

FOR 2nd CYCLE OF ACCREDITATION

WALCHAND COLLEGE OF ENGINEERING

WALCHAND COLLEGE OF ENGINEERING, (GOVERNMENT AIDED AUTONOMOUS INSTITUTE) A/P. VISHRAMBAG, DIST SANGLI 416415

www.walchandsangli.ac.in

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BANGALORE

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Walchand College of Engineering Sangli (WCE), established in 1947 and aided by the Govt. of Maharashtra, is one of India's oldest and premier engineering institutions. With a history of 76 years and a beautiful campus of over 90-acres, WCE Sangli provides a transformational learning experience in various engineering disciplines. WCE is affiliated with Shivaji University Kolhapur and is approved by AICTE, New Delhi. It has celebrated its Platinum Jubilee year (June 2021 - June 2022). It was marked by inviting renowned personalities from industries and IITs almost weekly to guide, develop and extend their experience to WCE faculty and students.

New Datacenter was created with internet leased two lines of 500 Mbps and another 100 Kbps NKN line as a part of the Platinum Jubilee celebration. WCE offers 6 UG programs in Civil, Electrical, Mechanical, Electronics, Computer Science and Engineering, and Information Technology and 10 PG programs in Environmental Engineering, Structural Engineering, Heat Power Engineering, Design Engineering, Production Engineering, Power System, Control Systems, Electronics Engineering, Computer Science and Engineering, and Computer Science and Information Technology. It also offers Ph.D. programs under Shivaji University, the National Doctoral Fellowship of AICTE, and the Quality Improvement Program (QIP) Ministry of Education (MoE) scheme.

The Institute has been granted autonomous status by the University Grants Commission since 2007. The Institute has received extended autonomy upto 2027 in the third cycle WCE was selected for Technical Quality Improvement Program (TEQIP) of MHRD through NPIU in Phase-I in 2004 with funding of Rs. 8.54 Cr., for TEQIP-II with funding of Rs. 12 Cr. WCE was also selected for TEQIP-III in 2017 with a funding of 7.0 Cr. WCE has consistently performed well in the implementation of these projects. Based on the performance, the Institute has received additional funding of Rs. 0.7 Cr. in TEQIP-III. Under TEQIP-III, WCE was mentoring Jabalpur College of Engineering, Jabalpur. The Ministry of Human Resource Development has announced the India Rankings for 2022, based on the National Institutional Ranking Framework (NIRF). The college has ranked in 201-250 range among other engineering institutions, including IITs and NITs in India.

WCE has highly qualified and dedicated faculty members who are constantly involved in research and are associated with practicing engineering. Most faculty members hold Doctoral degrees and M. Tech degrees from eminent institutes such as IITs and IISc. WCE has achieved a series of milestones, the credit of which undoubtedly goes to dedicated faculty, encouraging management, our brilliant students, and alumnus spread across the globe. No wonder WCE Sangli is the most preferred destination for engineering education today!

Vision

"To produce capable graduate engineers with an aptitude for research and leadership"

Mission

- To impart quality education through demanding academic programmes.
- To enhance career opportunities for students through exposure to industry.

- To promote excellence by encouraging creativity, critical thinking and discipline.
- To inculcate sensitivity toward society and a respect for the environment.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

Strengths:

- Realistic & clear VMOQ statements
- Academic flexibility
- Cultural heritage
- Learner centric curriculum
- The preferred choice of students
- Devoted faculty & staff
- Research culture & infrastructure
- Quality UG & PG programs
- Student environment learning communities, organizations, and clubs
- A close relationship between students and faculty through mentorship
- Supportive administrative council
- Strong alumni base
- Pride of city
- Placement and industrial partnership
- Available land area
- a location that offers many growth opportunities
- Nationally recognized for providing high-quality polytechnic education at a low cost

Institutional Weakness

Weaknesses:

- Distant proximity to industries and R&D organizations
- Rural background of students
- Faculty Recruitment
- Technical competency of support staff
- Lack of consensus among PW, UG & PG programs
- Lack of long-term resource planning
- Lack of alumni network
- Old buildings in need of repair & maintenance
- Legal complications & disputes
- Unrevised fee structures for Polytechnic programs
- Underutilization of information technology not taking full advantage of IT resources
- Non-receipt of long-awaited financial dues
- Not recognized internationally for research and leadership in respective fields
- No research centers of excellence
- Lack of NRI student attraction

- Lack of out-of-state or out-of-region targeted advertisements for post-graduation programs
- Dependency on under-qualified contractual faculty for teaching core courses
- Inability to adjust the educational environment to fit the immediate needs of smart cities & industry

Institutional Opportunity

Opportunities:

- To offer reward programs to earn money & repute
- To develop leaders in engineering
- To offer interdisciplinary programs
- To establish tie up with local industry & ULBs to promote practice-based research
- To attract research funding
- To handhold nearby technical institutes for joint research programs
- To expand and improve the testing and consultancy facilities
- To focus on excellence through internal collaborations and external collaborations
- To tap alternative funding models new programs, alumni, industry, foundations, start-ups

Institutional Challenge

Challenges:

- Drastic changes in higher education policies
- Poor student enrolment in PG programs
- Reduced demand for conventional graduate and post-graduate programs
- Reduction in qualified faculty & support staff
- Saturation of core engineering programs
- Inability to satisfy student requirements
- Reduced research funding from state/central government
- Declining resources from the state and increasing dependence on tuition revenue
- Development of Multidisciplinary Education and Research Universities (MERUs) and entry of online universities and private autonomous colleges
- Declining financial aid for students
- Lowering standards by having less qualified professors
- Inability to compete for expert faculty and their retention
- Loss of industrial support and shifting attitudes toward the potential of Centers of Excellence
- An attitudinal shift in Student, Society & Public perception · Low contractual employee morale due to reduced salary and job security

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

The vision and mission of the college are realized through the vibrant syllabi formulated under the guidance of academicians, Engineers from industry, alumni, and employers to cater to the requirements of changing technological developments with appropriate emphasis on basic & engineering sciences and mathematics. The curriculum is designed to offer sufficient flexibility in choosing the departmental and/or interdisciplinary courses right from the program's second year. The adoption of creative learning methods by keeping Bloom's taxonomy in mind and giving an experience of "learning by doing" from the second year onwards helps students to understand the concepts in both breadth and depth. The students are exposed to innovative research problems through the centers of excellence set by the college in various fields, such as embedded systems in collaboration with John Deere, BARC, IBM, Chitale Digitals, etc.

Organizing various co-curricular and extra-curricular activities centrally by the college or through various student clubs helps the students to develop leadership qualities, teamwork spirit, professional skills, and soft skills. These aspects help them to sustain and succeed in their professional life. Values are inculcated in the students through the reflection of the virtues of all concerned stakeholders and the culture of the college. The values related to good citizenship and civic sense are addressed through Environment Studies, Economics, industrial management, and business ethics courses.

Teaching-learning and Evaluation

Academic Calendar:

The college prepares the academic calendar for UG and PG separately before the beginning of every semester and is displayed on the department notice boards and the college website. The academic calendar mentions the academic days of instructions delivery, schedule for conduct of mid-semester and end-semester examinations, assessment, submission of attendance defaulter report, declaration of results, other institute-level events (co-curricular and extra-curricular), and the holidays.

Teaching Plan:

- For each theory course, the concerned faculty prepares the lesson plan to ensure uniform teaching throughout the semester.
- After approval by HoD/Module co-ordinator, the same is uploaded along with a copy of the syllabus on Moodle.
- The teaching plan clearly mentions the course's objectives and outcomes that students should achieve at the end of the course.
- Mid-Course and Exit-course feedback is collected from the students and is analyzed to orient the teaching in such a way that the average student attains the outcomes to an expected level.

Evaluation Blue Print: (UG and PG)

- The evaluation of theory courses is kept transparent. After every evaluation (In-semester, Mid-semester or End-semester), the answer books are shown to the students, and they are counseled for their mistakes. Any valid discrepancy reported by the student assessment is rectified before finalizing the marks for any of the evaluations.
- The grade Moderation Committee moderates the students' grades on a relative scale after consulting the concerned faculty and HoD. BoE then issues the results.
- The students failing to acquire passing grades in any of the courses are permitted to reappear for re-

examination conducted before the commencement of the next semester. The evaluation of the answer books of such students is done in the same manner as the regular end-semester examination.

Research, Innovations and Extension

The Institute's policy is to promote research which is evident in the vision statement of the college. The college promotes the research culture in many ways at various levels. The undergraduate and post-graduate (in particular) students are encouraged to take up research-oriented projects for the UG project and PG dissertation. All the facilities necessary for conducting the research work are provided in terms of infrastructure, manpower, and extended working hours. The students are financially supported to attend/participate in conferences and present their research work.

The faculty are deputed to pursue their Ph.D. program through Quality Improvement Programme (QIP) with full pay. The faculty are also encouraged to register for Ph.D. through external registrations in IITs and other universities. They are given study leave to complete their coursework in IITs in case of external registrations. The facilities required for carrying out the research work are made available through various college funds. The faculty is further supported to apply for research grants to national and international agencies. A provision for seed money funding is made in Technical Education Quality Programme (TEQIP). Under this funding scheme, the faculty are provided with seed money to develop the experimental set-up and procure the necessary components required for their work.

The college has a provision to provide travel grants to attend a national conference once a year and an international conference once in three years for the faculty. In addition to this, the faculty are financially supported to organize/attend conferences/seminars/ workshops/training programs under TEQIP.

The faculty are encouraged to publish their work in peer-reviewed journals. Financial support (if required) is provided to the faculty and students.

The college has been recognized as a minor center for the Ph.D program under QIP by AICTE.

Infrastructure and Learning Resources

The college has initiated many activities to procure equipment and refurbishment works in various departments. Faculty are encouraged to submit research proposals to funding agencies, and project-specific equipment has been procured in various departments. Refurbishment works are carried out to provide the required space and environment for research activities. A separate provision in the budget is made for such activities. The library is added with the latest edition of reference books, manuals, periodicals, encyclopedias, e-books, and handbooks. National and international journals published by reputed organizations/publishers like ASCE, ASME, Springer, IEEE, and Elsevier are subscribed.

Laboratory and computer facilities are provided 24x7 for students and faculty. Research students have independent rooms and are provided with a personal computer with an internet connection with 180+20 Mbps internet bandwidth. Wi-Fi facility is available in many parts of the college campus. The researchers are given access to Delnet and libraries of other reputed institutes like IIT.

Student Support and Progression

The College has an independent system for student support and mentoring. The student support system comprises mentors, counselors, HoDs, and Deans. The support system functions through several units, such as Departmental Mentoring System, Guidance and Counseling Cell, Placement and Career Guidance Cell, Grievance Redressal Cell, and Committees for all co-curricular and extra-curricular activities. These committees include staff and student representatives and carry out the activities under the supervision of the Director. The mentor meets the students once a semester in groups and individually as and when required. Such meetings enable the mentors to identify and help the academically weaker and economically needy students. The mentor also contributes to the student's physical, psychological, social and spiritual development.

Governance, Leadership and Management

The college's top management is called as "Administrative Council." Every member of the council, including the Chairman of the council, insists on making the college "World class." As the college was established in 1947 and most of its building infrastructure is old, the management has worked out a master plan for the growth of the college. World-famous planner, M/S HOK, has designed the plan.

Institutional Values and Best Practices

Aspect I: Enrichment of Teaching and Learning Process

- 1. Orienting the students by imparting the basics of OBE at the outset of the semester
- 2. Implementation of MOOC, E-learning, flipped classroom, and "Think-Pair-Share."
- 3. Slow learners: Counseling and remedial classes, Enrichment through interdisciplinary courses for advanced learners
- 4. Involvement of industrial experts for additional study sessions.
- 5. 24 X 7 access to archived study material, a digital library, in addition to a dedicated set of textbooks through the central library.
- 6. Dynamic curricula structure strictly in adherence to AICTE guidelines.
- 7. Annual purchase of high-end equipment and software for the development of state-of-the-art laboratories with additional virtual lab facility having remote accessibility
- 8. Internal quality audit for question paper setting and assessment
- 9. Student feedback on organization, assessment, and delivery of course contents, counseling, and guidance, twice a year.

Aspect II: Enrichment of Skill Sets of Student

- 1. Promoting the students for their involvement in co-curricular activities within and outside the campus by assigning additional credit.
- 2. Industrial training and internship since the second year of the UG program
- 3. Imparting need-based training to the students to enhance employability and entrepreneurship
- 4. one-semester credit transfer through academic linkages with other reputed colleges.
- 5. Conducting guest lectures, workshops, and seminars to encourage higher education within and outside

the country

- 6. Provision of language lab equipped with updated software
- 7. Extension of additional technical facilities such as open source platforms, plagiarism, and grammar checks
- 8. Reimbursement of registration fees for paper publication
- 9. Proctor system each faculty member works as a proctor for a group of twenty students for counseling and better performance of students.

Aspect III: Interaction with Outside World

- 1. Establishment of tie-ups with renowned industries and institutes
- 2. Close interaction with society with problem-solving aptitude through student project work, faculty consultancy, and testing.
- 3. Empanelment of faculty as resource persons in various government and non-government organizations, reviewers for national and international journals
- 4. Motivation and support to students: competitive exams and a summer internship in industries, and research Institute in India and abroad.

Aspect IV: Faculty Development and Welfare

- 1. Sponsorship for development programs, higher education under QIP, participation in national and international conferences
- 2. Participative management with hierarchical support systems
- 3. Decentralization of autonomy to departments to result in efficient and effective academic and administrative functioning.
- 4. ERP implementation for management of Leave, Time table, Salary, Library, Exam and results, Fees Collection, Teaching learning processes, Hostel Admissions, etc.
- 5. Appropriate functioning of grievance redressal mechanism
- 6. Ideal teacher award to one faculty every year

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College			
Name	WALCHAND COLLEGE OF ENGINEERING		
Address	Walchand College of Engineering, (Government Aided Autonomous Institute) A/P. Vishrambag, Dist Sangli		
City	SANGLI		
State	Maharashtra		
Pin	416415		
Website	www.walchandsangli.ac.in		

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Director(in- charge)	U. A. Dabade	0233-2300838	9820542138	0233-230083	director@walchand sangli.ac.in
IQAC / CIQA coordinator	A. K. Kokane	0233-2300383	9822964111	0233-230038	msiqac@walchand sangli.ac.in

Status of the Institution	
Institution Status	Private, Grant-in-aid and Self Financing

Type of Institution			
By Gender Co-education			
By Shift	Regular		

Recognized Minority institution	
If it is a recognized minroity institution	No

Establishment Details	
Date of Establishment, Prior to the Grant of	23-06-1947

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'Autonomy'	
Date of grant of 'Autonomy' to the College by UGC	01-07-2007

University to which the college is affiliated				
State University name Document				
Maharashtra	Shivaji University	View Document		

Details of UGC recognition			
Under Section	Date	View Document	
2f of UGC	30-10-2014	View Document	
12B of UGC	30-10-2014	View Document	

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)				
Statutory Regulatory Authority	Recognition/App roval details Inst itution/Departme nt programme	Day,Month and year(dd-mm- yyyy)	Validity in months	Remarks
AICTE	View Document	01-07-2022	12	Extension of approval by AICTE for current Academic year

Recognitions	
Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	No
Is the College recognized for its performance by any other governmental agency?	No

Location and Area of Campus				
Campus Type Address Location* Campus Area in Acres sq.1				
Main campus area	Walchand College of Engineering, (Government Aided Autonomous Institute) A/P. Vishrambag, Dist Sangli	Urban	90.2	51115

2.2 ACADEMIC INFORMATION

Details of Pro	Details of Programmes Offered by the College (Give Data for Current Academic year)									
Programme Level	Name of Pr ogramme/C ourse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted				
UG	BTech,Civil Engineering	48	HSC CET	English	60	70				
UG	BTech,Mech anical Engineering	48	HSC CET	English	60	67				
UG	BTech,Electr ical Engineering	48	HSC CET	English	60	67				
UG	BTech,Electr onics Engineering	48	HSC CET	English	60	67				
UG	BTech,Comp uter Science And Engineering	48	HSC CET	English	90	111				
UG	BTech,Infor mation Technology	48	HSC CET	English	60	69				
PG	Mtech,Civil Engineering	24	B.Tech. BE	English	18	11				
PG	Mtech,Civil Engineering	24	B.Tech. BE	English	30	33				
PG	Mtech,Mech anical Engineering	24	B.Tech. BE	English	30	5				

PG	Mtech,Mech anical Engineering	24	B.Tech. BE	English	18	2
PG	Mtech,Mech anical Engineering	24	B.Tech. BE	English	30	0
PG	Mtech,Electr ical Engineering	24	B.Tech. BE	English	18	1
PG	Mtech,Electr ical Engineering	24	B.Tech. BE	English	18	1
PG	Mtech,Electr onics Engineering	24	B.Tech. BE	English	30	2
PG	Mtech,Comp uter Science And Engineering	24	B.Tech. BE	English	30	4
PG	Mtech,Infor mation Technology	24	B.Tech. BE	English	18	0
Doctoral (Ph.D)	PhD or DPhil,Civil Engineering	60	M.Tech. ME	English	20	11
Doctoral (Ph.D)	PhD or DPhi l,Mechanical Engineering	60	M.Tech. ME	English	20	15
Doctoral (Ph.D)	PhD or DPhi l,Electrical Engineering	60	M.Tech. ME	English	12	6
Doctoral (Ph.D)	PhD or DPhi l,Electronics Engineering	60	M.Tech. ME	English	12	8
Doctoral (Ph.D)	PhD or DPhi l,Computer Science And Engineering	60	M.Tech. ME	English	16	13

Position Details of Faculty & Staff in the College

	Teaching Faculty											
	Profe	essor			Asso	Associate Professor			Assis	Assistant Professor		
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				7				19				63
Recruited	5	0	0	5	6	2	0	8	40	6	0	46
Yet to Recruit		,		2		,	'	11		'		17
Sanctioned by the Management/Soci ety or Other Authorized Bodies				10				15				15
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit				10				15				15

		Non-Teaching	Staff	
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				202
Recruited	90	6	0	96
Yet to Recruit				106
Sanctioned by the Management/Society or Other Authorized Bodies				0
Recruited	0	0	0	0
Yet to Recruit				0

		Technical St	aff	
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				64
Recruited	34	2	0	36
Yet to Recruit				28
Sanctioned by the Management/Society or Other Authorized Bodies				0
Recruited	0	0	0	0
Yet to Recruit				0

Qualification Details of the Teaching Staff

	Permanent Teachers											
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor						
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total		
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0		
Ph.D.	5	0	0	5	2	0	20	1	0	33		
M.Phil.	0	0	0	0	0	0	0	0	0	0		
PG	0	0	0	1	0	0	20	5	0	26		
UG	0	0	0	0	0	0	0	0	0	0		

