activities	Departmental student forum, NSS, Rotary Club, other NGO	Yes	Yes	Yes	Yes	Yes
	Enhance department association and professional society activities	Professional Society Chapter=1 per dept.	Yes	Yes	Yes	Yes	Yes
	Develop counseling center to address students' psychological and emotional issues	Psychological Counselor, Meditation through YOGA	Yes	Yes	Yes	Yes	Yes
	Empower the student council to discuss common problems of students and ensure its solution	Interaction with Student Council= 1 per sem. And display of ATR	Yes	Yes	Yes	Yes	Yes
	Effective grievance mechanism to address grievances Redress all	Grievance redressal committee and follow up of grievances	Yes	Yes	Yes	Yes	Yes
	Interaction with Role model	1 per year	--	--	--	--	--

GOAL 4: Recruit, retain and enable a community of exceptional faculty and staff

Objectives	Strategies	Action Plan	2018-19	2019-20	2020-21	2021-22	2022-23
4.1 Ensure quality in intake of faculty and staff	Recruit faculty and staff through a rigorous screening process evaluating their capability and interest	Screening Test, Selection Panel, Interview with Demo Offering higher pay scale to deserving candidate	Yes	Yes	Yes	Yes	Yes
	Establish norms for career advancement in tune with AICTE guidelines	CAS as per University/UGC /AICTE guidelines in every 2 years	NO	NO	NO	NO	YES
	Arrange induction programme for newly joined faculty	Every year at start of session	Yes	Yes	NO	NO	YES
4.2 Ensure No. of faculty and cadre ratio as per guidelines of statutory bodies	Recruit faculty as per SFR	Faculty to be retained/replaced to meet SFR	Yes	Yes	Yes	Yes	Yes
	Availability of faculty to meet cadre ratio	Promotion of faculty under CAS/Internal promotion scheme	NO	NO	NO	NO	YES
4.3 Ensure teaching load of faculty as per cadre	Proper distribution of teaching load	HoD's must allot teaching load as per 10:14:18 Relaxation to functional heads as per policy Verification by DAM	Yes	Yes	Yes	Yes	Yes
4.4 Encourage and enable faculty excellence and staff development	Steps taken to improve teaching skills	Mentor Mentee Scheme, Periodic feedback-analysis and mentoring by HoD-DAM-Principal,	Yes	Yes	Yes	Yes	Yes
	Contribution towards development of LRM	No. of books/book chapters published=2 per dept. per year	22	16	16	15	12*

		No. of monograms developed=1 per dept. per year,	09	19	07	12	09*
		New experimental set up=1 per dept. per year,	07	11	09	18	15*
		No. of models/charts developed=5 per dept. per year	67	45	04	07	07*
		Q-bank with solution set=8 per dept. per year	Yes,259	Yes,259	Yes,259	Yes,259	Yes,122*
	Association with professional bodies	Ensure membership of professional bodies by each faculty,	Yes	Yes	Yes	Yes	Yes
		No. of programme of professional body organized=1 per dept. per year,	12	17	21	27	31
		No. of faculty participation in professional body programme= 10% of faculty	27	31	37	43	47
	Review and accommodate innovative teaching methodologies	No. of innovative teaching practice implemented=4-6 per dept. and 1 by each faculty. Feedback from students. Impact analysis and report to be prepared,	Yes,32	Yes,34	Yes, 35	Yes,39	Yes,38
		Presentation of case study to other faculty in the dept.	NO	NO	NO	NO	NO