	Temporary Teachers											
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor						
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total		
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0		
Ph.D.	0	0	0	0	2	0	3	0	0	5		
M.Phil.	0	0	0	0	0	0	0	0	0	0		
PG	0	0	0	0	0	0	20	13	0	33		
UG	0	0	0	0	0	0	0	0	0	0		

	Part Time Teachers											
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor						
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total		
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0		
Ph.D.	0	0	0	0	0	0	0	0	0	0		
M.Phil.	0	0	0	0	0	0	0	0	0	0		
PG	0	0	0	0	0	0	0	0	0	0		
UG	0	0	0	0	0	0	0	0	0	0		

Details of Visting/Guest Faculties						
Number of Visiting/Guest Faculty	Male	Female	Others	Total		
engaged with the college?	2	2	0	4		

Provide the Following Details of Students Enrolled in the College During the Current Academic Year

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	1303	76	1	0	1380
	Female	599	16	0	0	615
	Others	0	0	0	0	0
PG	Male	94	0	0	0	94
	Female	48	0	0	0	48
	Others	0	0	0	0	0
Doctoral (Ph.D)	Male	37	0	0	0	37
	Female	18	0	0	0	18
	Others	0	0	0	0	0
Diploma	Male	451	0	0	0	451
	Female	274	0	0	0	274
	Others	0	0	0	0	0

Provide the Followi Years	ing Details of Studer	nts admitted	to the College I	Ouring the last f	our Academi
Category		Year 1	Year 2	Year 3	Year 4
SC	Male	45	50	48	54
	Female	18	21	31	31
	Others	0	0	0	0
ST	Male	17	14	18	22
	Female	7	7	5	3
	Others	0	0	0	0
OBC	Male	88	95	110	146
	Female	44	51	49	53
	Others	0	0	0	0
General	Male	183	232	210	174
	Female	79	90	84	87
	Others	0	0	0	0
Others	Male	34	40	49	47
	Female	24	16	26	23
	Others	0	0	0	0

2.3 EVALUATIVE REPORT OF THE DEPARTMENTS

539

Total

Department Name	Upload Report
Civil Engineering	View Document
Computer Science And Engineering	View Document
Electrical Engineering	<u>View Document</u>
Electronics Engineering	View Document
Information Technology	View Document
Mechanical Engineering	<u>View Document</u>

616

630

640

Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:

NEP-2020 is a comprehensive policy emphasizing higher education's multidisciplinary & multimode approaches with significant technical support. Walchand College of Engineering, Sangli, had its modest establishment in 1947 with only a single UG program. With 75 years of excellence, the entire Institute journey has proved its acquiescence with modern technology by expanding itself to six UG, ten PG programs, and a Ph.D. research center status. In 2019 the institute further progressed with the announcement of minor and value-added courses. Since its academic autonomy, i.e., 2007-08, the institute has become a pioneer in offering professional elective courses, a few with the help of industry support. Well before the launch of NEP-2020 i.e., July 2020, the institute had envisaged the need for an interdisciplinary approach given the convergence of the aptitude. Way back in 2015 itself, the institute introduced a concept of Open Electives from the 5th to 8th semester, wherein the students were required to choose an Open Elective from the other branch than their branch. On similar grounds, open electives were included in PG courses. Such knowledge exchanges provided a prominent platform to work in teams with multidisciplinary skill sets. Introduction of Mini projects from the 4th to 7th semester, in addition to the mega project in 8th semester, enables students to undertake interdisciplinary problem statements involving nearly all disciplines. Since 2016, a research symposium has been arranged as a yearly activity. The institute being residential, many of the students work after working hours 24x7 laboratories open to all. The culture is so developed that students used to be more active with supporting extra-curricular activities. This interaction inspires students to form various student clubs. To date fourteen clubs have been created, and it has become a regular practice to arrange various national and even international events where platforms are made open to demonstrate collaborative and cooperative knowledge, skills, and attitude. Thus, offering multidisciplinary, current-state of art professional electives, a Minor in Engineering, Value Added Courses (VAC), mini projects, hackathons, ideathons, bookethons, innovation cells, etc., are the proven practices followed by WCE. These practices

	infiltrate NEP policies into the institute premises.
2. Academic bank of credits (ABC):	UGC has introduced the "Academic Bank of Credits (ABC)" to promote student-centric education. ABC's primary focus is building a transformative educational framework that helps faculty members manage and check the credits earned by their students at will. In short, ABC is a digital storehouse that contains information on the credits earned by individual students throughout their learning journey. It enables students to open their accounts and gives multiple options for entering and leaving colleges or universities. There may be "multiple exits" & "multiple entries" points during the higher education tenure, and credits will be transferred through the ABC seamlessly by helping students to hold a multidisciplinary educational approach. The idea is to make students "skillful professionals" and support their growth. Accordingly, WCE has registered for ABC and given wide publicity amongst the students through the institute website (http://www.walchandsangli.ac.in) with a link to register for ABC. The request made by WCE to register for ABC is approved and verified by National Academic Repository (NAD). WCE ID is 'NAD036768'. It is worth mentioning that, even well before the concept of the Academic Bank of Credits was introduced, WCE started the Student Exchange Program with other institutions in 2015. Around six students of WCE have already benefited from the credit transfer system by collaborating with the College of Engineering, Pune. Academic office of WCE also permits students to undergo NPTEL courses instead of Professional and Open Electives, and the grades obtained are to be transferred and amalgamated in WCE Grade Cards. These executions of reserving credits for the fulfillment of the award of the college degree are the shreds of evidence that WCE has prepared its mindset to follow ABC policies.
3. Skill development:	While knowledge and research are the focus of undergraduate engineering education, multi-domain skills are needed for employability readiness. It can not be ignored. The WCE is addressing the concern of skill development in multiple ways. WCE has incorporated skill-based laboratories right from the first year of the UG program. In total, provisions of five mini-projects and one mega-project have been

introduced in the curriculum. A simultaneous endowment of five to seven professional electives and an industry internship of two to twelve weeks can prove necessary means to gain various required skills for the Students. A special incorporation of the courses named 'IPR' and 'Technical Report Writing', 'Learning Foreign (German) language' has improved students' learning ability. A special task force under training and placement is in action to enhance students' overall ability toward personality development. WCE has specifically designed a Value Added Course on Aptitude Training, and other Value Added Courses on Programming Languages. As mentioned earlier, students' clubs are very active in arranging the weekly event for overall skill improvements in technical, behavioral, learning, listening, analytical, linguistic, and coding domains. MoU with various industry partners and setting up a Center of Excellence (CoE) make critical problems available to students. The optimal or near-optimal solution pathways allow them to find nondeterministic, feasible, cost-effective solutions. An MoU with STEAM by Diana laboratory has allowed students to reach school students and demonstrate and build educational models. Hence, these active engagements are helpful for skill development for students.

4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):

Walchand College of Engineering offers higher education in engineering and technology; its official language of communication is English. However, as many of the students admitted to this college have a rural background; the additional mentoring system is made available where the local language, i.e., 'Marathi' is also used as a supporting language to clarify doubts and re-explain a few facts and concepts, mentioned in the curriculum. Few yearly programs are arranged to exhibit Indian traditions and culture with the most enthusiasm. WCE has introduced courses like 'Ethics and Management,' 'Human Relations at Work,' 'Law and Engineering,' 'Environmental Science,' 'Constitution of India,' 'Ecology,' 'Biology,' 'Geology,' etc. as additional supporting courses. Faculty members actively translate technical content into the regional languages under various banners and AICTE schemes. A central library and each department's exclusive library is equipped with

	many titles and online subscriptions that are appropriately integrated into the Indian Knowledge system.
5. Focus on Outcome based education (OBE):	Various programs offered by the institute were accredited by the National Board of Accreditation, which essentially certified the implementation of OBE in accordance with the Washington Accord. Since Engineering Education has changed its conventional track from a teacher-centric approach to a student-centric outcome-based system, the WCE has redesigned the curriculum structure and syllabus of courses integrating the OBE. The Course Outcomes were designed with appropriate cognitive levels using Bloom's revised taxonomy. Further, a scientific mapping is done of each Course Outcome (CO) with all Program Outcomes (POs) and Program Specific Outcomes (PSOs) and given in a mapping table in the curriculum itself. Further, WCE is most probably the pioneer in mapping each sub-question in the Mid Semester and End Semester examinations to the Course Outcomes as per examination reforms and guidelines stipulated by AICTE. Hence, it is pretty easy to quantify the attainment of each Course Outcome directly. Further, we have incorporated indirect methods based on the Course Feedback from Students, Employers, and Alumni to evaluate the attainment of Program Outcomes. Indirect attainment is suitably factored in process of computing the overall attainment of the course and program outcomes. A provision of continuous assessment in the form of In-semester evaluation (ISE) gives a good opportunity for teacher evaluators to implement various modes and pre-defined rubrics for better assessment in view of OBE.
6. Distance education/online education:	The COVID-19 situation has geared the infrastructure and overall attitude toward Distant Education through online modes. WCE met the COVID challenge effectively and started ONLINE Classes as early as April 2020 itself without even waiting for directives from University/UGC/AICTE, State, and Central Governments. Moreover, WCE effectively has utilized Free Certification Courses offered by COURSERA under their COVID-specific program. WCE now has a complete setup for conducting ONLINE Sessions as and when needed, even after COVID-19 Pandemic is over, and OFFLINE

Academics is started with a licensed Microsoft

Teams Platform, Google Meet, and licensed ZOOM Platform, licensed Impartus platform as well. The State-of-the-art Recording Studio is in place; many faculty members upload their sessions on YouTube. Few Faculty members even record actual lectures conducted in the classroom to benefit absent students and for revision. Online Education has helped a lot in conducting Virtual Sessions with Eminent personalities from India and abroad. WCE has already permitted to transfer of the Credits earned by Students from NPTEL Courses instead of Elective subjects. WCE further intends to offer Online Certification Programs as well through its Center for Continuous Education.

Institutional Initiatives for Electoral Literacy

1. Whether Electoral Literacy Club (ELC) has been set up in the College?	Yes.	
2. Whether students' co-ordinator and co-ordinating faculty members are appointed by the College and whether the ELCs are functional? Whether the ELCs are representative in character?	Yes, ELC representatives are appointed by the Institute. The ELC is fully functional. It's constitution is self-evident of equal representation to all stakeholders.	
3. What innovative programmes and initiatives undertaken by the ELCs? These may include voluntary contribution by the students in electoral processes-participation in voter registration of students and communities where they come from, assisting district election administration in conduct of poll, voter awareness campaigns, promotion of ethical voting, enhancing participation of the under privileged sections of society especially transgender, commercial sex workers, disabled persons, senior citizens, etc.	Following campaigns and activities are executed at ELC 1. Shared a google sheet with all student groups; information on registered and non-registered voters was collected 2. Issued form no 6 to non-registered students. 3. Conducted a session for counsel voters: Importance of voting, Required documents to complete form no.6 and their submission. 4. Displayed poster for "Voter registration Campaign" on the college campus. 5. Participated in a rally organized by "District collector" on 25 January 2023 for Voter registration Campaign for new voters and transgender, commercial sex workers, disabled persons, and senior citizens.	
4. Any socially relevant projects/initiatives taken by College in electoral related issues especially research projects, surveys, awareness drives, creating content, publications highlighting their contribution to advancing democratic values and participation in electoral processes, etc.	Prepared creative content: Video "Awareness: Voter registration system" and published on social media.	
5. Extent of students above 18 years who are yet to be	1. Collection of Data (registered and non-registered	

enrolled as voters in the electoral roll and efforts by ELCs as well as efforts by the College to institutionalize mechanisms to register eligible students as voters.

voters in the college) 2. Issue of Form No 6. / Link for online registration (NVSP) on college website https://www.nvsp.in / Voter helpline app. https://ecis veep.nic.in/video/register-now-to-vote/how-to-register-as-a-voter-through-voter-helpline-app-r1290/3. Counselling session for electoral literacy.

Extended Profile

1 Program

1.1

Number of programs offered year-wise for last five years

2021-22	2020-21	2019-20	2018-19	2017-18
16	16	16	16	16

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

1.2

Number of departments offering academic programmes

Response: 6

2 Students

2.1

Number of students year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
2236	2342	2282	2290	2306

File Description	Do	ocument		
Institutional data in prescribed forma	t <u>Vie</u>	ew Document		

2.2

Number of outgoing / final year students year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
623	666	694	694	696

File Description	Document
Institutional data in prescribed format	View Document

2.3

Number of students appeared in the examination conducted by the Institution, year-wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
630	675	696	715	718

File Description		Document			
Institutional data in prescribed form	nat	View 1	<u>Document</u>		

2.4

Number of revaluation applications year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
1	0	23	34	72

3 Teachers

3.1

Number of courses in all programs year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
581	553	549	566	519

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

3.2

Number of full time teachers year-wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
118	116	117	140	126

File Description	Document
Institutional data in prescribed format	View Document

3.3

Number of sanctioned posts year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
90	90	90	109	109

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

4 Institution

4.1

Number of eligible applications received for admissions to all the programs year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
102533	90350	87537	86437	85543

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

4.2

Number of seats earmarked for reserved category as per GOI/State Govt rule year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
335	335	335	335	335

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

4.3

Total number of classrooms and seminar halls

Response: 38

4.4

Total number of computers in the campus for academic purpose

Response: 1183

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4.5

Total Expenditure excluding salary year-wise during last five years (INR in Lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
347.23	543.01	467.43	458.03	466.29

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curriculum Design and Development

1.1.1 Curricula developed and implemented have relevance to the local, national, regional and global developmental needs which is reflected in Programme outcomes (POs), Programme Specific Outcomes(PSOs) and Course Outcomes(COs) of the Programmes offered by the Institution.

Response:

Towards the curricula development, general practice is followed by inviting suggestions from various stakeholders. The recommendations are discussed with multiple industry-academia interaction bodies. These bodies are grouped into various committees like the Department Committee, Board of Studies (BoS), Department Advisory Board (DAB), and Industry Consultation Committee (ICC). The department committee analyses the formal and informal feedback from alumni, employers, and local society. The curriculum is correspondingly framed to address the needs of local and global communities to meet the requirement of critical thinking, scholarship of knowledge, industrial application, etc. The course syllabi and course outcomes (CO) are decided in Department Committee and are sent to BoS for further suggestions and hence the decisions. The curriculum approved in BoS is forwarded to the Academic Council for endorsement and approval.

The curriculum of each program department takes into account the local, regional, national, and global developmental needs. The topics related to Civil Engineering are typically related to the environment, water quality, air quality, pollution, green ambiance, and designing cost-effective and robust civil structures. The curriculum under Mechanical Engineering supports machine designs, fluid mechanics, manufacturing processes, robotics, machine drawings and CAD, heat transfer, production engineering, etc. The Electrical Engineering program includes courses on energy audit and energy conservation, non-conventional energy sources, electrical safety, etc. The curriculum of CSE and IT programs tries to enhance students' skills to act as a software task force at national and global levels. The curriculum of Electronics Engineering prepares the students to act as hardware professionals for future India to tackle embedded-based systems responsible for integrating international, national, and local development.

The curriculum also has courses such as foreign language, human relations at work, techno-socio activity, etc., relevant to international, national, and local developmental needs.

The ICC members, having potential industry backgrounds, look at the curriculum from the industry perspective and usually suggest recent trends, tools, and technologies that can be incorporated into professional courses. DAB mainly focuses on academic quality monitoring, curriculum assessment mechanisms, and attainment calculations; thus, it actively decides policy matters.

The cumulative attainment of CO is responsible for the overall PO and PEO attainment of the program offered by the institution. WCE always encourage students and faculty members to work with local small-scale industries and extend their expertise. e.g., One of the identified industries, working in exporting local- Sangli regional table grapes, named "Fresh Express, MIDC Sangli-Miraj," with which WCE has been working for the last few years. As a result of the past work and probable collaboration in the future, an MOU is signed. The document is attached for reference.

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File Description	Document
Any additional information	View Document
Link for Additional Information	<u>View Document</u>

1.1.2 Percentage of Programmes where syllabus revision was carried out during the last five years.

Response: 100

1.1.2.1 Number of all Programmes offered by the institution during the last five years.

Response: 16

1.1.2.2 How many Programmes were revised out of total number of Programmes offered during the last five years

Response: 16

File Description	Document
Minutes of relevant Academic Council/BOS meeting	View Document
Details of program syllabus revision in last 5 years(Data Template)	View Document
Any additional information	View Document

1.1.3 Average percentage of courses having focus on employability/ entrepreneurship/ skill development offered by the institution during the last five years

Response: 6.46

1.1.3.1 Number of courses having focus on employability/ entrepreneurship/ skill development yearwise during the last five years..

2021-22	2020-21	2019-20	2018-19	2017-18
49	40	28	27	35

File Description	Document
Programme / Curriculum/ Syllabus of the courses	<u>View Document</u>
MoU's with relevant organizations for these courses, if any	View Document
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	View Document
Average percentage of courses having focus on employability/ entrepreneurship(Data Template)	View Document
Any additional information	View Document
Link for Additional Information	View Document

1.2 Academic Flexibility

1.2.1 Percentage of new courses introduced of the total number of courses across all programs offered during the last five years.

Response: 6.47

1.2.1.1 How many new courses are introduced within the last five years

Response: 179

1.2.1.2 Number of courses offered by the institution across all programmes during the last five years.

Response: 2768

File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Institutional data in prescribed format	View Document

1.2.2 Percentage of Programmes in which Choice Based Credit System (CBCS) / elective course system has been implemented (Data for the latest completed academic year).

Response: 100

1.2.2.1 Number of Programmes in which CBCS / Elective course system implemented.

Response: 16

File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Institutional data in prescribed format	View Document

1.3 Curriculum Enrichment

1.3.1 Institution integrates crosscutting issues relevant to Professional Ethics ,Gender, Human Values ,Environment and Sustainability into the Curriculum

Response:

Higher education in India always has ancestries incorporating human values and ethics in the curricula. It is witnessed at the first entry level of the student at FY UG, where an induction program is provided. Thus, as a mandatory part of the induction program, the entry-level students undergo various activities related to human values, ethics, and gender-related issues for around two to three weeks. The highest authority of the college addresses the gathering of the fresher aspirants and their parents by welcoming and briefing them about the institute's vision, mission, objectives, philosophy, and culture. The distinctive features of the college, such as curriculum, examination, learning methodologies, and available facilities, are introduced by respective functionaries. Special lectures on human values, yoga, and physical and mental fitness are arranged during this induction program. Senior students involved in various club services usually take further responsibilities towards mentoring juniors. This parental activity continues to maintain ethics and values in the entire groupings of the college.