	Form research groups & establish center of excellence	Formation of Thrust Area wise research group in each dept. No. of CoE= 1 per dept.	Yes	Yes	Yes	Yes	Yes
	Institute research promotion schemes to support higher education for faculty	QIP Policy, Study leave of 15 days	Yes	Yes	Yes	Yes	Yes
	Conduct regular skill up-gradation programmes for technical staff	TNA by HoD No. of skill up-gradation programmes for technical staff=1 per dept. per year	06	07	08	08	12
4.5 Facilitate welfare measures for a rewarding career	Implement performance-based incentives, rewards and recognition	Best Teacher Award=1 per dept. per year	NO	NO	NO	NO	NO
		Incentive for publication in SCI Indexed Journals=Rs. 10000/- per publication	NO	NO	NO	NO	Yes
		Incentive for Research grant received=3% of grant	Yes	Yes	Yes	Yes	Yes
	Conduct skill development programmes in advanced technology areas for faculty and technical staff	TNA by HoD No. of skill development prog.=1 per dept. per year	9	13	14	15	16
	Encourage faculty to promote entrepreneurship amongst students	Deputation of faculty to entrepreneurship awareness prog.=1 per dept. per year	Yes	Yes	Yes	Yes	Yes
		Organizing 2-3 entrepreneurship awareness prog per year Strengthening incubation activity through proper projects and interaction with industries	06	11	09	17	04*
	Implement attractive pay and other benefits for personal/ professional development	Promotion through CAS, Additional increments/incentives for professional excellence	NO	NO	NO	NO	YES

GOAL 5: To establish and maintain facilities and infrastructure; governance and administration that support the achievement of the college's vision, mission and values.

Objectives	Strategies	Action Plan	2018-19	2019-20	2020-21	2021-22	2022-23
5.1 Achieve excellence in governance and administration through transparency, accountability, quality and trust	Ensure meetings of statutory bodies, minutes and ATR	Meetings will be conducted as per statutory body norms Minutes will be prepared and circulated. ATR is prepared and communicated	Yes	Yes	Yes	Yes	Yes
	Establish well defined rules, policies and procedures.	Adherence to Service rules, Policies available on intranet Periodic review of policies and modifications if desired	Yes	Yes	Yes	Yes	Yes
	Ensure contribution of faculty towards excellence	AWL targets to be given by HoD at the start of session and continuous monitoring. Audit of AWL targets at the end of session Issue of appreciation and warning letters and mentoring APR submission and evaluation and directives for improvements	Yes	Yes	Yes	Yes	Yes
	Decentralization of powers and all-inclusive well defined organizational charts	Well defined organization chart, Deans, Registrar, CoE, DyCoE, HoDs, I Yr Coordinator, TPO, Decision through various statutory and non-statutory committees	Yes	Yes	Yes	Yes	Yes
	Provide financial powers to departments and manage its utilization with accountability and transparency	Financial Power to HoD=Rs. 50000/- per year and utilization as per established norms	NO	NO	NO	NO	NO

	Celebrate and reward excellence in innovation, leadership and initiative	Felicitation on 15th August and 26th January	Yes	Yes	Yes	Yes	Yes
	Streamline the process of budgeting	Schedule of budget related activities to be published in the month of December for next session Review of budget proposed by dept. Continuous follow up with purchase dept of NYSS	Yes	Yes	Yes	Yes	Yes
5.2 Develop and maintain good infrastructural facilities for undergraduate and post graduate education, and research	Additional Built up area required	Additional Space of 7500 Sq. Ft. is required for MSME BI and TBI project.	6000 SQ. FT.				
	Continuous up-gradation of lab/workshop requirements at par with reputed National/ International institutions	Planning for Dept. upgradation of lab, Development of new lab,	01	02	--	08	04
		ICT enabled classrooms,	86	86	86	99	99
		Enhancing research facilities	63 research related equipment's				
	Stock Verification	Every Year	Yes	Yes	Yes	Yes	Yes
	Maintenance of Equipment	Report on working of equipment in April every year	Yes	Yes	Yes	Yes	Yes
	Improve green initiative	Rain water harvesting, Plastic free campus, Optimum use of stationary	Yes	Yes	Yes	Yes	Yes
	Improve library facilities- print and digital resources, both at central and department libraries.	Increase reading room capacity by 2000 sq. ft. within 2 yrs.	Yes, 1785.54 sq.ft				
		No. of computers in digital section=100 in 2 years	40	40	40	50	50
		No. of e books=100 per dept. per year	15804	9765	16280	16540	17883

Upgradation of existing computing facility, Improve Internet, WiFi and Networking	Every Year 50 units to be upgraded and 50 units to be replaced by new,	194	43	12	575	NIL
	Ensure maximum use of open-source software's (5 per dept.),	10	12	17	20	20
	Internet = 200 mbps,	200 MBPS	400 MBPS	400 MBPS	1 GBPS	1 GBPS
	WiFi {24 x 7) = Campus wide, Hostel, Canteens	Yes	Yes	Yes	Yes	Yes
Enhance facilities for sports, arts and recreation, with time extension beyond regular working hours	Creation of indoor sport facility and development of recreation club	NO	NO	NO	NO	NO
	Display of schedule for sports activities	Yes	Yes	Yes	Yes	Yes
A full-fledged maintenance cell to undertake the maintenance of infrastructure and other facilities	Implementation of SOP and review mechanism	Yes				
Improve medical facilities in the campus, including ambulance	Tie up with Nearby hospitals, well equipped ambulance on campus, Organizing health checkup camps, Regular inspection of first aid boxes in various dept.	Yes, Lata Mangeshkar Hospital		MGI Hospital is in YCCE Campus		
Improve drinking water facilities	Sufficient No. of water coolers with purifiers, Frequent inspection, Periodic water quality testing	Yes	Yes	Yes	Yes	Yes

5 Year Plan for Yeshwantrao Chavan College of Engineering, Nagpur
(As per NAAC/NBA/NIRF requirements)

SN	Parameters		Responsibility /Targets assigned to	Minimum achievement after 5 Yrs. at 2023-24	Current Status at 2018-19	Year wise Targeted Activities				
						2019-20	2020-21	2021-22	2022-23	2023-24
1	Syllabus Revision, CO-PO Attainment with yearly incremental increase in benchmarks & Corrective Measures in case of less attainment		Principal Dean (AM), Dean (P&D)	Syllabus Revision, PG & UG: once & CO-PO-PSO Attainment, Improved Benchmarks	V M Statements of Institute & Dept. are redefined. CO's are redefined, Quality policy & core values are defined.	CO-PO-PSO Attainment as per Redefined Course Outcomes with defined benchmarks	Revision of PG syllabus, Corrective Actions on Attainment as per benchmarks	Revision of UG Syllabus; CO-PO-PSO Attainment as per improved benchmarks	CO-PO-PSO Attainment with improved benchmarks & Relevant Corrective Actions	CO-PO-PSO Attainment & Relevant Corrective Actions
2	Offering New Elective Courses on employability/ entrepreneurship/ skill development	Industry aligned elective Courses	Dean (AM)	16	04	08	10	12	14	16
		Research Organization aligned Courses	Director (R&D) TPO	06	00	02	03	04	05	06
		MOOCS/ NPTEL Courses		15	02	07	09	11	13	15
3	Value-added courses (30 Hrs. duration) for Students		Director (Training)	13	00	02	02	03	03	03
4	Student - Full time teacher ratio		Principal, Dean (AM)	1:15	1:16.5 to 1:22.8	1:19	1:18	1:17	1:16	1:15
5	Teachers using ICT (NPTEL/DTEL materials, Webinars, Podcast, MOOCs)		Dean (AM), HOD's	100%	70%	80%	85%	90%	95%	100%

No.	Parameter	In-charge								
6	Teachers with Ph.D. (New Additions)	Dr. R. M. Moharil	**120+69***	69	20	22	24	26	28
7	No. of days for ESE results declaration	CoE	**15**	20-22	15	15	15	15	15
8	Online Student Feedback (analysis and corrective actions)	Dean (AM)	Feedback Collection of Mid & End Semester as per standard Formats, Graphical Analysis, URL Link on college website, Timely Corrective Actions, ATR display on notice boards/ website for stakeholder's information. 85-90% feedback suggestions should be implemented in time bound manner.						
9	Students enrolled for Ph.D.		**100%**	90-95%	100%	100%	100%	100%	100%
	No. of students awarded Ph.D. (yearly)	Dr. R. M. Moharil	**125**	17	20	22	25	27	30
10	PhD teachers recognition as research guides/ Supervisor		**75+28***	28*	10	12	15	18	20
	PhD Registrations per Supervisor	Dr. R. M. Moharil	**4**	2	2.5-3	2.5-3	3-3.5	3-3.5	3.5-4
11	Faculty awarded PhD while working in the institute		**106+63***	63	16	18	20	20	22
12	Research Fund received from — Outside agencies	Dr. U. H. Gawande	**7.5 Cr**	--	1 Cr	1.25 Cr	1.50 Cr	1.75 Cr	2 Cr
	Research Fund received from — MGI Schemes		**93 L**	--	14 L	16 L	18 L	20 L	25 L
	Funding received from State & Central Govt. Agencies for incubation support	Dr. Sandip Khedkar	**280 L**	15 L	30 L	45 L	55 L	65 L	70 L
13	Workshops/Seminars conducted on IPR and Industry-Academia Innovative practices & Entrepreneurship	Dr. Sandip Khedkar	**75**	1+1+3=5	2+3+5=10	2+4+6=12	3+5+7=15	3+6+8=17	3+8+10=21
	No. of Industry based Training programs for students	Director (Training), Dr. J. P. Giri	**70**	06	10	12	14	16	18