A step further, a few credit courses on human values, legal knowledge, IPR, and safety are offered as core and professional electives to students in their second, third, and final year of education. Every department organizes social development activities like working in NGOs, flood relief camps, nursing homes, orphanages, schools for blinds, etc. Students frequently organize blood donation camps, health check-up camps, digital literacy camps, social and public health workshops, etc.

Sensitization of students about the issues of environment, sustainability, gender equalization, human values, and professional ethics is done through conduct of courses under generic and professional electives, special lectures, workshops and conferences. Content plagiarism checks and avoidance of similarity duplications are brought into force with special software tools to maintain ethical values in publishing results and textual reports. Even in team building tasks, various students are grouped, reflecting gender and cultural unbiased parameters.

It is worth mentioning that students are very active in celebrating Environment Day, Earth Day, Water Day, etc., on yearly occasions in appropriate, meaningful manners. Students proactively try to sort the issues of solid waste, dry waste, e-waste, food waste, etc., by involving themselves in suitable procedures. A practice of a green environment is adopted not only by planting trees but also by following low-energy-consuming devices. Solar panels are installed at various places to generate energy consumed on the college campus for heating water and lighting internal road lamps. A wastewater treatment plant is devised as a prototype, while rainwater harvesting is implemented in all significant buildings.

Hence, every other junction of the curriculum and extra-curriculum supports the engagement to promote

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professional ethics and human values with a sensible gesture towards the environment and sustainability.

File Description	Document
Upload the list and description of the courses which address the Gender, Environment and Sustainability. Human Values and Professional Ethics into the Curriculum	
Link for Additional Information	View Document

1.3.2 Number of value-added courses for imparting transferable and life skills offered during last five years.

Response: 19

1.3.2.1 How many new value-added courses are added within the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
14	3	0	2	0

File Description	Document
List of value added courses (Data Template)	View Document
Brochure or any other document relating to value added courses	View Document
Any additional information	View Document

1.3.3 Average Percentage of students enrolled in the courses under 1.3.2 above.

Response: 10.96

1.3.3.1 Number of students enrolled in subject related Certificate or Add-on programs year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
736	310	0	198	0

File Description	Document
List of students enrolled	View Document
Any additional information	View Document

1.3.4 Percentage of students undertaking field projects/ internships / student projects (Data for the latest completed academic year)

Response: 16.64

1.3.4.1 Number of students undertaking field projects / internships / student projects

Response: 372

File Description	Document
List of programs and number of students undertaking field projects / internships / student	View Document
projects (Data Template)	

1.4 Feedback System

1.4.1 Structured feedback for design and review of syllabus – semester-wise / year-wise is received from 1) Students, 2) Teachers, 3) Employers, 4) Alumni

Response: A. All 4 of the above

File Description	Document
Any additional information	View Document
Action taken report of the Institution on feedback report as minuted by the Governing Council, Syndicate, Board of Management	View Document
URL for stakeholder feedback report	View Document

1.4.2 The feedback system of the Institution comprises of the following:

Response: A. Feedback collected, analysed and action taken and report made available on website

File Description	Document	
Any additional information	View Document	
URL for stakeholder feedback report	View Document	

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average Enrolment percentage (Average of last five years)

Response: 106.44

2.1.1.1 Number of students admitted year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
605	644	689	695	720

2.1.1.2 Number of sanctioned seats year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
630	630	630	630	630

File Description	Document
Institutional data in prescribed format (Data Template)	View Document

2.1.2 Average percentage of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy) during the last five years (exclusive of supernumerary seats)

Response: 105.79

2.1.2.1 Number of actual students admitted from the reserved categories year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
291	296	343	419	423

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
Any additional information	View Document

2.2 Catering to Student Diversity

2.2.1 The institution assesses the learning levels of the students and organises special Programmes for advanced learners and slow learners

Response:

The institutional assessment is relative if the number of student batch sizes opting for a specific course is more than or equal to fifteen. It is quite possible to assess the learning levels of a student within a group with certain expectations than to assess as fail or pass criteria. The assessment is often subjective to specific predefined criteria framed into the rubrics. The continuous assessment pattern of the Institute helps to identify advanced and slow learners in a particular batch of students or even across the batches. The assessment pattern supports the requirement of OBE by having the provision attainment calculation of the class. This student attainment index to the class attainment threshold helps to identify individual students' performance if 'excellent,' 'good,' 'satisfactory,' or 'needs improvement.'

A mechanism exists for earning additional credits to advanced learners in Value Added Courses (VAC) of a few credits imparting knowledge in recent technologies. The individual VAC can further be grouped to offer a Minor certification Program with specific technological skills. As per the announcement by AICTE in 2018, WCE has initiated Minor Certification Program equivalent to twenty additional credits. Such a VAC and/or Minor certification is helpful for the advanced learner for their career opportunities at global levels. To date, two Minor Programs have been successfully implemented and awarded with a certificate for the Minor batch 2019-2022 in CSE and AI-ML.

A provision of an additional Honours Program is under the necessary approval process.

Simultaneously in this competitive world, it is not sufficient to rely just on classroom teaching for an average learner. Hence, supporting learning material is made available to all students in the form of Virtual labs, MOOC, recorded lectures, NPTEL, Coursera, etc. Few attempts are made to provide an academic YouTube channel and Impartus facility. Platforms like Google Class, Moodle, Edpuzzle, etc., provide additional content to the students that they can refer to frequently. Individual connection is established with every student for one-to-one questioning and receiving recorded answers from every student using those platforms. Additionally, a few make-up classes are arranged for weak learners, as extra revision classes with eight weeks duration per course.

Student groups like ACCESS, SAIT, PACE, SOFTA, ELESA, MESA, etc., and student chapters like ACM are also actively training the students. Under the group activity, senior students arrange special coaching for juniors to enhance their academic, technical, presentation, and other skill sets.

Thus, continuous attempts are in force through training for specific learners and provisions of a few additional programs.

File Description	Document	
Any additional information	<u>View Document</u>	
Link for Additional Information	View Document	

2.2.2 Student - Full time teacher ratio (Data for the latest completed academic year)		
Response: 19:1		
File Description	Document	
Any additional information	View Document	

2.3 Teaching-Learning Process

2.3.1 Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences

Response:

Walchand College of Engineering has proved its significant initiative for instigating various learning methodologies since its academic autonomy i.e., 2007-08. The experimental and experiential teaching-learning drives have developed a mature process to define student-centric methods for student participative leanings. The problem-solving methodologies involve open book and a wide range of solutions to attempt for every other option to arrive at optimal or near-optimal solutions. The collaborative and cooperative approach is recommended for specific problems where diverse levels of skill sets are required.

The students are grouped into teams and are asked to visit the actual site or the location to understand the problem instead of having a theoretical interpretation. A team is normally led by a staff advisor and industry expert wherever necessary. Along with the final year mega project, a provision of additional mini projects is made in the program curriculum from the fourth semester. Those mini-projects are the counterparts of classroom learning. This blended learning has proved to gain necessary exposure to the project management and software engineering cycles.

The rich history of the last thirty years' consecutive ingenuity of college is resonated by arranging national-level technical completion every year under the event titled 'VISION.' It is one of the remarkable technosocietal events of the college that itself is the characteristic inscription of WCE Sangli. A series of organizing Hackathons and Ideathon proceedings as a host institute through the innovation cell, simultaneously attaining exceeding performances in the analogous events offered by other leading institutes, are exhibiting students' exceptional abilities. It is worth mentioning that the institute has a total of fourteen student clubs having weekly event organizations for transferring knowledge and skills from senior students to junior students. The expanded journey of personality advancement under 'PACE' has given the confidence to arrange the program PRUDENCE at the international level as well. At the same time, other national-level events like IMPULSE, AAKAR, TECHUMEN, ROBOTICS, etc., are further showcasing occasions to demonstrate learning experiences. Walchand Linux User Group ('WLUG) is consistently encouraging and contributing to safer operating systems along with web development competitions like 'D-Jango'. The successive achievements in 'BAHA' vehicular competition is another example where students can excel in extra-curricular activities through the contents concealed in the curriculum aiming participative learning and problem-solving methodologies.

File Description	Document	
Any additional information	<u>View Document</u>	
Link for Additional Information	View Document	

2.3.2 Teachers use ICT enabled tools including online resources for effective teaching and learning process.

Response:

Higher education programs, including engineering programs, are expected to use prominent ICT tools, and such guidelines are given by AICTE as well. Walchand College of Engineering, Sangli, is an autonomous institute with Government aid. This Institute has also proved its proactive approach to adopting leading advanced tools and technologies for its routine work. With sufficient funds and expertise, the Institute has provided many facilities for a long time. The infrastructure development, specifically IT-enabled mechanisms, is prioritized under TEQIP I, II, and III and department reserve funds.

Around thirty-two classrooms, six seminar halls, two conference rooms, the auditorium 'Tilak Hall,' and a few laboratories are equipped with high-resolution LCD projectors. Additional ten classrooms are furnished with digital boards with necessary interfaces. Six classrooms are supported with the content recording facility 'Impartus' storage mechanism at CLOUD and college servers. A fully customized learning management scheme is being utilized through 'MOODLE.' Online library resources are available to every faculty and student for e-resources. Subscriptions to well-known national and international level learning platforms are made through Coursera, NPTEL, Virtual laboratories, etc. A special laboratory using Apple machines is devised to experience the latest technology. A licensed ZOOM and Microsoft Teams platform connecting to all probable stakeholders with a capacity of around four thousand users is made available. G-suite with domain mail id i.e., username@walchandsangli.ac.in is brought into force for maintaining authorization in legitimate communication. The MAC-based learning platform is provided as an additional competence. A soundproof recording studio is developed for content creation and audiovideo recording with modern camera and editing tools. Many teachers have their academic YouTube channel where content publishing is possible. Google classrooms and platforms like 'EDPUZZLE' allow for establishing a one-to-one correspondence between a teacher and an individual student. The entire campus has high-speed Internet and surveillance system that can be interfaced with small working modules with necessary operational activities. The central exam section utilizes dedicated, customized software for exam preparation, record keeping, question paper designing, answer book scanning, and result processing.

Thus, every corner of the Institute is engaging ICT tools to effectively implement learning resources and allied tasks on the college campus.

File Description	Document
Any additional information	<u>View Document</u>
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	View Document

2.3.3 Ratio of students to mentor for academic and other related issues (Data for the latest completed academic year)

Response: 21:1

2.3.3.1 **Number of mentors** ??????????????????????

Response: 109

File Description	Document
Upload year wise, number of students enrolled and full time teachers on roll	View Document
Circulars pertaining to assigning mentors to mentees	View Document
Circulars pertaining to assigning mentors to mentees	View Document
Any additional information	View Document

2.3.4 Preparation and adherence of Academic Calendar and Teaching plans by the institution

Response:

The institute has an academic culture to outline the semester activities in advance of the commencement of every semester in the form of an academic calendar. This academic calendar is the roadmap for all academic and allied activities and should get approved by the highest academic committee, Academic Council.

In a broad sense, a year, i.e., fifty-two weeks, are divided equally into twenty-six weeks for odd and even semesters each. Mid-semester exam (MSE) and end-semester exam (ESE) are two significant milestones where fourteen-week classroom teaching is usually accommodated. In short, after registration for the semester courses, students undergo seven weeks of classroom teaching and appear for MSE. After MSE, again, seven weeks of classroom teaching led toward ESE. Within a given period of seven weeks, an In-Semester evaluation (ISE) is to be conducted. All expected dates for these activities with minute instructions are supposed to get indicated in the academic calendar. A provision of student activities, cultural events, frequency of meeting schedules, question paper evaluation and assessment duration, result declaration, re-exam dates, and all other concerned activities of UG, PG and Ph.D. are to be announced in the academic calendar. Apart from a minimum of fourteen weeks of actual teaching engagement, excluding around thirteen government holidays, one-week MSE and two weeks of ESE are engaged. The remaining four to five weeks are reserved for industry drives, summer, and winter internship activities, make-up classes for academically weak students, etc.

WCE is following all above mentioned expectations in days and weeks duration. The academic calendar is available to every stakeholder and published on the college website for occasional reference. It has become a usual practice that, at the beginning of each semester, individual class timetables are prepared to the reserved time list given with the planned and published academic calendar.

Even academic project durations, industry visits, workshops, seminars, guest talks, and other academic sessions are defined to the given schedules. On similar grounds, non-academic activities, cultural events, etc., are scheduled by not disturbing the declared dates of academic engagement. In short, faculty and students plan their schedules strictly, adhering to this calendar.

File Description	Document
Upload Academic Calendar and Teaching plans for five years	View Document
Any additional information	<u>View Document</u>
Link for Additional Information	View Document

2.4 Teacher Profile and Quality

2.4.1 Average percentage of full time teachers against sanctioned posts during the last five years

Response: 126.81

File Description	Document
Year wise full time teachers and sanctioned posts for 5 years(Data Template)	View Document
List of the faculty members authenticated by the Head of HEI	View Document

2.4.2 Average percentage of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. during the last five years (consider only highest degree for count)

Response: 34.07

2.4.2.1 Number of full time teachers with *Ph.D./D.M/M.Ch./D.N.B Superspeciality/D.Sc./D'Lit.* year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
44	41	37	47	41

File Description	Document
Institutional data in prescribed format (Data Template)	View Document

2.4.3 Average teaching experience of full time teachers in the same institution (Data for the latest completed academic year in number of years)

Response: 15.98

2.4.3.1 Total experience of full-time teachers

Response: 1886

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Link for Additional Information	View Document

2.5 Evaluation Process and Reforms

2.5.1 Average number of days from the date of last semester-end/ year- end examination till the declaration of results year-wise during the last five years

Response: 26.2

2.5.1.1 Number of days from the date of last semester-end/ year- end examination till the declaration of results year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
34	36	16	19	26

File Description	Document
Institutional data in prescribed format (Data Template)	View Document
Link for Additional Information	View Document

2.5.2 Average percentage of student complaints/grievances about evaluation against total number appeared in the examinations during the last five years

Response: 3.65

2.5.2.1 Number of complaints/grievances about evaluation year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
1	0	23	34	72

File Description	Document
Number of complaints and total number of students appeared year wise	View Document
Link for Additional Information	View Document

2.5.3 IT integration and reforms in the examination procedures and processes including Continuous Internal Assessment (CIA) have brought in considerable improvement in Examination Management System (EMS) of the Institution

Response:

The examination cell delivers continuous efforts to facilitate students and teachers, in examinations, by providing state-of-the-art facilities for contributing to the institute's vision. Our mission is to implement and optimize our online examination system. Walchand College of Engineering, Sangli, followed the smooth conduction of examinations before the pandemic in offline mode. It included the following subprocesses,

- 1. The course faculty submits hard copies of question papers to the examination cell.
- 2. Exam conducted in offline mode using pen and paper.
- 3. Assessment of answer sheets
- 4. Manually entering question-wise marks of each exam of subjects in excel files by the faculty
- 5. Paper showing for two-way verification and marks declaration
- 6. Offline Grievance process
- 7. Manual Grade card generation

The onset of the pandemic posed several challenges for the smooth conduction of examinations due to different constraints like social distancing, the need to conduct online exams, in-time result processing, and result declaration, which led to the need to have an automated online system.

A cost-effective and efficient cloud and web-based system was procured and is also under customization. Initially, all examinations were conducted using objective question banks. Now the automated examination system supports

- 1. Online Paper Setting order generating system.
- 2. Supports online examination with both objective and descriptive type question banks
- 3. Online Submission of question banks via faculty portal.
- 4. Answer sheet scanning system for documentation and assessment.
- 5.On Screen Marking assessment system along with online two-way verification and reassessment systems.
- 6. Online Paper showing system.

- 7. Downloading question-wise marks option to faculty in their login
- 8. Automatic marks sync from the assessment to the result processing module of the system.
- 9. Different dashboards for the Examination committee (i.e., CoE, DCoE, etc.) to monitor and manage examination activities
- 10. Faculty Dashboard for Evaluation, question bank uploading, marks uploading
- 11. Student login for attending the examination, form filling process, and dashboard to view marks and grades.
- 12. Automatic Grade card generation

All the above processes have inbuilt required security and authentication based on the roles of the user. These features make the system extremely robust and, in the future, will aid in achieving total automation with respect to all aspects of the examination.

2.6 Student Performance and Learning Outcomes

2.6.1 Programme and course outcomes for all Programmes offered by the institution are stated and displayed on website and communicated to teachers and students.

Response:

As per the instructions given by the AICTE, individual courses, and programs are to be assessed based on the action verbs to attain Outcome Based Education (OBE). Institute's Vision, Mission, Objectives (VMO), and Quality Policy are the prime focus for every program all six departments offer.

The program educational objectives (PEO), program outcomes (PO), program specific outcomes (PSO), and course outcomes (CO) are defined as per OBE requirements. The program outcomes are framed with the significant goals:

- Achieve excellence in learning and research through continual improvement in both content and delivery of academic programs.
- Promote close interaction among industry, faculty, and students to enrich learning and enhance student career opportunities.
- Develop state-of-the-art laboratories and other infrastructure commensurate with the need to deliver quality education and research services.
- Strengthen the Institution through a network of alumni and optimize the use of resources by leveraging inter-departmental capabilities.
- Provide opportunities and ensure regular skill upgradation of faculty and staff through structured training programs.

Accordingly, department-level PO statements are framed. Graduated students are thus enabled to apply engineering knowledge and identify-formulate-analyze critical problems. Furthermore, they should be able to develop solutions for complex engineering problems through investigations, using modern tools, understanding societal-environmental-cultural-ethical issues, working in teams for sustainable solutions, and using program-specific expertise.

Each course under every program is identified into the broad vertical of core professional, elective

professional, knowledge transferable open elective, hands-on based projects, or humanity & science courses. Six Bloom's cognitive levels are used to define expected action and hence outcome out of the said course. Bloom's revised taxonomy is considered for framing each CO to the course category. Practice-based learning is recommended mainly for applying, analyzing, evaluating, and creating levels. For skill assessment, affective and psychomotor domains are concentrated.

All COs and their mapping with POs are identified in three levels. The content is available to every stakeholder over MOODLE and the college website. Hence, instead of listing all course CO in this description, it is recommended to observe the details at a common platform i.e., college website indicating departments and academic sections with thorough syllabi.

File Description	Document
Upload COs for all courses (exemplars from Glossary)	View Document
Any additional information	<u>View Document</u>
Link for Additional Information	View Document

2.6.2 Attainment of programme outcomes and course outcomes are evaluated by the institution.

Response:

As described in the earlier section, POs, PSOs, and COs are defined for each program and course under that program. Looking at the category of the course; if it is a hardcore or professional elective, or skill-based project course, the expectations for the outcome are mapped using graduate attributes. The sole intention of OBE is the articulated idea of what students are expected to know and be able to do so. The expectations are further categorized into three levels. These three levels, viz. low (L1), medium (L2), and high (L3), are used to map CO levels to PO. Care is taken that no single CO is mapped to different POs with the same level. Three to six COs per course are defined. A justification is provided for mapping and level of mapping by associated interpretation of CO to the defined graduate attribute with specific indicators and competency as per AICTE Examination Reforms document.