#	Particulars		Responsible							
	Industrial tours for students		TPO & HOD's	1 Per Dept.	1 Per Dept.	1 Per Dept.	1 Per Dept.	1 Per Dept.	1 Per Dept.	1 Per Dept.
14	No. of incubation ideas incubated on campus		Dr. Sandip Khedkar	75	13 ideas identified	10	12	15	17	20
15	Number of Patents Submission	Regular Patents	Dr. Sandip Khedkar	105	06 Submitted	14	18	21	24	28
		Fast Track Patents with DMIMS (DU)		102	00	12	15	20	25	30
	Number of Copyrights Submission			650	122	110	120	130	140	150
16	No. of quality publications in well-known databases (Journals: SCI, Scopus, Web of Science, UGC notified)		Dr. S. P. Gawande	700	32*	130	135	140	145	150
	No. of publications in other Journals with Impact Factor above 2 and in reputed conferences (IEEE, ACM etc.)			600	92	100	110	120	130	140
	No. of Books/Book Chapters/ Monographs			82	07	10	12	15	20	25
	Research Papers with more than 10 citations			240	--	35	40	45	55	65
	Increase in Citation Count of Papers			6,200	--	700	900	1200	1500	1900
17	No. of Joint Publications by faculty with second author from other institutes			350	35	50	60	70	80	90
18	New Experimental Set-ups establishment in department labs.		Dr. U. H. Gawande	80	13	16	16	16	16	16

#	Item	Sub	Responsible	Target						
19	Annual consultancy amount actually received	From Industry	Dr. J. P. Giri	**21-30 L per year**	15 L	Ind.: 3-4 L per dept.	Ind.: 3-4 L per dept.	Ind.: 4-5 L per dept.	Ind.:4-5 L per dept.	Ind.:5-6 L per dept.
		From others		**30-35 L per Year**	8.32 L	Other: 3-4 L per dept.	Other: 3-4 L per dept.	Other: 4-5 L per dept.	Others: 4-5 L per dept.	Others: 5-6 L per dept.
20	Collaborative extension & outreach programs with community and Non - Government Organisations		In-charge (S. Activity)	**350**	42	60	65	70	75	80
21	Development of Working models/charts (New Additions)		Dean (AM) & HOD's	**Models=:98 Charts=80, Manual:40**	Models= 08 Charts=22 Manual:07	Models=10 Charts=16 Manual:08	Models =12 Charts=16 Manual:08	Models =14 Charts=16 Manual:08	Models =16 Charts=16 Manual:08	Models =18 Charts=16 Manual:08
22	Establishing Industry supported laboratories in the departments		Dr. J. P. Giri	**14 1 per dept.**	03	05	07	09	11	14
23	Adv. Lab Infrastructures, Incubation Facilities on campus		Principal, System Analyst	**Super Computing Centre & Fab. Lab**	CCC	Fabrication Lab.	Media & Graphic Lab.	Design/ Modelling/ Simulation centre	Super Computing Centre	Super Computing Centre
24	No. of classrooms & seminar halls with ICT – enabled facilities (smart class)		Dean (AM) & Registrar	**100%**	60%	70%	75%	80%	90%	100%
	IT facilities including Wi-Fi on campus		Principal, System Analyst	**Entire Campus**	5 Bldgs. + Hostel	7 Bldgs. all floors+ Hostel	Entire Campus	Entire Campus	Entire Campus	Entire Campus
	Student - Computer ratio in the college			**2:1**	2.29:1	2.25:1	2.20:1	2.15:1	2.10:1	2:1
	Bandwidth of internet (Leased line)			**1-1.5 GBPS**	100 MBPS	160 MBPS	250 MBPS	350 MBPS	512 MBPS	1-1.5 GBPS
25	Students Campus Placement + Joining Higher Studies		Director (Placement) & TPO	**85% +10% (30% in core companies)**	639 (82%) in 85 companies; 20 core companies -112	80%+10% (20% in core companies)	80%+10% (22% in core companies)	85%+10% (25% in core companies)	85%+10% (27% in core companies)	85%+10% (30% in core companies)