Once the examination assessment is over, individual students' marks for a particular question attempt with assigned CO to that question are tabulated. The success ratio is obtained for the correct answers. The valid attempts' percentage value is calculated. And a number of students exceeding the pre-defined expected threshold of the course and hence for cumulative courses i.e., program threshold, is calculated. Depending on the percentage calculation of this attainment to the threshold, a subjective evaluation is declared in linguistic parameters like 'excellent,' 'satisfactory,' or 'needs improvement.' Few attempts are made to calculate attainment further to the mapping level of CO to PO by assigning equivalent weights to the levels L1, L2, and L3. The intellectual thinking ability is divided into six cognitive levels that are used to measure the attained knowledge by students. Specific and measurable terms like accuracy or quality or quantity and time or space- constraints are used to attain affective domain skills. The result of student engagement in the learning activity is used to attain the student's attitude in the psychomotor domain. This attainment is declared as direct attainment.

Few mechanisms are implemented through questioning and feedback sessions for obtaining indirect attainment. The direct-to-indirect attainment ratio is maintained at 70:30 or 80:20 for presenting the overall attainment of the course and the program. These calculations are maintained with course books and are reviewed with academic audits. Department advisory board (DAB) members generally regulate these activities and suggest improvement in the attainment mechanisms.

File Description	Document
Any additional information	View Document

2.6.3 Pass Percentage of students(Data for the latest completed academic year)

Response: 95.4

2.6.3.1 Total number of final year students who passed the examination conducted by Institution.

Response: 601

2.6.3.2 Total number of final year students who appeared for the examination conducted by the Institution.

Response: 630

File Description	Document
Upload List of Programmes and number of students passed and appeared in the final year examination(Data Template)	View Document
Link for additional information	View Document
Link for the annual report	View Document

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response:

_		
File Description	Document	
Upload database of all currently enrolled students	<u>View Document</u>	
Upload any additional information	View Document	

Criterion 3 - Research, Innovations and Extension

3.1 Promotion of Research and Facilities

3.1.1 The institution's Research facilities are frequently updated and there is a well defined policy for promotion of research which is uploaded on the institutional website and implemented

Response:

Policy for the Promotion of Research

The objective of Research & development (R&D) initiatives undertaken by Walchand College of Engineering (WCE) Sangli is to build research careers, develop innovative human potential, support strengthening the knowledge foundation, and promote the creation of new applications. All education, research, and innovation of this Institute should aim to be of a high standard. The goal of creating technological and social innovations has emerged alongside R&D-based activities.

WCE Sangli is a recognized research center of Shivaji University. WCE Research center also admits QIP Ph. D. and AICTE-ADF students. Presently around 60 Ph. D students are involved in active research. The Research and Development cell is established in the college to achieve a high-quality research ambience and Research work. The director of the Institute heads the research and development cell. The other cell members are HODs of all the departments, senior faculty nominated by the director, and nominees from industry and university. Dean R&D (ex officio member) - would be the cell secretary. The following are the primary responsibilities

- i) It should plan and execute the research training activities.
- ii) Motivate all Faculties to pursue research in their respective areas of expertise
- iii) IPR and consultancy activities related to R&D
- iv) Disbursement of Institute Research Funds
- v) To monitor and enhance the quality of research programs, projects, and the research infrastructure within the Institute, including training research scholars.
- vi) Formulate incentive schemes for promoting research activities with teachers and students/scholars

Each department has one industry-sponsored lab with state-of-the-art equipment for the research.

Research funding is provided for the research projects of faculty and students. Faculty and PG students are offered financial assistance for attending the National conferences to present their research papers. Financial aid to the faculty is provided to submit the paper and attend the conference aboard. Institute has well defined IPR policy to protect the Intellectual property rights of faculty and students. Institute has provided financial assistance to file patents. Financial assistance is provided to conduct National conferences, workshops, faculty, and students training programs.

Financial assistance is provided to the students to participate in the following National events.

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- i) E-BAJA is an intercollegiate design competition. Teams of students need to design and build an electric powered All-Terrain Vehicle (ATV) that has a Traction motor of 48V with a fully automatic transmission and battery pack.
- ii) Efficycle competition is an intercollegiate design competition for undergraduate and graduate students where teams have to design and fabricate an energy-efficient, entirely human-powered three-wheeled vehicle
- iii) M-Baja competition is an intercollegiate design competition. Design of an all-terrain vehicle with a diesel engine.
- iv) Go-Cart competition is an open-wheel auto.

File Description	Document
Any additional information	<u>View Document</u>
URL of Policy document on promotion of research uploaded on website	View Document

3.1.2 The institution provides seed money to its teachers for research (average per year, INR in Lakhs)

Response: 13.7

3.1.2.1 The amount of seed money provided by institution to its faculty year-wise during the last five years (INR in lakhs).

2021-22	2020-21	2019-20	2018-19	2017-18
0	8.24	23.26	37	0

File Description	Document
Minutes of the relevant bodies of the Institution	View Document
List of teachers receiving grant and details of grant received	View Document
Budget and expenditure statements signed by the Finance Officer indicating seed money provided and utilized	View Document
Any additional information	View Document

3.1.3 Percentage of teachers awarded national / international fellowship for advanced studies/research during the last five years

Response: 3.57

3.1.3.1 The number of teachers awarded national / international fellowship for advanced studies / research year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
3	5	5	5	4

File Description	Document
List of teachers and their international fellowship details	View Document
e-copies of the award letters of the teachers	View Document

3.2 Resource Mobilization for Research

3.2.1 Grants received from Government and non-governmental agencies for research projects, endowments, Chairs in the institution during the last five years (INR in Lakhs)

Response: 266.08

3.2.1.1 Total Grants from Government and non-governmental agencies for research projects, endowments, Chairs in the institution during the last five years (INR in Lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
125.18	27.32	42.93	62.25	8.40

File Description	Document
List of project and grant details	View Document
e-copies of the grant award letters for research projects sponsored by government and non-government	View Document

3.2.2 Percentage of teachers having research projects during the last five years

Response: 3.73

3.2.2.1 Number of teachers having research projects during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
4	4	7	4	4

File Description	Document
Names of teachers having research projects	View Document
Any additional information	View Document

3.2.3 Percentage of teachers recognised as research guides

Response: 24.58

3.2.3.1 Number of teachers recognized as research guides

Response: 29

File Description	Document
Upload copies of the letter of the university recognizing faculty as research guides	View Document
Any additional information	View Document

3.2.4 Average percentage of departments having Research projects funded by government and non-government agencies during the last five years

Response: 53.33

3.2.4.1 Number of departments having Research projects funded by government and non-government agencies during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
3	2	4	3	4

3.2.4.2 Number of departments offering academic programes

2021-22	2020-21	2019-20	2018-19	2017-18
6	6	6	6	6

File Description	Document
Supporting document from Funding Agency	View Document
List of research projects and funding details	View Document

3.3 Innovation Ecosystem

3.3.1 Institution has created an eco system for innovations, creation and transfer of knowledge supported by dedicated centers for research, entrepreneurship, community orientation, Incubation etc.

Response:

Innovation, Incubation, and Entrepreneurship Cell (WCE-IIE Cell)

The institute has set up the IIE Cell during the academic year 2015-16 with the following objectives:

- 1. To create awareness among WCE students for innovation, incubation, and entrepreneurship.
- 2. To provide a platform for promoting ideas/projects to product development/commercialization.
- 3. To set up the pre-incubation space for startups.
- 4. To set up the idea lab and incubation center.
- 5. To assist the WCE students in getting funds / financial support under various schemes from venture capitalists, industries, and Govt. schemes.

The cell has infrastructure scattered across various departments like Startup Enclave: physical cubical space for incubates - CSE Dept, learning factory – Mech Dept, Product Innovation Lab – Mech Dept. and research labs in each dept. The cell organizes various activities every year like a hackathon, ideation, seminars, guest lectures, and showcasing (exhibition) of projects/ideas/research of students/faculty members. In this context, the institute has signed MoU with various industries like Perfect Consultants, Kolhapur, Samruddhi TBI Foundation, and Sangli.

The IIE cell has promoted various early-stage startups in the IT sector and 3D printer manufacturing initiatives. The cell promotes state and national-level competitions. The WCE students are consistent winners/participants in Smart India Hackathon, Seneca (Canada) -COEP Innovative Project Competition, TCS – DISQ, and Maharashtra Startup Yatra.

File Description	Document
Upload any additional information	<u>View Document</u>
Paste link for additional information	View Document

3.3.2 Number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR),entrepreneurship, skill development during the last five years.

Response: 119

3.3.2.1 Total number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR), entrepreneurship, skill development year-wise during the last five years.

2021-22	2020-21	2019-20	2018-19	2017-18
33	20	30	21	15

File Description	Document
Report of the event	View Document
List of workshops/seminars during last 5 years	View Document

3.4 Research Publications and Awards

3.4.1 The Institution ensures implementation of its stated Code of Ethics for research through the following: 1. Inclusion of research ethics in the research methodology course work 2. Presence of Ethics committee 3. Plagiarism check through software 4. Research Advisory Committee

Response: B. 3 of the above

File Description	Document
Any additional information	View Document
Link for additional information	View Document

3.4.2 Number of Ph.D's registered per teacher (as per the data given w.r.t recognized Ph.D guides/supervisors provided at 3.2.3 metric) during the last five years

Response: 2.07

3.4.2.1 How many Ph.Ds are registered within last 5 years

Response: 60

3.4.2.2 Number of teachers recognized as guides during the last five years

Response: 29

File Description	Document
List of PhD scholars and their details like name of the guide, title of thesis, year of award etc	View Document
URL to the research page on HEI web site	View Document

3.4.3 Number of research papers per teachers in the Journals notified on UGC website during the last five years

Response: 3.44

3.4.3.1 Number of research papers in the Journals notified on UGC website during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
73	100	86	74	91

File Description	Document
List of research papers by title, author, department, name and year of publication	View Document

3.4.4 Number of books and chapters in edited volumes / books published per teacher during the last five years

Response: 2.76

3.4.4.1 Total number of books and chapters in edited volumes/books published and papers in national/international conference proceedings year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
21	34	56	113	117

File Description	Document
List books and chapters in edited volumes / books published	View Document

3.4.5 Bibliometrics of the publications during the last five years based on average citation index in Scopus/ Web of Science or PubMed

Response:

File Description	Document
Bibliometrics of the publications during the last five	View Document
years	

3.4.6 Bibliometrics of the publications during the last five years based on Scopus/ Web of Science - hindex of the Institution

Response:

File Description	Document
Bibiliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	View Document
Any additional information	View Document

3.5 Consultancy

3.5.1 Revenue generated from consultancy and corporate training during the last five years (INR in Lakhs).

Response: 779.3

3.5.1.1 Total amount generated from consultancy and corporate training year-wise during the last five years (INR in lakhs).

2021-22	2020-21	2019-20	2018-19	2017-18
219.28	164.59	181.37	136.22	77.84

File Description	Document
List of consultants and revenue generated by them	View Document
Audited statements of accounts indicating the revenue generated through consultancy and corporate training	View Document
Any additional information	View Document

3.5.2 Total amount spent on developing facilities, training teachers and staff for undertaking

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consultancy during the last five years (INR in Lakhs).

Response: 196.67

3.5.2.1 Total amount spent on developing facilities, training teachers and staff for undertaking consultancy during the last five years (INR in Lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
35.78992	3.19471	97.15185	36.0999	24.43600

File Description	Document
List of facilities and staff available for undertaking consultancy	View Document
Audited statements of accounts indicating the expenditure incurred on developing facilities and training teachers and staff for undertaking consultancy	View Document

3.6 Extension Activities

3.6.1 Extension activities are carried out in the neighbourhood community,-sensitising students to social issues, for their holistic development, and impact thereof during the last five years

Response:

WCE has 13 student clubs that conduct at least one social outreach activity annually. These include visiting unprivileged schools and training them in new technology trends, visiting orderly shelter homes (Wrudhashram) and spending time with them, celebrating birthdays & creating joyous moments in orphan/differently abled (divyang) schools, etc. WCE Rotaract club organizes a blood camp every year in collaboration with 2/3 Sangli district blood banks, and around 160 plus packets bold is donated every year for humanity's cause. ACSES (Association of CSE Students) conducts a unique SITAC (Social IT Awareness Campaign) initiative led by Faculty advisor in nearby unprivileged schools and trains students and their teachers about IT technology and encourages them about engineering opportunities in the upcoming future. Since 2014 almost 16000 school children are benefitted from this program.

Another extension activity example from the department of Civil Engineering student's organization (CESA) is the testing of water quality and water treatment of Danoli village at Danoli from 22-Mar-2019 to 22-Mar-2019. Civil Engineering students accomplished the activity under guidance of CESA staff advisor. The institute sponsored part of this social initiative through TEQIP III funding.

CESA staff advisor has also undertaken a TEQIP III-sponsored mentoring program to Guide Sangli-Miraj-Kupawad Municipal Corporation Civil Contractors in the field of Concrete Technology on 26th November 2019. As per the discussions with the City Engineer of SMKC, contractors working on various activities

with the corporation were willing to improve the quality of concrete works because most contractors were not civil engineers. So WCE felt that there is a great need of mentoring contractors regarding the basics of concrete technology. In this regard to give basic knowledge of concrete technology regarding the importance of concrete mix design, material quality, and use of different admixtures, this mentoring program was arranged. Also some important material quality tests were explained and quick tests should be performed on-site has explained.

As per AICTE mandate, Induction Program is conducted in college for first-year newly admitted students every year. Eminent speakers are invited to guide students on universal human values, cultural and skill bases, health awareness, and sports activities. Students are believed to imbibe this learning in their four years of engineering journey to march as successful engineers and genuine human beings. Students are motivated by ECAC to participate in extracurricular activities on campus as well in various platforms such as IITs Mood Indigo, Tech-fest, etc. Also, the WCE Sports club is functional in boosting sports activities at zonal, inter-zonal, state, and national levels in sync with the WCE gymkhana committee led by ECAC.

File Description	Document
Upload Any additional information	View Document

3.6.2 Number of awards and recognition received by the Institution, its teachers and students for extension activities from Government / Government recognised bodies during last five years

Response: 46

3.6.2.1 Total number of awards and recognition received for extension activities from Government/ Government recognised bodies year-wise during the last five years.

2021-22	2020-21	2019-20	2018-19	2017-18
7	6	10	15	8

File Description	Document
Number of awards for extension activities in last 5 year	View Document
e-copy of the award letters	View Document

3.6.3 Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years

Response: 5

3.6.3.1 Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
1	1	1	1	1

File Description	Document
Reports of the event organized	View Document
Number of extension and outreach Programmes conducted with industry, community etc for the last five years	View Document
Any additional information	View Document

3.6.4 Average percentage of students participating in extension activities listed at 3.6.3 above during the last five years

Response: 3.86

3.6.4.1 Total number of students participating in extension activities listed at 3.6.3 above year-wise during the last five years.

2021-22	2020-21	2019-20	2018-19	2017-18
100	0	120	120	100

File Description	Document
Average percentage of students participating in extension activities with Govt or NGO etc	View Document

3.7 Collaboration

3.7.1 Number of Collaborative activities per year for research/ faculty exchange/ student exchange/ internship/ on -the-job training/ project work

Response: 10.2

3.7.1.1 Total number of Collaborative activities per year for research/ faculty exchange/ student exchange/internship/on -the-job training/ project work

2021-22	2020-21	2019-20	2018-19	2017-18
18	12	8	7	6

File Description	Document
Number of Collaborative activities for research, faculty etc	View Document
Copies of collaboration	<u>View Document</u>
Any additional information	View Document

3.7.2 Number of functional MoUs with institutions of national, international importance, other institutions, industries, corporate houses etc. during the last five years (only functional MoUs with ongoing activities to be considered)

Response: 21

3.7.2.1 Number of functional MoUs with institutions of national, international importance, other Institutions, industries, corporate houses etc. year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
5	7	2	5	2

File Description	Document
e-copies of the MoUs with institution/ industry/ corporate house	View Document
Details of functional MoUs with institutions of national, international importance, other Institutions etc during the last five years	View Document

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1 The Institution has adequate infrastructure and physical facilities for teaching-learning. viz., classrooms, laboratories, computing equipment etc.

Response:

The college was established in 1947. Since then, the adequate availability of physical infrastructure has been duly identified, planned, and constructed accordingly. The college imparts six UG programs and ten PG programs, as mentioned in Criterion 1. Each of the six departments is provided with built-up space as per the requirements of AICTE in the form of classrooms, laboratories, tutorial, and seminar rooms, staff rooms, and a departmental library. In addition to this, there are central facilities in the form of a library, computing facility, canteen, student recreational facilities, and auditorium. Allied areas in the form of hostels and mess cater to the need of students. The staff quarters provide residing facilities for teaching and non-teaching staff. The campus also offers appropriate parking facilities for two-wheeler and four-wheeler vehicles. Some of the common areas are equipped with vending machines for beverages in addition to two kiosks.

Sr. No. Ruilt-up area (Rounded off in sa **Department/Amenity**

Table 4.1. Details	or Dunt up	riica

Table 4.1. Details of Ruilt-up Area

51.110.	Department/Amemty	Dunt-up area (Nounded on in sq.
		m.)
1	Civil Engineering	2624
2	Mechanical Engineering	5647
3	Electrical Engineering	1863
4	Electronics Engineering	1481
5	Computer Science and Engineering	525
6	Information Technology	381
7	Library	4680
8	Central Computing Facility	506
9	Canteen	238
10	Student recreational facility	763
11	Auditorium	466
12	Hostel	9515
13	Mess	1301

The central facilities are common areas for all the institutional components and are organized, developed, and maintained by institute-level building planning and maintenance cells. Every college department has a Seminar Hall of different capacities in addition to a common auditorium and open-air theatre as a central facility. Any department may utilize these depending on availability and requirement for conducting guest lectures, workshops, training programs, and co-curricular and extra-curricular activities.

Every department has its own office, and it is under the control of the HoD of the respective department. The departments also have a common room as a joint meeting hall. A standard facility is at the central level for women students and staff.

Most structures comprising building infrastructure are single-storied and do not impair the circulation of

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even disabled persons. The library building is double-storied and is provided with a ramp to meet the requirement in the form of horizontal and vertical circulation of disables. The classroom quadrangle is also supplied with a ramp at entry points for easy climbing of wheelchairs. The main building, which serves as an administrative complex, is a double-storied old structure proposed to refurbish with a lift.

File Description	Document
Upload Any additional information	View Document

4.1.2 The institution has adequate facilities for cultural activities, yoga, games and sports (indoor & outdoor); (gymnasium, yoga centre, auditorium, etc.,)

Response:

The WCE Gymkhana provides excellent infrastructure for indoor and outdoor sports and related extracurricular activities. Spacious playgrounds surrounded by scenic greenery, a jogging track, and wellequipped gymnasiums are the attractions of the College. The Gymkhana provides facilities for outdoor games like Cricket, Volleyball, Basketball, Football, Kabbadi, Kho-Kho, Lawn tennis, and Athletics (Running, Shot-put, Discus throw, Javelin throw, etc.) at the main ground. Facilities in indoor games like Badminton, Table-Tennis, Carom, and Chess are also made adequately available to the students. Besides indoor and outdoor games, WCE Gymkhana provides a separate facility of a well-equipped fitness center for boys, girls, and the college staff. Gymkhana provides a facility of 800-meter jogging track for students and college staff. Sports events are organized yearly with annual social gatherings at the college level. Nearly 2000 students participate in the selection process of various sports to select the best players to represent the College at the Inter-Collegiate, District, State, and National Level Tournaments. Participation in sports keeps the students physically fit and develops the sportsman spirit, crucial to living a happy life.

File Description	Document
Upload any additional information	View Document
Geotagged pictures	<u>View Document</u>

4.1.3 Percentage of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc. (Data for the latest completed academic year)

Response: 100

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 38

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

4.1.4 Average percentage of expenditure for infrastructure augmentation excluding salary during the last five years (INR in Lakhs)

Response: 56.1

4.1.4.1 Expenditure for infrastructure augmentation, excluding salary year-wise during last five years (INR in lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
293.3	187.01	146	375	226

File Description	Document
Upload Details of Expenditure, excluding salary during the last five years	View Document
Upload audited utilization statements	<u>View Document</u>

4.2 Library as a Learning Resource

4.2.1 Library is automated using Integrated Library Management System (ILMS)

Response:

The Ajit Gulabchand Central Library is well-equipped with new libraries and information science trends, including a well-defined digital library. We have an electronic security system, Surveillance system, and Barcoding system, and the library provides computerized web base library services to all readers. We have subscribed to 1700+ full-text online journals, and many thousand open-source e-journals are available on our web-based digital library along with many self-learning e-resources. (i.e., eBooks, eJournals)

The Ajit Gulabchand Central Library was fully automated in 2014 with SLIM21: Library Management Software developed by Algorithms Consultants Pvt. Ltd., Pune, Maharashtra, India. The library is fully integrated with Barcode System, where the user can enter, search the catalog, borrow, and return books can be done on his own. The library is under closed-circuit television (CCTV) surveillance Cameras.

Library Automation: All the active book collection is updated in the library software database, and the online public access catalog (OPAC) is available for students and faculty members. The issue and return of the book have been activated in the library software

SLIM21: SLIM21 has fully featured ILMS software for Libraries of varying types and sizes, volunteers, and support companies worldwide. AGC library is fully automated using the

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SLIM21 software by using the following modules for regular activities.

SLIM21 Software Modules Cataloguing, Circulation, Acquisitions, Serials, OPAC (Online Public Access Catalogue), Web OPAC (Web Online Public Access Catalogue), Installed in 2014 and Costing Rs.2,62,500/-

All reading material, including Books, Bound Volumes of Periodicals, Dissertations, and Non-Print Material such as C.D.s etc., are included in the library database. It provides Intranet based Online Public Access Catalogue campus-wide facility to all readers and allows open access to all members.

Name of the ILMS software: SLIM21

Nature of automation (fully or partially): Fully Automated

Version: 3.4.0.29143

Year of automation: 2014

Library WebOpac Link: http://10.10.12.108/w27/

Electromagnetic Security System for books.

The library has got the Tattle Tape Security Strips System. The Electromagnetic Tattle Tape Security strips based library asset security system is a proprietary system from 3M TM, 3M TM is the inventor/Developer of the library asset security systems based on the electromagnetic strips

The system includes 3M Tattle tape detection strips for books Model-3M B2, EM detection system with a single corridor and with buried cable kit Model-3M 3501, Electromagnetic tattle tape with security strip based circulation workstation for DE/RE sensitizing tattles Model-3M 942, Costing Rs.14,46,750/-Installed Date.12/06/2008

Knimbus Standalone Remote Access: Knimbus Standalone Remote Access (includes) (1) Mobile App (iOS &Android) (2) Remote Access (3) Library Portal & Access Period: 3 years. The U.G., P.G., Research Students and Faculties need this Knimbus Platform in the covid-19 (Corona Virus) situation and also post covid-19 situations, for their academics and research work. E-Books Springer-1890, GIST Book-435, Nlist INFLIBNET-3135000 available in the library will be made available on this portal which can be accessed from anywhere anytime. E-journals like IEEE ASPP, ASCE, ASME, and other services like nlist.inflibnet.ac.in, DELNET are also available.

File Description	Document	
Upload any additional information	View Document	
Paste Link for additional information	View Document	

4.2.2 Institution has access to the following: 1. e-journals 2. e-ShodhSindhu 3. Shodhganga Membership 4. e-books 5. Databases 6. Remote access to e-resources

Response: A. Any 4 or more of the above

File Description	Document
Institutional data in prescribed format	View Document
Details of subscriptions like e-journals, e-books, e-ShodhSindhu, Shodhganga Membership etc	View Document

4.2.3 Average annual expenditure for purchase of books/ e-books and subscription to journals/ejournals during the last five years (INR in Lakhs)

Response: 20.14

4.2.3.1 Annual expenditure of purchase of books/e-books and subscription to journals/e-journals year wise during last five years (INR in Lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
26.88	15.94	23.73	19.40	14.75

File Description	Document
Details of annual expenditure for purchase of and subscription to journals/e-journals during the last five years	View Document
Audited statements of accounts	View Document

4.2.4 Percentage per day usage of library by teachers and students (foot falls and login data for online access) during the latest completed academic year

Response: 15.93

4.2.4.1 Number of teachers and students using library per day over last one year

Response: 375

File Description	Document
Details of library usage by teachers and students	View Document

4.3 IT Infrastructure

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4.3.1 Institution has an IT policy covering wi-fi, cyber security, etc., and allocated budget for updating its IT facilities

Response:

The Institute has an IT policy for fair and transparent use of various IT resources owned or managed by WCE. Institute IT policy covers faculty, staff, students, alumni, guests, external individuals, departments, hostels, and administrative offices. Due to the policy initiative and setting up of high-end campus-wide network infrastructure, IT resource utilization in the campus has grown rapidly during the last decade. IT policy covers 'IT Resources' like licensed or managed software and hardware and use of the Institute's wired/wireless network via a physical or wireless connection, regardless of the ownership of the computer or device connected to the network. Misusing these resources can result in unwanted risks and liabilities for the Institute. Therefore, these resources are expected to be used primarily for institute-related purposes and in a lawful and ethical way.

Institute provides a substantial annual budget for the upgradation of IT facilities. The recent upgradation in the IT infrastructure at the Institute are as follows:

- 1. Internet Bandwidth: The previous internet bandwidth was 600Mbps, but now it is upgraded with a Reliance Jio 500Mbps (1:1) line connection. The total bandwidth enabled in the Institute is now 1100 Mbps, which consists of RailTel-500mbps, Reliance Jio-500 Mbps, and NKN of 100 Mbps each.
- 2. Wi-Fi facility: To provide seamless Wi-Fi connectivity throughout the college campus, including hostels, Institute has deployed 169 Access Points with Wi-Fi 6 technology solution. The present Access Points are highly secured with the latest WPA3 Wi-Fi security standard delivering robust protection for users.
- 3. Firewall: Previous Sophos XG 330 Firewall is upgraded with high-end features of Sophos XGS 4300.
- 4. CCTV Surveillance System: Institute has also upgraded the campus-wide CCTV Surveillance System with 96 more IP Cameras for the safety and security of all the stakeholders and property. More than 180 CCTV cameras are available on the campus, connected with four 64-channel NVR at the new Data Center.
- 5. Institute has also recently developed a digital content creation studio with the latest technology multimedia device i.e., Apple Mac pc, sound mixer, and different types of video cameras.
- 6. Data Center: Institute has also replaced the old Data Center with a new state of the art new Data Center with redundant power and cooling facilities.
- 7. NMS and Asset Management System (AMS): Institute has recently deployed the NMS and Asset management system for 5000 devices, which allows the Institute to keep track of all institute assets. The AMS also helps to maintain, upgrade, and dispose of all the institute assets.

File Description	Document	
Upload any additional information	<u>View Document</u>	

4.3.2 Student - Computer ratio (Data for the latest completed academic year)

Response: 2:1

File Description	Document	
Upload any additional information	View Document	

4.3.3 Bandwidth of internet connection in the Institution.

Response: ?50 MBPS

File Description	Document
Details of available bandwidth of internet connection in the Institution	View Document

4.3.4 Institution has the following Facilities for e-content development

- 1. Media centre
- 2. Audio visual centre
- **3.Lecture Capturing System(LCS)**
- 4. Mixing equipments and softwares for editing

Response: A. All of the above

File Description	Document	
Upload Additional information	<u>View Document</u>	
Institutional data in prescribed format	View Document	
Link for Additional information	View Document	

4.4 Maintenance of Campus Infrastructure

4.4.1 Average percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component during the last five years

Response: 20.77

4.4.1.1 Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component year wise during the last five years (INR in lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
181.43	188.04	35	18	26

File Description	Document
Upload any additional information	View Document
Details about assigned budget and expenditure on physical facilities and academic facilities	View Document
Audited statements of accounts	View Document

4.4.2 There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.

Response:

The college has Campus Coordination Committee comprising a Chairperson, Seven regular teaching staff as a member, and a Member Secretary. The external agency is appointed to deal with the housekeeping work on campus. The routine maintenance is looked after by this cell. Moreover, if any maintenance-related issues arise, the department sends requests to Campus Coordination Committee (CCC). According to the nature of maintenance work, an in-house or external agency is appointed to work through the central store to execute the maintenance work. Construction and refurbishment of works at individual departments and central common facilities are planned and executed through the services of the building works department and designated officer for land records from the Civil Engineering department. For the major works, consultation from external professional agencies is taken for the design and supervision of civil works.

Most of the open areas are planted with flowering saplings and fruit-bearing trees. Some of the areas are also landscaped with lawns and ornamental plants. The routine maintenance of flowering samplings and trees is carried out by CCC.

The housekeeping work of central facilities like the administrative building, academic complex, sports centers, and library surrounding is maintained by CCC. It is common practice to appoint housekeeping staff and sundry labors for casual repairs of buildings on a yearly basis. Petty contractors are appointed for some of the works by calling for quotations for the works.

Staff in different departments maintains their own computers through departmental assistance, whereas other computing facilities provided centrally at the department are maintained by WIC.

Usually, equipment is maintained through AMC with the supplier. However, if the equipment needs calibration or repairs, any service provider is consulted to set it right.

File Description	Document
Upload any additional information	<u>View Document</u>

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1 Average percentage of students benefited by scholarships and freeships provided by the Government during last five years

Response: 50.17

5.1.1.1 Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)

2021-22	2020-21	2019-20	2018-19	2017-18
1043	1183	1255	1254	1013

File Description	Document
upload self attested letter with the list of students sanctioned scholarships	View Document
Institutional data in prescribed format	<u>View Document</u>
Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years	View Document

5.1.2 Average percentage of students benefited by scholarships, freeships, etc. provided by the institution and non-government agencies during the last five years

Response: 4.4

5.1.2.1 Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)

2021-22	2020-21	2019-20	2018-19	2017-18
120	107	130	72	74

File Description	Document
Number of students benefited by scholarships and freeships besides government schemes in last 5 years	View Document
Institutional data in prescribed format	View Document

5.1.3 Following Capacity development and skills enhancement activities are organised for improving students capability 1. Soft skills 2. Language and communication skills 3. Life skills (Yoga, physical fitness, health and hygiene) 4. Awareness of trends in technology

Response: A. All of the above

File Description	Document
Details of capability enhancement and development schemes	View Document
Any additional information	View Document

5.1.4 Average percentage of students benefited by career counseling and guidance for competitive examinations as offered by the Institution during the last five years.

Response: 18.19

5.1.4.1 Number of students benefitted by guidance for competitive examinations and career counselling offered by the institution year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
468	431	391	403	389

File Description	Document
Number of students benefited by guidance for competitive examinations and career counselling during the last five years	View Document

- 5.1.5 The institution adopts the following for redressal of student grievances including sexual harassment and ragging cases 1. Implementation of guidelines of statutory/regulatory bodies
- 2. Organisation wide awareness and undertakings on policies with zero tolerance
- 3. Mechanisms for submission of online/offline students' grievances
- 4. Timely redressal of the grievances through appropriate committees

Response: A. All of the above

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File Description	Document
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	View Document

5.2 Student Progression

5.2.1 Average percentage of placement of outgoing students during the last five years

Response: 62.03

5.2.1.1 Number of outgoing students placed year - wise during the last five years.

2021-22	2020-21	2019-20	2018-19	2017-18
468	431	391	403	389

File Description	Document
Self attested list of students placed	View Document
Details of student placement during the last five years	View Document

5.2.2 Percentage of student progression to higher education (previous graduating batch).

Response: 16.21

5.2.2.1 Number of outgoing student progressing to higher education.

Response: 101

File Description	Document
Details of student progression to higher education	View Document

5.2.3 Average percentage of students qualifying in state/national/international level examinations during the last five years (eg: IIT-JAM/CLAT/ NET/SLET/GATE/ GMAT/CAT/GRE/ TOEFL/ **Civil Services/State government examinations, etc.)**

Response: 89.68

5.2.3.1 Number of students qualifying in state/ national/ international level examinations (eg: IIT/JAM/ NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations, etc.)) year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
38	33	59	51	32

5.2.3.2 Number of students appearing in state/ national/ international level examinations (eg: IIT/JAM/ NET / SLET/ GATE/ GMAT/CAT,GRE/ TOEFL/ Civil Services/ State government examinations) year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
38	38	66	58	38

File Description	Document
Upload supporting data for student/alumni	View Document
Number of students qualifying in state/ national/ international level examinations during the last five years	View Document

5.3 Student Participation and Activities

5.3.1 Number of awards/medals won by students for outstanding performance in sports/cultural activities at inter-university/state/national / international level (award for a team event should be counted as one) during the last five years.

Response: 40

Kesponse. 40

5.3.1.1 Number of awards/medals won by students for outstanding performance in sports / cultural activities at inter-university / state / national / international events (award for a team event should be counted as one) year - wise during the last five years.

2021-22	2020-21	2019-20	2018-19	2017-18
12	10	10	4	4

File Description	Document
Number of awards/medals for outstanding performance in sports/ cultural activities at interuniversity / state / national / international level during the last five years	View Document
e-copies of award letters and certificates	View Document
Any additional information	View Document

5.3.2 Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the institution

Response:

Notion of WCE Student Council

Student Council is a representative structure for students only, through which they can be part of the development of the institution, working in sync with college authorities, faculties and parents for the zenith of the institution, mainly the students.

Role of the Student Council

- To inculcate technical and cultural interests among all the students with imbibing ethical behaviour
- To facilitate assistance-ship and advisory mechanism for the grooming of students
- To represent students with faculty and management in institutional strategic planning

Formation of Student Council

- Members of Council will be decided every year among the secretaries of WCE clubs. The WCE student Council is constituted by twelve members including general secretary.
- Among twelve, six posts (secretaries) are technical branch specific ie secretaries of Mechanical, Civil, Electrical, Electronics, Computer and IT student clubs. These secretaries will be functional in designing and roll out of all state of the art technical activities in the institute. Other posts (secretaries) include Social Outreach Secretary, Skillset Secretary, Cultural secretary, Magazine Secretary, Ideation secretary and Sports secretary.
- Social Outreach Secretary is adjudged from Rotract club who will design and rollout social and extracurricular activities at the institute, Skillset Secretary is adjudged from PACE club who will design and rollout skills enhancement (professional, soft shills etc) activities at the institute, Cultural secretary is adjudged from Arts circle who will articulate art related(such as annual social gathering) activities at the institute, Magazine Secretary is adjudged from SOFTA club who will be instrumental in designing and publishing WCE magazine, Ideation secretary is adjudged on rotation from WLUG, ACM chapter and CodeChef clubs who will lead in designing and roll out of idea competitions (such as Smart India Hackathon, Ideathon etc) at institute, Sports secretary is selected by polytechnic wing vice principal who will be functional at organizing sports related activities at institute.

- The working duration of the student council is for one academic year. It will be renewed every year.
- General Secretary will lead the council. Every year the selection of general secretary is based on rotation among the technical club secretaries.
- The Ideation secretary will be one from WLUG/ ACM Chapter or CodeShef chapter. Selection of which will be on rotation basis every year.
- Student council will take pro-active part in institute's strategic planning focusing on all round development of WCE students.
- Student council will be instrumental in organizing Mega technical events such as Vision, Annual Social Gathering, Annual Sports events every year. Also it will coordinate various extra-curricular and co-curricular activities through WCE clubs and it will also rollout celebrations of various days such as Independence day, Republic day, Teachers day, Engineers day during each academic year.

Student council is governed by chairperson, ECAC (Extra Curricular Activity Committee).

File Description	Document
Upload any additional information	View Document

5.3.3 Average number of sports and cultural events / competitions organised by the institution per year

Response: 32.4

5.3.3.1 Number of sports and cultural events / competitions organised by the institution year - wise during the last five years.

2021-22	2020-21	2019-20	2018-19	2017-18
45	40	12	25	40

File Description	Document
Report of the event	View Document
Number of sports and cultural events / competitions organised per year	View Document

5.4 Alumni Engagement

5.4.1 The Alumni Association / Chapters (registered and functional) contributes significantly to the development of the institution through financial and other support services.

Response:

Walchand College of Engineering, Sangli has always maintained excellent relationships with its Alumni and this relationship has manifested in the form of great benefits for the students currently studying at this prestigious organization. Due to these healthy relationships, the alumni have actively participated in the Board of Studies, for designing the curriculum. They have also greatly supported students' activities both on-campus and off-campus, and simultaneously provided funds whenever necessary. Along with this, they have shown great enthusiasm in providing an industry approach to education and have collaborated with the professors at the college to allow students to explore industries by setting up centers of excellence and providing funds for the construction and maintenance of labs. Particularly speaking, Mr. Abhijit Pawar, the CEO and managing director of Sakal group, has actively supported and encouraged students' activities that help them grow and become more employable by developing their technical and social skills. He has also encouraged other alumni to come forward and help the college by providing their expertise. Mr. Ram Rathi has helped to develop a structural health monitoring lab in the Civil Engineering department of Walchand College of Engineering, Sangli. He has donated? 25 lakh for the development of this lab and simultaneously provided another? 75 lakh for student awards and activities. Mr. Milind Kulkarni, the founder and managing director of FinIQ, has donated ? 5 lakh every year to support various student activities such as seminars, events,

conferences etc. Many alumni have helped in organizing the campus internship and placement drives throughout the years, and hence the role of these well-established individuals have always been an important factor in maintaining the quality of education and quality of placement at Walchand. The valuable role that these alumni play has allowed Walchand to directly and indirectly maintain its rank as one of the top 3 engineering colleges in Maharashtra, in at least the internship and placement activities.