#	Parameter	Responsibility							
	Salary Package of placed students		**4-18 L**	1.80- 10 L	2.0-12 L	2.5-13 L	3-14 L	3.5-16 L	4-18 L
	Collection of Offer orders of placed students by TPO		**100%**	60%	100%	100%	100%	100%	100%
	Collection of evidences of students joined Higher Study	TPO & HoD's	**100%**	100%	100%	100%	100%	100%	100%
26	No. of students Qualifying in exams. (NET/ SLET/ GATE / GMAT/ CAT/ GRE/ TOEFL/ Civil Services/ State govt.)	Director (Training)	**1050**	132*	170	190	210	230	250
	Career guidance facilities on campus	Director (Placement) & TPO	Every Year **10-12 Carrier guidance programs**, Mock Interviews, *Campus Recruitment Training (**CRT**),* Domain knowledge Classes by departments 15 days prior to company visit, Availability of Aptitude Test Practice Software in Computer Centres & its Usage Records.						
27	No. of awards/medals for outstanding performance in sports/cultural activities at national/internat. level by students	I/C Student Activities	**215**	24	30	35	40	50 .	60
28	Alumni Association/ Chapters Activities	I/C Alumni Association & Registrar	**Every Passed Out Student**	--	**Registered and functional Alumni Association Every Passed out student registrations per year**				
	Alumni Contribution (Amount in Rupees)		**63 L**	--	10 Lakh	11 L	12 L	15 L	20 L
			Every Year Alumni Meet	Alumni Meet at USA in June 19	Alumni Meet	Alumni Meet	Alumni Meet	Alumni Meet	Alumni Meet
29	No. of teachers attending STTP, FDP	Dean (P & D) & HoD's	**95%**	92%	95%	95%	95%	95%	95%
	No. of teachers receiving highly reputed national/ international awards/ recognitions from Govt. agencies	Principal	**27**	--	4	5	5	6	7

#	Parameter	Responsible							
	Female Faculty in administrative positions		20%	20%	20%	20%	20%	20%	20%
30	Number of MoUs with National/International Recognized Bodies	Principal, Dean (P&D) Registrar	45	--	5	7	09	11	13
	Quality assurance initiatives of the institution	Principal, Dean (P&D) Registrar	NBA: UG=7 CE/ME 6 Yrs. NAAC: A+ NIRF: <100	PG=3 programs 1 Year extension of accreditation	NBA accreditation of UG=7 & PG=1-2 programs	YCCE NIRF Rank: within 100	NIRF Rank: within 100	NAAC Accreditation with A+ Grade	NBA:UG=7 All programs; CE/ME:UG for 6 Yrs.
31	Differently abled friendliness Resources available in the institution	Registrar	Lift, Ramp/Rails, Rest Rooms, Special toilets etc. in all buildings						
32	Green Measures in the institution	Principal & Registrar	Waste Management, Rain water harvesting, Solar Panels for solar energy, Green Practices, Electronic Displays, LED Lamps, Optimum use of papers, tree plantation near all buildings/depts., Conduct Green Audit Every Year						
33	Institutional & Departmental Best practices implementation	Principal, Dean (P&D) Dean (AM) Director (R&D)	2 Best Practices strictly as per NAAC Guidelines. Periodic review of the best practices implementation. Outcomes of the existing best practices. Impact Analysis.						
34	Students passing exams (Success Rate) in stipulated period of program	Principal & Dean (AM)	95%	79%*	92%	92%	93%	94%	95%
35	Innovative methods practicing by Faculty in T-L	Dean (AM), & HoD's	6-7 Methods	4-5 Methods	4-5 Methods	4-5 Methods	5-6 Methods	5-6 Methods	6-7 Methods
36	Impartus: faculty Lecture Video recording	Dean (AM) & HoD's	3 courses/ sem./dept.	2-3 courses/ dept. in Even sem.	2 courses/ dept./sem.	3 courses/ dept./sem.	3 courses/ dept./sem.	3 courses/ sem./dept.	3 courses/ sem./dept.
37	'Innovative Students' Projects' recognized at State/National/International level by renowned Agencies	Dr. Sandip Khedkar	75	04	10	12	15	18	20