Association of Past Students .[Reg. No. MAH/5147/ SANGLI]

Association of Past Students of Walchand College of Engineering Sangli is a platform founded to promote the interests of Past Students, i.e., the entire fellow Walchandians. This is also to help further develop and strengthen the inherent ties of goodwill among them & to develop a sound communication channel for a noble cause. A united, strong bond of anyone with this platform should be helpful for everyone, including existing as well as future alumni members. The association enables the express integral identity of past students to motivate everyone to give the advantage of experience, knowledge, and skills to the rest of society. In the opinion of the senior members, this is strongly felt as the need of the time.

The association came into existence after official registration with Charity Commissioner in 1995.[Reg. No. MAH/5147/ SANGLI]. There were many attempts to initiate & consolidate this platform much before but the natural nucleus of development geared up for growth only recently. The donations to the association are exempted from Income Tax under Section 80G. At present the membership strength is about 1000 & with little more effort of all the members, it is anticipated that the potential growth within one year shall be 10 times its present figure.

File Description	Document
Any additional information	<u>View Document</u>
Link for additional information	View Document

5.4.2 Alumni financial contribution during the last five years (in INR).

Response: A. ? 15 Lakhs	
File Description	Document
Any additional information	<u>View Document</u>

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1 The governance of the institution is reflective of an effective leadership in tune with the vision and mission of the Institution

Response:

WCE Sangli is exercising governance through participative approaches. Importance is given to values, ethics, and care to have transparent processes. This is ensured through statutory bodies, i.e., the Administrative Council (AC), Academic Council, Board of Studies(BoS), Department Advisory Boards(DAB), Finance and Planning & other non-statutory bodies like College Development Committee(CDC), IQAC, Antiragging, Students Council, etc. These committees comprise vital stakeholders such as Government officials, educationalists, faculty, staff, industry, employer, alumni, parents, and students. Committees monitor and control academic-administrative activities, thus promoting inputs from different stakeholders and participative management.

Administrative Council (AC) is our apex body for designing strategies for growth, progress, and success in development. It aims at developing excellence in academics, strategic planning, raising funds, financial planning, research and development, employee welfare policies, and enhancing placements.

The administrative council (AC) and Director actively participate in quarterly AC meetings (Scheduled well in advance – minimum of four meetings in a year) to ensure that the policy statements and action plans are aligned for attaining the strategic plans, Goals of the institute. It also ensures that dissemination of the vision and mission statements to all stakeholders is done continually and their involvement in forming the policy statements.

All HoDs, sections in charge, deans, and coordinators have formulated action plans in consultation with faculty, staff, and students; to review the outcomes from implementing action plans through meetings with functional committees and make necessary changes in action plans if required. The AC regularly takes review of quality policies and makes amendments to quality policies if needed. The action plans are formulated in line with Mission and Vision statements under the leadership of the Director, and the same is incorporated into strategic plans for effective implementation

The Director ensures that all stakeholders are involved in different activities. Quality policies, vision, mission, and short-term and long-term goals are kept open to all stakeholders to reinforce the excellence culture. The necessary qualification improvement and training are provided to its faculty and supporting staff for their development through motivation and team-building activities, thereby creating healthy work culture. Through participative management, all stakeholders are involved in various decision-making bodies of the institute. The financial requirements are proposed by various statutory committees and the AC with the Director's approval. The AC meets regularly, reviews the institution's operations, and provides guidance and support for further improvements, keeping the vision, mission, and strategic plan in view.

The management mobilizes funds to enhance conducive infrastructure, laboratory, library, and office equipment, apart from creating an environment-friendly campus/premise. The concern and commitment of the Director and the AC towards the goals of higher education are evident through their continuing efforts of mobilizing resources and introducing job-oriented programs and courses.

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The Strategic Plan for the institute will be developed in Dec. 2022 for the next five years. Based on the achievements till July 2022, further plans are prepared up to 2027.

File Description	Document	
Any additional information	View Document	
Link for additional information	View Document	

6.1.2 The effective leadership is reflected in various institutional practices such as decentralization and participative management.

Response:

Effective Governance is necessary for the growth and development of the Institute and for implementing innovative ideas as per stakeholders' requirements. Administrative Council (AC) being the apex body, the members are involved in strategic planning of WCE Sangli, placement, academic activities, R&D, starting new courses as per industry needs, financial requirements (Budget Approval), etc. Decisions taken in Administrative Council (AC) meeting, which is conducted once in three months span, are reflected in the minutes of meetings and action taken report. These decisions are percolated in the college management committee (CMC) chaired by Director and meets biweekly. Deans, Registrar, Librarian, HODs, and Training Placement officer are members of this committee. It implements directions given by AC. Departmental meetings convey Deliberations in CMC to the department faculty and staff. In this way, the chain of command is maintained, and decentralization and participation are ensured by involving faculty and staff and adequately communicating to grass root level in view of implementation and day-to-day operation. Annual Reports of the Institute, AQAR, NIRF, AISHE, AC minutes, and Academic Council meetings are published on Institute's website. Appropriate information is communicated to employees and students through circulars, emails, notice boards, digital displays, website, etc. Recommendations given in Finance and Planning committee are presented in AC and CDC meetings, such as budget, employer issues, etc. Budgetary provisions for departments are made based on requirements provided by the HOD. Institute also publishes audited financial statements on the website for information to all stakeholders.

Financial power is delegated to Director, Registrar, Dean, and HODs. All HODs are members of the Academic Council in which major Academic decisions are taken. Administrative positions like Deans, HODs Placement officer, Rector, Controller of Examination are allocated to senior faculty members. They are part of various decision-making administrative bodies. The HOD as chairman of BOS, also discusses the introduction of new courses, revision of content, and syllabus of a particular course based on recent developments and requirements with the faculty. Any of the changes in the courses, including revision and introduction of new courses, are then put to the BOS of the respective Programme, which includes experts and resource persons from Academia, Industry, Alumni etc., for discussion and approval. The recommendations of the BOS of the various Programmes are then put to the Academic Council, which also includes experts and resource persons from Academia, Industry and represents all the stakeholders for discussion and approval.

In order to establish departmental communication channels with functional heads (Deans, TPO etc.), department coordinators are identified. Department Academic coordinators(DACs), Department Quality

Assurance Coordinators(DQACs), Deputy Controller of Exam (DCoEs), Placement coordinators etc., communicate with the functional heads at institute level. Office orders are issued, mentioning these coordinators' lines of authority and responsibilities to ensure smooth conduct.

This Institute functions through a committee-based participative management approach. Committees are set up for various events (cultural, technical, alumni meet, Industry meet, etc.), and a conscious effort is made to ensure the representation of all departments. Some examples are the cultural event committee, Gymkhana committee, Campus coordination committee, Library committee, hostel administration committee, Board of studies, Department Advisory board, Industry Institute Interaction committee, Alumni meet, Industry meet organization committee, and purchase committee.

File Description	Document
Any additional informatiom	View Document
Link for strategic plan and deployment documents on the website	View Document

6.2 Strategy Development and Deployment

6.2.1 The institutional Strategic / Perspective plan is effectively deployed

Response:

1. Strategic Plan Implementation of ICT in Examination Section

The exam section has started working on software-based automation to capture the student life cycle, starting from admission and ending with a Provisional passing certificate. Out of various life cycle stages, we make a strategy according to current implementation needs. An implementation starts from the Examination part of the student life cycle, which is crucial and sensitive. A cost-effective and efficient Cloud and web-based system is designed, developed, and deployed with the services of WeShine Technologies Pvt. Ltd., Pune.

2. ERP system for WCE processes

The institute recently floated a Request for Proposal for implementing a Cloud-based Enterprise Resource Planning (ERP) System as part of the strategic plan. The scope includes Services (Process Analysis, customization, and implementation) for cloud-based ERP Systems for institutional management, which provides for developed ERP application as a service, its training and implementation, and maintenance and support

3. Detailed Budget formulation process

The institute has implemented a fairly detailed bottom-to-top budget system. Every last-tier member plans for an activity, works out its expenditure and puts it into a detailed excel sheet which generates a summative view for heads.. A summary is prepared department-wise in the following heads (Revenue

Budget Receipts, Revenue Budge Payment, CAPEX Budget)

Other features included in the reform are,

- Budgetary control through purchase requisitions from dept./section heads, centralized purchase system in place, using TALLY prime for maintaining the accounting system with proper budgetary control and implementation of the Booking system, Regular finance meetings for approval.
- 4. Walchand Informatics Center(WIC)

WIC has been realized, wherein Data Center, Content creation Studio, Network Operation Center, and Executive training Hall are key facilities developed. It is expected to implement a high-speed, reliable, and seamless networking infrastructure for teaching, learning, research, and institute administration. It aims to establish a systems infrastructure to provide highly available, seamless, and secure computing and storage resources, applications, and data repositories. WIC also monitors the usage, availability, and performance of all ICT resources through high-end software

5. Academic reforms

The academic reforms planned in the strategic plan included the following features.

- Outcome Based Education
- Choice-Based Credit System:
- Humanities courses
- Value-added Courses
- Industry Participation
- Minor and Honors Certification
- Facility for slow learners
- Common FY Curriculum for all disciplines
- Learning Resources: Moodle, MS Teams, Google Classroom/Meet, wceeapps portal, Nimbus Online library resources (Books, Publications), Access to IEEE publications, Turnitin Plagiarism checking software, Facility for MOOCs creation, Professional Recording studio, vDigital tabs, MATLAB Campus license, SWEEBOK Online Learning resource
- **6. Platinum Jubilee events**: The institute celebrated the platinum jubilee year with various activities such as an Industry meet, Alumni meet, Open house, etc.
- **7. Guidebooks**: WCE has prepared and implemented various guidebooks, which include the Academic section, TPO section, consultancy section, Exam section, Construction, maintenance section, etc. This practice intends to channel multiple processes at the institute and avoids personal and subjective decisions.
- **8. Reorganising physical infrastructure:** All departments and sections related to the First year B.Tech academics were given building spaces in a close cluster for convenience. Similarly entire Polytechnic wing was carved out into a single building cluster.

File Description	Document
Any additional information	View Document
Link for Strategic Plan and deployment documents on the website	View Document
Link for additional information	View Document

6.2.2 The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment, service rules and procedures, etc.

Response:

Governance, Leadership and Management

Top management of the College is "Administrative Council". The Chairman of the Administrative Council, Mr. Ajit Gulabchand, is an industrialist and has keen interest in raising the academic level of this instate to world class. All the members of AC and stake holders of the institute are continually striving hard to march on the path of meeting the Vision of the institute.

The organization has good decentralization of authorities, and the overall improvements are closely monitored. The administrative, academic and financial policies are designed at the Administrative Council level, however inputs for the policy making are derived from various stake holders namely; internal faculty, staff, students, University, DTE, Alumni, academicians, Industries, Research Organizations etc. All the committees have been constituted as per the UGC guidelines. The committee meets regularly and the minutes of the meetings are well recorded. Academic improvements are also audited by internal and external committees. Periodic feedbacks are obtained from students, parents, alumni, employers etc for enabling overall improvement of the college.

The college practices participative management at various levels. Various positions, namely, Registrar, Dean (Academics), MSIQAC, Dean (R&D) ,TPO, Chairman (Students Council), Chairman (BWC), Chairman (Central Purchase Committee), Campus Coordination committee, Hostel wardens, Rector, Security In-charge, Canteen In-charge, TEQIP Coordinator, Heads of Departments etc. positions are available and working is very smooth. he College Development Committee (CDC) members are elected members. They work as an interface between college's top level management and employees of the college.

The College also promotes bottom up approach in budget preparation. The budget prepared so is usually approved at top level of Finance Committee and Administrative Council. The Finance-coordinator is playing vital role and establishes link between college authorities and top level management.

Bimonthly, on Wednesday, CMC meets to review various activities including class monitoring, and resolves various issues in participative manner.

Matters pertaining to each department are discussed with the staff during department meetings and their collective decisions and opinions are considered in HODs meetings.

Establishment section of the institute is face of office administration section and performs following roles and responsibilities.

- Faculty and support staff recruitment
- Maintaining personal file, service detail of faculty and support staff in service book.
- Maintaining attendance record of regular and contractual staff
- Maintaining leave records, LTC and Travel sanction for regular staff
- Issuance of office memos, notices
- PF subscription notification for regular staff
- Retirement benefits for regular staff
- Pension orders for regular staff
- Appraisal maintenance of for regular staff
- Correspondence with University, Government, DTE, AICTE etc. regarding establishment.

Some of the best practices implemented are:

- Every year annual report is to be prepared and published on the Institute website.
- Decentralized administration system.
- Good Co-ordination between different sections of Administration Section.
- Administration Section provides resources to all departments in terms of necessary information, government resolutions, required guidelines and distribution of manpower
- Use of e resources / D space for important Record keeping for smooth functioning.
- Feedback from various committees is given significant weightage for future decisions.
- Feedback collected from various stakeholders is considered to improve the overall performance.

File Description	Document	
Any additional information	View Document	
Link to Organogram of the Institution webpage	View Document	

6.2.3 Implementation of e-governance in areas of operation

- 1. Administration
- 2. Finance and Accounts
- 3. Student Admission and Support
- 4. Examination

Response: A. All of the above

File Description	Document	
Screen shots of user interfaces	View Document	
Institutional data in prescribed format	View Document	

6.3 Faculty Empowerment Strategies

6.3.1 The institution has effective welfare measures for teaching and non-teaching staff and avenues for career development/ progression

Response:

Career Development/Progression -

The college implemented and completed various TEQIP phases. In all these phases college has trained teaching and non-teaching staff in various areas as listed below. As per the institute development plan (IDP), skill enhancement for faculty and staff is also considered one of the important tasks. The following types of activities have been conducted/promoted and even planned for the faculty and staff to enhance their professional development.

- Faculty training in core areas.
- Faculty training in curriculum development.
- Faculty training for soft skill development
- Senior faculty training for "Change Management."
- Faculty training for advanced software.
- Refresher program.
- Non-teaching training for technical skill development.
- Life skill developments for non-teaching staff.
- Interpersonal / team building/leadership programs for teaching and non-teaching members.
- Paper presentation/conference participation for faculty.

There is also a provision to upgrade qualification viz Ph.D., post-doctorate under various government schemes like QIP, NDF as per AICTE, DST and UGC, etc.

Existing welfare measures for teaching and non-teaching staff

The college implements the provision of accidental group insurance of Ten Lackh to all stakeholders as per the government of Maharashtra resolution number 69 dated 11th August 2017. The college also implements similar insurance of Two Lackh (University Welfare Fund) as per the provision made by Shivaji University Kolhapur for all students, teaching, and non-teaching staff. The college also provides emergency help for the needy non-teaching staff member through a "Staff Welfare Fund (SWF)." The college provides reimbursement of medical expenses incurred by the employee for his/her for employee and his / her close relatives. On average, 50% of employees avail of the advance/reimbursement facility.

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File Description	Document	
Any additional information	<u>View Document</u>	

6.3.2 Average percentage of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the last five years.

Response: 34.62

6.3.2.1 Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
15	40	59	69	33

File Description	Document	
Institutional data in prescribed format	View Document	

6.3.3 Average number of professional development / administrative training Programmes organized by the institution for teaching and non-teaching staff during the last five years.

Response: 16.4

6.3.3.1 Total number of professional development /administrative training Programmes organized by the institution for teaching and non teaching staff year-wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
1	20	21	27	13

File Description	Document	
Institutional data in prescribed format	<u>View Document</u>	

6.3.4 Average percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the last five years (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course).

Response: 147.3

6.3.4.1 Total number of teachers attending professional development Programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes year wise

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during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
88	200	429	102	63

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

Internal Audit

- A firm of Chartered Accountant is appointed as internal Auditor.
- Quarterly audit is conducted by internal auditor.
- Quarterly Financial statements are prepared.
- Extent of checking is 100%

External Audit

- A firm of Chartered Accountant is appointed as statutory Auditor.
- Audit is conducted at the end of the year
- Extent of checking Sample checks
- Balance sheet is examined with books of accounts
- Audit objections are compiled as per periodicity of audits

File Description	Document
Any additional information	<u>View Document</u>
Link for additional information	<u>View Document</u>

6.4.2 Funds / Grants received from non-government bodies, individuals, philanthropists during the last five years (not covered in Criterion III and V) (INR in Lakhs)

Response: 3.77

6.4.2.1 Total Grants received from non-government bodies, individuals, Philanthropers year-wise

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during the last five years (INR in Lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
1	2	0.77435	0	0

File Description	Document
Institutional data in prescribed format	View Document
Annual statements of accounts	View Document

6.4.3 Institutional strategies for mobilisation of funds and the optimal utilisation of resources

Response:

Strategies for mobilization of funds

- Student fees are collected at the time of admissions as per state government norms.
- Fees from concessional students are recovered from respective government departments, For this scholarship forms are timely taken and forwarded to respective agencies through online portal of government.
- Testing and consultancy activities are carried out by the department staff as per expertise.
- Research grant and project grants are obtained by faculty with submitting the proposals to different agencies and industry.
- Outside examinations and coursed are conducted in the College from which income is generated.

Optimum utilization

- Yearly budget is prepared by the departments for their revenue and capital expenses which get reviewed and sanctioned from Finance committee / Administrative council.
- Quarterly review is taken to examine the utilization of budget.
- Funds are allocated according to need and priority to each department and college.

Institute finance committee is in place quarterly meetings are scheduled and discussions and approvals for

- Review of quarterly income expenditure,
- Budget and financial proposals regarding income expenses
- All statutory compliances
- Audit compliances
- Review of Fees/ Funds receivable

6.5 Internal Quality Assurance System

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6.5.1 Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes visible in terms of – Incremental improvements made for the preceding five years with regard to quality (in case of first cycle) Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives (second and subsequent cycles)

Response:

At WCE Sangli, importance is given to quality of education and to improve the performance of academic's faculty qualification improvement is essential and most important. Accordingly, WCE Sangli long back, adopted the policy of deputation of faculty, staff for higher studies under QIP and other schemes. Every year 2-3 faculty members are deputed, permitted for higher studies. This has not only improved the qualification of faculty but also reflected in overall performance in teaching learning process, research and professional practices, patents, etc. The present practice of quality assurance has contributed to the planning and execution of the policies uniformly throughout the college. All quality assurance strategies are applied uniformly throughout the college. Dean (Academic and Quality assurance) plans, and schedules both internal and external academic audits. It also keeps track of the accreditation status of various programmes and makes arrangements for an application to accreditation agencies. IQAC has external committee members as per the guidelines of NAAC. Each department have Department advisory board (DAB) is department Committee chaired by the Head of the Department and comprising external members (academician, industry expert, alumni), senior teachers in the department who are UG and PG Program coordinators, Dept. academic coordinator (DAC) and Dept. quality assurance coordinator (DQAC) for NBA, NAAC accreditation. The DAB and IQAC shall have the following mandates: To ensure implementation of the resolutions and recommendations of the academic council, BoS, in the department, towards overall quality improvement in the 'curriculum review, analysis and design', and most importantly 'Content Delivery'. To ensure and monitor the execution of standard practices and the state-ofart in 'Teaching Learning-Assessment-(T-L-A)', in the Academic year, semester-to-semester, based on the resolutions and recommendations of the AC / BoS, and feedback of teachers and learners on the T-L-A. To prepare for and offer the UG/PG programs in the Department for periodic assessment by NBA or NAAC, towards successful accreditation, by consistent upkeep and maintenance of relevant academic records, data, documents and evidence. To accumulate, compile and analyze all the relevant data and outcomes that enable successful participation of the department in national, global ranking and branding frameworks such as NIRF.

During the last five years, about 11 faculty members awarded with Ph.D and a total of 348 research papers has been published in Web of Science, Scopus indexed journals. The 909 papers were published in National / International conference proceedings or as a book chapter. The institute H-index of journal publications is 36. Total 44 patents have been filed out of which 24 have been granted. The institute has received Rs. 3.77435 + 7.70 Cr (TEQIP) research funding from government and non-government agencies. The overall placement has been improved with average salary (CTC) of Rs. 10 lakhs/annum with highest package (CTC) of Rs. 51 lakhs/annum.

File Description	Document
Link for additional information	View Document

6.5.2 The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities (For first cycle - Incremental improvements made for the preceding five years with regard to quality For second and subsequent cycles - Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives)

Response:

Efforts are taken by IQAC in coordination with all WCE officials towards improving the academic environment consisting teaching, and learning process, curriculum and evaluation methods and research, IPR as well as extra and co-curricular culture in the institute.

The institution reviews its teaching-learning processes, structure, and methodologies of operations and learning outcomes at periodic intervals. The institution reviewed and found the different gaps in the Teaching learning process. The gaps were: Skill development courses such as communication skills, soft skills, and technical skills. Human values and professional ethics. Focused courses on Entrepreneurship. The above gaps are filled by introducing new subjects such as skill development courses for improving the communication skills, soft skills, employability training for the enhancement of placements of students. Also basic and advanced programming skills, Industry - 4, Data Science, IoT, etc., are introduced in curriculum with a view to improving opportunities for student's placement.

Structures & Methodologies of operations: All the faculty members prepare an academic plan well in advance before the commencement of classwork for the courses. Every faculty member maintains course file for each course being assigned to them. Mentors conduct meeting with students to know the progress of course content, course coverage, and effectiveness of the teaching learning process. The internal question papers are audited regularly in the department. Course feedback and mid and end of semester is collected from all the students on the content, coverage and evaluation of answer scripts for each course. The ICT facilities are reviewed from time to time for its improvement.

Learning outcomes: The institute has adopted outcome-based education and prepared course outcomes, program outcomes and program-specific outcomes for all the programs. The programs got accredited under an outcome-based approach. Course end feedback and program exit feedback are collected from the students to improve upon the course content, its delivery mechanism and evaluation system. Attainment calculations are made for each course at the end of the semester and in turn, the Program Outcomes are mapped and evaluated.

IQAC in coordination with depts. conducts an overall feedback, of course faculty related to teaching, learning as well as the overall behavior of the faculty in each semester. Faculty whose performance is not satisfactory are informed, counseled and such faculty gives action taken report for future improvement.

As per AICTE announcement in 2018, The Institute has implemented Minor certification programs wherein students can learn interdisciplinary and advanced courses. Under the Minor Certification Scheme, students can learn courses from another department. It is planned to offer an Honor Certification scheme

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where students can select advanced courses from their respective branch in which they are pursuing the degree. To get a minor degree certificate, aspiring students must register for additional (20 credit). Total 18 students have completed two minor certifications till the year 2021-22 as follows.

- 1) Minor certification in CSE (Offered by CSE department) successfully completed by 9 students
- 2) Minor certification in AIML (Offered by IT department) successfully completed by 9 students

A few other minor courses are being run currently. On the similar ground, individual 2 or 3 credit value added courses are also active.

File Description	Document
Any additional information	View Document
Link for additional information	View Document

6.5.3 Quality assurance initiatives of the institution include:

- 1. Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analysed and used for improvements
- **2.** Collaborative quality initiatives with other institution(s)
- 3. Participation in NIRF
- 4. Any other quality audit recognized by state, national or international agencies (ISO Certification)

Response: All of the above

File Description	Document
Upload e-copies of the accreditations and certifications	View Document
Institutional data in prescribed format	View Document
Any additional information	<u>View Document</u>
Paste web link of Annual reports of Institution	View Document
Link for additional information	View Document

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1 Measures initiated by the Institution for the promotion of gender equity during the last five years.

Response:

7.1.1.1 Gender Equality

The concept of gender equity refers to "fairness of treatment for both women and men, according to their individual needs. This may include equal treatment or treatment that is different but which is considered equivalent in terms of rights, benefits, obligations and opportunities" (International Labour Office [ILO], 2000).

Gender equity in education means that males and females have equal opportunities in terms of economic, social, cultural, and political developments. If gender equity is exactly achieved, this will contribute to the future of girls and boys more than approaches men-centered, and girls will benefit from public and domestic life as much as boys.

WCE Shows gender sensitivity through various initiatives and actions for creating a safe, Secure and healthy atmosphere on campus. Sensitization of the students is done through special lectures and functions.

Internal Complaints Committee is active in the college. It organizes various events on awareness issues. College has appointed counselors to guide the students and attend to the issues of the students. They motivate them regularly and guide them to lead a good life.

7.1.1.2 Facilities for women on campus

The safety of girls is a top priority at every college campus. So, the following actions have been taken to ensure the safety of the girl students

- The Institute keeps visitors as well as students IN/OUT register to record the details of any person entering the college premises/hostel
- Female Warden Staff in Hostel: Girls' hostels have female wardens and supervisors. The duties of supervisors are arranged in such a manner that supervisors remain there continuously for 24x7 hours. Hostel wardens also reside within the hostel premises. Female sweepers are there in each girl's Hostel. No males are allowed without due permission.
- Hostel areas are protected by an almost 10ft mesh wall compound.
- Street Lights for the Female Hostel:
- Pole mounted Web Camera for on-road monitoring
- Power backup during electricity failure
- Ladies security Guard during Examination for maintaining the comfort zone of girls
- Ladies squad during Examination

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Other facilities include:

- Mess facility for Girls along with canteen
- Playing Ground and open Gym to the Female Hostel:
- Ladies' Rooms and Toilets:
- Health facilities in the campus: College also provides a separate gym facility for girls situated in the college campus. There are two types of gyms, indoor and open Gym.
- .Water purifiers and coolers are available in the girls' Hostel.
- A separate playing ground is also provided, and it is protected with a mesh wall.
- Sanitary napkin dispensing machines and incinerators are also available for use.

File Description	Document
Annual gender sensitization action plan	View Document
Specific facilities provided for women in terms of: a.Safety and security b.Counselling c.Common Rooms d. Day care center for young children e. Any other relevant information	View Document

7.1.2 The Institution has facilities for alternate sources of energy and energy conservation measures

- 1. Solar energy
- 2. Biogas plant
- 3. Wheeling to the Grid
- 4. Sensor-based energy conservation
- 5. Use of LED bulbs/ power efficient equipment

Response: A. 4 or All of the above

File Description	Document
Geotagged Photographs	<u>View Document</u>

7.1.3 Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 500 words)

- Solid waste management
- Liquid waste management
- Biomedical waste management
- E-waste management
- Waste recycling system
- · Hazardous chemicals and radioactive waste management

Response:

Solid waste management

Solid waste is the unwanted or useless solid material generated from human activities in a residential, industrial, or commercial area. Solid waste management reduces or eliminates the adverse impact on the environment and human health. WCE has a massive amount of waste collection daily. Waste from various sections is collected and filled in a human-operated car. On the WCE campus, the method used to dispose of degradable waste is dumping in composting pits.

Liquid waste management

WCE owns two wastewater treatment systems inside its campus. There are two Constructed Wetlands present for the treatment of generated wastewater. A constructed wetland (CW) is an artificial wetland to treat municipal wastewater, greywater, or stormwater runoff. Similarly to natural wetlands, constructed wetlands also act as a biofilter and can remove a range of pollutants (such as organic matter, nutrients, pathogens, and heavy metals) from the water. Constructed wetlands are designed to remove water pollutants such as suspended solids, organic matter, and nutrients (nitrogen and phosphorus). The planted vegetation plays a vital role in contaminant removal. The filter bed, usually consisting of sand and gravel, has an equally vital role to play. Some constructed wetlands may also serve as a habitat for native and migratory wildlife, although that is not their primary purpose. Typha and Canna-Indica are the main species used in constructed wetlands due to their effectiveness.

Biomedical waste management

The college does not produce any biomedical waste.

E-waste Management:

The generation of e-waste is apparent in every educational institute, mainly at the campus level, where there are several pieces of equipment and instruments used for administrative and scientific execution. Computers, electronics accessories, Printers, and Xerox machines are essential for administrative and research work. The wires required for the connectivity also get included in the e-waste. These electronic and computer accessories which are declared "Obsolete" are sold through auction to a licensed vendor on a periodical basis. College also has a scheme by which new equipment is purchased under the old buy-back scheme.

Waste recycling system

Paper waste is regularly sold to an outside agency for recycling. The answer sheets are shredded and sold to the licensed purchaser. Moreover, the non-working equipment, which is declared "Obsolete," are sold through auction to a licensed vendor on a periodical basis.

Hazardous chemicals and radioactive waste management:

College does not produce much hazardous waste or radioactive waste. If any such waste is found, it is destroyed under strict human supervision. No hazardous wastes are generated in college except in laboratories like Chemistry and Environmental Engineering. Adequate exhaust provisions are made in these laboratories to drive out acid fumes.

Water harvesting

All roof water is collected through ducts, and various sump systems have been set up to store the water. Rooftop rainwater harvesting is carried out at the Main Administrative building, civil department, mechanical department, electronics department, and IT department. The water collected is percolated into the ground with the help of pits.

File Description	Document
Geotagged photographs of the facilities	View Document

7.1.4 Water conservation facilities available in the Institution:

- 1. Rain water harvesting
- 2. Borewell /Open well recharge
- 3. Construction of tanks and bunds
- 4. Waste water recycling
- 5. Maintenance of water bodies and distribution system in the campus

Response: A. Any 4 or all of the above

File Description	Document
Geotagged photographs / videos of the facilities	<u>View Document</u>
Any other relevant information	View Document

7.1.5 Green campus initiatives include:

- 1. Restricted entry of automobiles
- 2. Use of Bicycles/ Battery powered vehicles
- 3. Pedestrian Friendly pathways
- 4. Ban on use of Plastic
- 5.landscaping with trees and plants

Response: A. Any 4 or All of the above

File Description	Document
Geotagged photos / videos of the facilities	View Document

7.1.6 Quality audits on environment and energy are regularly undertaken by the Institution and any awards received for such green campus initiatives:

- 1. Green audit
- 2. Energy audit

- 3. Environment audit
- 4. Clean and green campus recognitions / awards
- 5. Beyond the campus environmental promotion activities

Response: A. Any 4 or all of the above

File Description	Document
Reports on environment and energy audits submitted by the auditing agency	View Document
Certification by the auditing agency	View Document
Any other relevant information	View Document

7.1.7 The Institution has disabled-friendly, barrier free environment

- 1. Built environment with ramps/lifts for easy access to classrooms.
- 2. Divyangjan friendly washrooms
- 3. Signage including tactile path, lights, display boards and signposts
- 4. Assistive technology and facilities for Divyangjan accessible website, screen-reading software, mechanized equipment
- 5. Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading material, screen reading

Response: A. Any 4 or all of the above

File Description	Document	
Geotagged photographs / videos of the facilities	<u>View Document</u>	

7.1.8 Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 500 words).

Response:

The Walchand College of Engineering, Sangli recently celebrated its Platinum Jubilee and has been contributing significantly to Engineering Education for over 75 years. From the inception of WCE efforts are made not only to impart quality education to aspiring engineering but also having standard policies and measures to ensure the overall development of a student.

We regularly monitor and keep a track of students. Students enrolled at WCE Sangli are coming from a large variety and diversity of backgrounds. Students from gulf countries, NRI and J&K, Northeastern states, and belonging to minorities of the country are admitted based on merit as per State approved quota of seats. The institute is committed to provide an inclusive environment where student, faculty and staff can work together for their development, learning and upward mobility. It helps in creating a culture where all can work free of discrimination, exploitation, impediments and harassments. We respect and admire different religions, languages and cultures to nurture unity in diversity and provide an inclusive

environment. Different festivals & days like Diwali, Ganesh Festival, Navratri, Christmas, Dr. Babasaheb Ambedkar Jayanti, Chatrapati Shivaji Maharaj Jayanti, Mahatma Gandhi Jayanti, Vivekanand Jayanti, Dr. APJ Abdul Kalam Jayanti etc. are celebrated. During cultural events / competation organised by Art circle at WCE Sangli, traditional dress competation as well as regional / state culture is always presented.

During annual social gathering, a traditional day and competition is organized to represent our Indian culture, which helps students to admire different cultures of our nation. It assists to develop the tolerance and harmony towards regional, communal socioeconomic and other diversities.

During FY Student Induction Program, a mandatory activity by the AICTE which is successfully and effectively organized every year since 2018, we arrange expert sessions and activities such as YOGA, exercise, sports, etc. to ensure student's health (mental, physical and social).

Other than this, as per the Vishakha Guidelines (the procedural guidelines to be used in cases of sexual harassment, 1997), an official committee was established in WCE Sangli which comprised of members appointed on the basis of Vishakha guidelines. This committee has been officially appointed and conducts periodic meetings to assess or review cases.

Gender Equality action plan was prepared according to the TEQIP – III guidelines to give equal opportunity to all male, female at the institute.

WCE Sangli ensuring the safety and protection of each and every person involved with us and are always willing to be a part of any initiative that helps us make our employees and students feel secure.

File Description	Document
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	View Document
Any other relevant information	View Document

7.1.9 Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens (within 500 words).

Response:

Walchand Engineering College Sangli has been doing the sacred work of technical education since last 75 years. The college prides itself on strengthening the foundation of technical education to develop its students as good citizens of the country. Students and staff should know their duties, rights, values and responsibilities. It is necessary for everyone to know about the Indian Constitution, which contains the duties, rights and values of the citizens, that's why the college decided to include the subject of the Indian Constitution in the curriculum. Currently this subject "Constitution of India" is in both the semesters of Final Year B. Tech of all branches.

File Description	Document
• Details of activities that inculcate values; necessary to render students in to responsible citizens	View Document

7.1.10 The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard.

- 1. The Code of Conduct is displayed on the website
- 2. There is a committee to monitor adherence to the Code of Conduct
- 3. Institution organizes professional ethics programmes for students, teachers, administrators and other staff
- 4. Annual awareness programmes on Code of Conduct are organized

Response: B. 3 of the above

File Description	Document
Code of ethics policy document	View Document
Any other relevant information	View Document

7.1.11 Institution celebrates / organizes national and international commemorative days, events and festivals (within 500 words).

Response:

Shivswarajya Day: Shivswarajya Day was celebrated on 06th June 2021. This day is the coronation day of the great king Ch. Shivaji Maharaj and is celebrated as his inspiration.

Every year on 19th February the birth anniversary of the great king Ch. Shivaji Maharaj is celebrated with enthusiasm.

Marathi Rajbhasha Gaurav Din: Marathi Rajbhasha Gaurav Din is celebrated on 27th February every year. This is the birth anniversary of Marathi Poet V. V. Shirwadkar alias Kusumagraj. This year Art Circle took initiative for the same. Various activities were organized under this. Marathi Poetries, Dramas and cultural activities were conducted effectively.

Ganesh Festival: Every year students of WCE organize Ganesh Festival and celebrate the same with unity.

Dandiya Festival (Navratra): Every year Art Circle organizes Dandiya Night Event for all the students of WCE. All students participate and enjoy dancing and playing Dandiya with discipline.

Thai Thai Vithai (???? ?????): Ashadhi Ekadashi is a big festival celebrated with great devotion in Maharashtra. In our college, the students of Art Circle also celebrated this festival with different activities. Art Circle club organised online competition of different art forms for providing platform to all the artist's.

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Around 250 artist's participated in this online competition.

Diwali festival: Art circle club of Walchand College of Engineering Sangli organized online competitions on the occasion of Diwali. Fort making, Rangoli and photography competitions were organised.110 artist's participated in it. Digital certificates were provided to all the participants.

Deepotsav: Art circle organized "Deepotsav" in the premises of Sarasvati idol of Walchand College of Engineering Sangli. Deepotsav was celebrated by lighting the lamps, and different art forms were showcased by the members of Art Circle.

Birth anniversary programs of state and national great personalities: As per Maharashtra government circular, the college celebrates the birth anniversary of all great men-women's and sends its report to the government from time to time. Below are some photographs of the Jayanti event.

File Description	Document	
Geotagged photographs of some of the events	View Document	
Annual report of the celebrations and commemorative events for the last five years	View Document	

7.2 Best Practices

7.2.1 Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual.

Response:

Best Practice 1

Title of the Practice: Training programs to enhance students' skill sets for better employability, research, and leadership.

Objectives of the Practice:

- 1. To impart technical, professional training in the respective domains of students.
- 2. To train students on communication skills and life skills to improve employability in the industry.
- 3. Providing holistic development so that they can excel in their academics and the careers of their choice.
- 4. To provide training to succeed at campus placement and recruitment.
- 5. To nurture and develop leadership and research culture amongst the students.

The Context:

In the present scenario, apart from academic knowledge, industries need employees with specific skill sets that contribute to the company's growth, progress, and success. In order to meet the requirements of the

company recruiters, students receive training to develop their various skill sets. Since students come from various backgrounds, the training programs provided by WCE Sangli play a vital role in grooming their personality and overall technical and non-technical abilities. These programs also cater to the needs of lateral entry students (bridge the gap) so that they get an equal opportunity of being hired in product development, consulting, and service-based businesses.