38	SWAYAM/NPT EL Courses Certification by	Faculty	Dean (AM) & HoD's	**80%**	10%	20%	30%	45%	60%	80%
		Students		**590-655**	---	50-60	75-85	110-120	155-170	200-220
39	Quality assurance through annual quality assessment		Principal & Dean (P&D), Dean (AM)	Every year IQAC-AQAR,DQAC (Departmental Quality Assurance Cell) -DQAR, Project Quality Assurance Initiative (PQAI), Department Level Assessment (DLA), Annual Work Load (AWL) Plan Periodic Audits & Reports & corrective measures, HoD's Yearly Perspective Plans (Presentations & Implementations), Compliances and Review and revision of Targets/Targets Update						
40	Alumni involvement in Institutional Activities		Alumni I/C & HoD's	**Resource persons: 175 Start-up: 100**	As Resource persons=19 In Start-ups =03	As Resource persons=21 In Start-ups =10	As Resource persons =28 In Start-ups =15	As Resource persons =35 In Start-ups =20	As Resource persons= 42 In Start-ups =25	As Resource persons = 49 In Start-ups =30
41	No. of Joint Projects with	Research Organisation	Dr. J. P. Giri,	**55**	00	07	09	11	13	15
		Other reputed Organization	Dr. Khedkar	**70**	--	10	12	14	16	18
42	Feedback on curriculum from stakeholders	From Employer, Alumni	Dean (AM), TPO & HoD's	**Employers= 175 Alumni= 1870**	--	Employers=25 Alumni= 300	Employers=30 Alumni=320	Employers= 35 Alumni=350	Employers= 40 Alumni=400	Employers= 45 Alumni= 500
		Exit feedback from Outgoing students, Course completion reports by teachers	Dean (AM), TPO & HoD's	Exit feedback from 100% Outgoing Students, Feedback Analysis & Corrective Actions, Course completion reports for 100% Courses from faculty members, Gap Analysis & Corrective Actions, and Ensure implementation of 80%-90% recommendation through BoS and Academic Council.						
43	No. of National/ International Conferences to be organized per year		Dr. U. H. Gawande	**10+3**	01 National	2 (National)+1 (International)	3+ -	2+1	3+ -	2+1

44	Centers of Excellence in the Institute	Principal, HoD's	**10**	02	4	5	7	8	10
45	Average drop-out percentage of students	Principal & Dean (AM)	**<2%**	--	<2%	<2%	<2%	<2%	<2%
46	Staff Representation (teaching/non- teaching) in decision making bodies	Principal	**>30%**	>20%	>20%	>22%	>25%	>27%	>30%
47	No. of interdisciplinary open elective courses to be offered to students	Dean (AM)	**28**	14	14	20	23	25	28
48	No. of Programs to be organized for professional development of staff (Teaching + Non-Teaching)	Director (Training), .HOD	**56 (T) + 09 (NT)**	07	9 (T) +1 (NT)	10+2	11+2	12+2	14+2
49	Industry Internship for the Students	Dean (AM) Director (Training), HOD	**100%**	IT Dept. Students-100% Other Dept.- 15-20% students	IT Dept. Students-100% Other Dept.- 20-30% students	IT Dept.-100% Other Dept.- 30-50%	100% for all final year students of all depts.	100% for all final year students of all depts.	100% for all final year students of all depts.

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