The Practice:

At the beginning of the first Semester, the Institution delivers well-structured skill training programs for students of all branches of B Tech, M Tech, and Ph.D. students, allowing them to learn more effectively. The teaching programs' specifics are listed below.

As a professional institute, we have to use applicable scientific knowledge for engineering practices. Applied sciences is a bridge that connects pure science with engineering practices. It aims to provide a strong foundation for engineering students. The Department of Humanities and Sciences is one of the integral parts of the institute. The department offers multi-disciplinary courses in Chemistry, Physics, Professional Communication, Environmental Science, the Constitution of India, course, etc. English language and communication skill course is part of the curriculum in 1st and 2nd Semester, which help in honing the communication skills of the students. The language lab offers a platform for students and faculty members to enrich their communication skills with the help of software applications available in the lab. It also helps students to practice for various international-level exams in Business English and TOEFL, IELTS, and GRE.

Besides this, various clubs and associations also offer training programs related to their requirements. The WCE Sangli students have formed associations such as CESA, MESA, EESA, ELESA, CESA, and SAIT and clubs such as PACE, SOFTA, ROTRACT, ROBOTIC, BAJA, Efficycle, Art circle WLUG, etc. the motto of this clubs is to develop character with competence. The associations and clubs emphasize on invoking hidden soft skills which are very vital to stay and deal in the current scenario of cut-throat competition. Thus, the clubs conduct an array of workshops and training sessions by various experts from the professional world so as to develop communication skills as well as to learn about technical presentations and industrial etiquette.

Co-Curricular activities are engaged by professional societies like IET, ASRAE, ISHRAE, ISTE, VISION Department Associations, and clubs. At the same time, extracurricular activities such as sports, cultural, Community Services, Social work, Activities in Alumni meetings, Graduation day, Participation in Sports, Annual social gatherings, etc.

Soft-skills training is also provided during the V and VI semesters, including Quantitative, Logical, Aptitude, Verbal, and Reasoning, to name a few. This assists students in the preparation of the recruitment process, as well as entrance exams for further education and other competitive assessments. Students are given online resources (online videos) and online examinations to help them study for the abovementioned exams. The students are given inputs based on the requirements of various companies through TPO and dept placement coordinator to bridge the gap between the curricula and the industry requirements.

Owing to the fact that the model of the recruitment process by various companies has changed, the recruiting companies are now expecting the students to have basic programming skills irrespective of the branch of engineering they pursue. These Technical Skills Training programs include IT-related skills, namely Fundamental and Advanced Programming Skills. Students of engineering branches other than CSE

and IT are offered training in these domains through club services, value-added courses, minor degree programs, etc.

The students in the fourth year have compulsory project work (in-house, sponsored). Once guides are allotted, the students are allowed to choose a project from the industry or advised by the project guide. The dissertation has to be submitted by the end of the final Semester. Under this, the project guides train students on their research ability, documentation, writing, and presentation skills. All these activities play a significant role in their further professional life.

Difficulties in achieving the objectives:

- 1. Constant motivation and encouragement are required for students to participate in the activities.
- 2. In some activities, due to intake limitations, students could not enroll in the clubs or training programs of their choice.
- 3. Cope up with the frequent change in technology and advancements in the industries in a short time duration.
- 4. Bridge the gap between hard skills and the overall communication of students.
- 5. Financial resource generation for organizing activities at the national level.

Initiatives taken to counter the difficulties:

The college nominates the staff advisor and faculty mentors to overcome the difficulty of encouragement and student outreach. They are regularly in touch with students and give timely updates about the activities happening in the institute. They also monitor their progress.

Students are advised to keep checking the website, circulars, and notice boards regularly so that they can register for the programs of their choice.

Regular guests, expert lectures from industry personnel, interaction with alumni, and workshops are arranged so students are well-versed with the latest field advancements.

Evidence of Success:

The success rate is 90% based on the planned number of activities and executed activities. The hindrances to success include the non-availability/expiry of a licensed copy of the software, changes in the academic schedule, and non-availability of faculty and students. However, the review and feedback of the activities executed received positive responses from the participants. The participants also give constructive inputs to improve the program in the future.

Best Practice 2

Title: Research Symposium on Computing

Objectives of the Practice:

- 1. To provide an opportunity to researchers to present their research work and to enable them to interact with renowned/experienced researchers in CSE /IT.
- 2.To provide its participants with independent and constructive feedback about their

completed/planned research work for further improvements.

3. To provide industry interaction to UG and PG students to get input from them for their projects

Context:

In the present scenario, besides academic knowledge, some research component is needed in UG and PG students. With this initiative to provide some platform for students and faculties to publish their research work, we started the Research Symposium on Computing in 2016.

The Practice:

At Walchard College of Engineering (WCE) Sangli, Computer Science and Engineering (CSE) Department is active in promoting research in advances in CSE/ IT under Association for Computing Machinery (ACM) India. This has resulted in instituting the WCE-ACM Student chapter. The first, Second, Third, Fourth and Fifth and Sixth Research Symposia were organized during Dec 19-20, 2016; Dec 15-16 2017, Dec 22-23 2018, Dec 20-21 2019, March 20-21 2021 and 23rd and 24th April 2022 respectively at WCE and it received excellent response from researchers. The WCE-ACM chapter welcomes research paper submissions from faculty, doctoral students, research scholars and industry experts who are actively working in the area of Computer Science and Engineering and allied branches.

The RSC provides a unique opportunity for the researchers to present their research work and will enable them to interact with renowned and experienced researchers in the field of Computer Science and Information Technology.

The symposium will also provide independent and constructive feedback to the participants about their completed/planned research work for further improvements. The research symposium aims at establishing and promoting social and intellectual interactions among students and researchers from academia and industry. The symposium will be accompanied by prominent experts who will deliver the keynote addresses and will actively participate in critical discussions during the symposium.

RSC has three sub-events of it as follows:

- 1. Paper Presentation
- 2. Poster Presentation
- 3. Innovative Project Showcase

Paper Presentation:

This event will mainly focus on PG students, research scholars, faculties, and industry people who are doing research. In this category, research papers are invited in the provided template form from PG students, research scholars, faculties, and industry people. Plagiarism will be checked and sent to reviewers for double-blind review by at least three reviewers. If two reviews are positive, then that paper will be accepted for presentation in the symposium. In conclusion, on the day of the event, the best paper award is declared.

Poster Presentation:

This event mainly focuses on PG students as well as Final year UG students. In this category, a research proposals poster is invited and will be evaluated by the evaluators on the day of the event. If there are more

entries, then they will be shortlisted by a panel based on some rubrics. And shortlisted posters will be presented on the day of the event. In conclusion, on the day of the event best poster award is declared.

Innovative Project Showcase:

This event mainly focuses on UG students. In this category, innovative ideas are invited from the UG students in the form of a project proposal (3-4-page paper write-up). These ideas will be shortlisted, and a maximum of 15 to 18 project ideas will be presented on the day of the event. These ideas will be evaluated by a panel of industry experts and academicians. On the concluding day of the event, three awards will be declared as "IPS Winner," "IPS 1st Runner-up," and "IPS 2nd Runner-up".

Industries sponsor all the awards mentioned above.

Difficulties in Achieving the Objectives:

- 1. Constant motivation and encouragement are required for students to participate in the activities
- 2. Lack of awareness of students regarding research activities in UG students.
- 3. Finding a publishing partner for the research work presented in RSC

Initiatives Taken to Counter the Difficulties:

- 1. Enhancing communication with publishing partners like Springer, IEEE
- 2. Making Tie-up with other engineering colleges and industry for hosting the event
- 3. More industry-oriented research topics involved as a part of the event
- 4. Wide publicity of the event through portals

Success and its Evidence:

Sr. No.	RSC Year	No. of	Papers Journal Na	ame Awards
		Presented	Published: Count	
1	RSC 2016	13		
2	RSC 2017	15		
3	RSC 2018	18	IJCSE: 04	
			Springer: 12	
4	RSC 2019	11	Springer: 10	1.Best RSC Poster: Veersen Jadhav (Rs. 2

l I				2.Best M.Tech Poster: Abhishek Pawan (R
				3.Best M.Tech Poster: Shubhada Marw 1000/-)
				4.IPS Awards:
				1st Prize: Sonali Patil (Rs. 5000/-)
				2nd Prize: Shyam Hakke
				(Rs. 3000)
				3rd Prize: Ajinkya Khade (Rs. 1000/-)
				3 rd Prize: Nilesh Patil
E	DSC 2021	12	TICME, 11	(Rs. 1000/-)
5	RSC 2021	13	TJCME: 11	1.Best RSC Poster: Apurva Patil (Rs. 7000
				Best RSC Poster: Rachana Jadhav (Rs. 700
				2.Paper Presentation:
				1st Prize:
				Tejaswi Mahaling (Rs. 7000/-)
				2nd Prize:
				Sangita Nemade (Rs. 5000/-)
				3rd Prize:
				Arifa Shikalgar (Rs. 3000/-)
				3.IPS Awards:
				1st Prize:
				Yash Koti and Team (Rs.7000/-)
				2nd Prize:
				Nisha Jadhav and Team (Rs. 5000)
				3rd Prize:

				Narahari Papshetwar and Team (Rs. 3000/
6	RSC 2022	09	In process v	with 1. Best RSC Paper: Aditya Gadadhani and
			Springer	5000/-)
				2.Best Poster: Rakhi Dumne (Rs. 5000/-)
				3.IPS Awards:
				1st Prize:
				Yash Kalam and Team (Rs.12000/-)
				2nd Prize:
				Kshitij Sabale and Team (Rs. 10000)
				3rd Prize:
				Tejal Pansare and Team (Rs. 8000/-)

The following students have participated in RSC and published their papers, and these publications are considered for their Ph.D. thesis submission:

- 1. Karveer Manawade
- 2.S A Thorat
- 3. Umesh B Chavan
- 4.C A Laulkar (Submitted)
- 5. Suhel Sayyad (Submitted)
- 6. Ajitkumar S Patil
- 7. Sachin Subhash Patil
- 8. Archana Pritam Kale
- 9. Arifa Javid Shikalgar (Submitted)
- 10. Arun R. Babhulgaonkar
- 11. Bhushan Sukumar Yelure
- 12. Sangita Balkrishna Nemade (Submitted)
- 13. Shri T I Bagban
- 14. Shri S B Bhagate
- 15. Siddheshwar Vilas Patil (Submitted)

7.3 Institutional Distinctiveness

7.3.1 Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words

Response:

Ever since its inception in 1947, Teaching-Learning Process which is the core of Academics for any

Educational Institution has always been a key thrust area. Started with an undergraduate program in Civil Engineering in 1947, various other Undergraduate Engineering Programs are added in the year 1955, 1986 & 2001.

Renowned Faculty Members with a Focus on imparting theoretical as well as practical knowledge to students and adhering to strict norms of Academic discipline ensured necessary academic rigor which is necessary for maintenance of higher educational standards. However, mere bookish knowledge and limited exposure to experimental set-ups in the laboratory has its own limitations in upbringing of the Engineering Graduate. Therefore, in order to have an exposure for faculty members to state-of-the-art technology and necessary industrial liaison, way back in the year Golden Jubilee Year of the College 1972, Seth Gulabchand Research Foundation was established so that the enrichment it brings in the expertise of faculty members trickles down to Students especially in the qualitative improvement of the Projects of Undergraduate Students to make them relevant and applicable for industry. The introduction of Post Graduate Programs with the funding from Government of India in the year 1971 has brought about a sea change in the overall status of our Institution with availability of additional faculty members at higher cadre specialized in their domains and PG Students by qualitative improvement in overall academic processes in the institution. Even though nowadays, there has been a wider support of establishment of Research Parks, Start-ups, Incubators etc. around 50 years back, to have a dedicated Research Foundation was a unique concept on its own. This has been instrumental not only in increasing the industrial liaison and industrial consultancy for the faculty members, but also in establishment of Educational and Research Organizations like EPRF and ARE by the faculty members from the College having a far reaching positive impact of the quality of Academics in the Institution. Ours is one of few Colleges who has taken the advantage of Quality Improvement Program by deputing a large number of faculty members to various IITs to obtain their PhD leading to a better work culture at our place. Faculty members form our College Dr. P. A. Kulkarni, Dr. S. G. Joshi and Dr. P. J. Kulkarni had been recipients of the State Government Ideal Teacher Awards. (Here we can add names of Prof. M. P. Deval and Prof. M. S. Vader and Dr. S. M. Kulkarni also)

To support the regular academic activities, the institution has a rich legacy of Students Clubs since long and their various co-curricular and extra-curricular activities have been extremely helpful in overall development of Students. Even one of reputed international organization, Rotary Club has made an exception and established a separate Rotract Club exclusively for WCE Students way back in February 1975 which itself is a significant recognition. In order to support the activities of Students, the concept of organizing State Level Technical Exhibition of Student Projects was mooted and in the year 1989, we have started with such event named as VISION.

Therefore, despite being located in a remote area, the name of the institute has reached almost every corner of the world and has established itself to be highly preferred institute by meritorious students all over the State of Maharashtra. The institute has maintained its consistent higher ranking in the Undergraduate Engineering admission process even though number of Engineering Colleges in Maharashtra has increased from 9 to 497 in last 40 years. We have always maintained our rank in first 5 Engineering Colleges in Maharashtra in Undergraduate Engineering admission.

With the new theme of Autonomy getting round the corner in late 1990s, our Visionary Leadership has taken a bold step to immediately opt for it despite there was some overall apprehension in the minds of various stake holders across the State. On the new front of Autonomy and Accreditation, WCE has the unique distinction to be the First Autonomous College and to have the First UG Accredited Program and First PG Accredited Program in Shivaji University area. It also happens to be the First NAAC Accredited

College in Shivaji University area (? Needs to be confirmed). Similarly, ever since the inception of NIRF in 2016, WCE has maintained its rank in the list. We have successfully participated in TEQIP-I and ranked at No. 2 at National Level in the performance. We further successfully participated in TEQIP-III & TEQIP-III as well. We have been recognized as a PhD Research Center by Shivaji University, Kolhapur since long back and recently are approved as a Minor QIP Center and NDF/ADF Center by AICTE.

With the new paradigm of Outcome Based Education and Bloom's Taxonomy taking over the conventional rigid processes, many challenges were posed. However, considering these future challenges, our Visionary management way back in 2012 earmarked a separate fund to train all our faculty members in these areas by designing a Tailor-made Program with renowned Educational Experts Lueny Morrell and John Lemoncusa.

Autonomy has been instrumental in bringing about necessary required changes in curriculum. We have incorporated necessary changes to have required interdisciplinary components in curriculum. We also have started a Minor Certification program enabling Students to get a separate Certification in the other branch of specialization. While implementing Examination Reforms, we are the pioneers in the concept of mention of the Course Outcomes (COs) on the Question Paper itself and finding out it's attainment from the Question wise marks obtained.

All the focus on the Academic processes have naturally been helpful in achieving our institute Vision of producing capable engineering graduates with an aptitude for research and leadership. The data shows that we are amongst top placement institutes in the state with almost all interested students getting placed. Also most of these students get internship offers in the final semester itself. Also many of our students who participate in various events like BAJA, Hackathons etc. are amongst the winners. At the same time many students pursue their post-graduation in reputed institutes like IITs here or abroad. Our students also find their place in the competitive examinations conducted by UPSC and MPSC.

So we can conclude that the institute has risen to the expectations of its forefathers by maintaining its standards in core area of Academics and serving the Society as well as the Nation.

File Description	Document	
Any other relevant information	View Document	

5. CONCLUSION

Additional Information:

Walchand College of Engineering (WCE) Sangli having an existence with pride for last seven decades, has been started as the first private Engineering College in the then Province of Bombay in the pre-independence era in June 1947. It started receiving Grant in-Aid in 1977. Ever since its inception, the College is striving hard to provide quality technical education to students for generations together to fulfill its VISION statement of "To produce capable graduate engineers with an aptitude for research and leadership," even though the statement has been formalized 15 years back after wording the legacy and work culture of old institution. In order to achieve this VISION following MISSION statements have been practiced by the College.

- 1. To impart quality education through demanding academic programmes.
- 2. To enhance career opportunities for students through exposure to industry.
- 3. To promote excellence by encouraging creativity, critical thinking and discipline.
- 4. To inculcate sensitivity toward society and a respect for the environment Undoubtedly,

WCE has its own prominent presence as one of the renowned Engineering Colleges in the country. It has been one of the preferred choices in the State of Maharashtra by the students aspiring for their Engineering career, despite being located at a non-Metro place. Currently, with an intake of 390, it runs six major UG programs and offers ten PG specializations with an intake of 240. WCE is also offering a Ph.D. affiliated with Shivaji University, and also a recognized minor QIP Centre and AICTE NDF Ph.D. center with more than 100 students who are at present doing their Ph.D. in various disciplines. WCE has a strong alumni base of over 16000, spread across the globe. Proudly, they are contributing in diversified fields at prominent positions. WCE provided all its efforts for the Technical Quality Improvement Program (TEQIP) of MHRD through NPIU for TEQIP-I in 2004 with funding of Rs. 8.54 Cr., for TEQIP-II with funding of Rs. 12 Cr and for TEQIP-III in 2017 with a funding of 7.0 Cr. WCE has consistently performed well ahead of other peer institutes to contribute the success story of TEQIP. Based on the performance, the College has received additional funding of Rs. 0.7 Cr. in TEQIP-III. The College, Under TEQIP-III, could get associated with Jabalpur College of Engineering, Jabalpur as a mentor to bring positive changes. The College could also execute the AICTE Margdarshan scheme successfully during 2017- 22. All the educational programs are recognized by AICTE and were accredited through NBA. At this stage, College is entering into the next phase of accreditation through NBA as well as NAAC. The College stand in the NIRF range of (201-250) among engineering institutions, including IITs and NITs in India, as announced by the Ministry of Human Resource Development for the year 2022.

Concluding Remarks:

Walchand College of Engineering (WCE) Sangli having an existence with pride for the last 76 years and recently celebrated its Platinum Jubilee during 2021-22. WCE was started as the first private Engineering College in the then Province of Bombay in the pre-independence era in June 1947. Ever since its inception, the College has been striving hard to provide quality technical education to students for generations together in order to fulfill its VISION and MISION statement. All the educational programs are recognized by AICTE and were accredited through NBA, and Institute has been NAAC accredited and now submitting SSR for cycle

2. WCE has highly qualified and dedicated faculty members who are constantly involved in research and are associated with practicing engineering in addition to their academic duty. WCE has achieved a series of milestones, the credit of which undoubtedly goes to dedicated faculty, encouraging management, and our brilliant students. No wonder WCE Sangli is the most preferred destination for engineering education today!