

## YEARLY STATUS REPORT - 2020-2021

Part A		
Data of the Institution		
1.Name of the Institution	YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING	
• Name of the Head of the institution	Dr. Uday P. Waghe	
• Designation	Principal	
• Does the institution function from its own campus?	Yes	
Phone No. of the Principal	07104295083	
Alternate phone No.	07104295085	
Mobile No. (Principal)	9764996477	
• Registered e-mail ID (Principal)	principal@ycce.edu	
• Address	Hingna Road, Wanadongri	
• City/Town	Nagpur	
• State/UT	Maharashtra	
• Pin Code	441110	
2.Institutional status		
• Autonomous Status (Provide the date of conferment of Autonomy)	26/10/2009	
• Type of Institution	Co-education	
• Location	Urban	

Financial Status	Self-financing
Name of the IQAC Co-ordinator/Director	Dr. Arvind R. Bhagat Patil
• Phone No.	07104234623
Mobile No:	8552963777
• IQAC e-mail ID	dean_pd@ycce.edu
3.Website address (Web link of the AQAR (Previous Academic Year)	https://www.ycce.edu/pdf/NAACPLUS /AOAR-2020-21.pdf
4.Was the Academic Calendar prepared for that year?	Yes
• if yes, whether it is uploaded in the Institutional website Web link:	https://www.ycce.edu/AcademicCale ndar.php

### **5.Accreditation Details**

Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
Cycle 1	A	3.25	2016	16/09/2016	15/09/2021
		06/01/2016			

6.Date of Establishment of IQAC

06/01/2016

7.Provide the list of Special Status conferred by Central and/or State Government on the Institution/Department/Faculty/School (UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC, etc.)?

Institution/ Depart ment/Faculty/Sch ool	Scheme	Funding Agency	Year of Award with Duration	Amount
Yeshwantrao Chavan College of Engineering	NIL	NIL	Nil	NIL

#### **8.**Provide details regarding the composition of the IQAC:

• Upload the latest notification regarding the composition of the IQAC by the HEI	<u>View File</u>

9.No. of IQAC meetings held during the year	02	
• Were the minutes of IQAC meeting(s) and compliance to the decisions taken uploaded on the institutional website?	Yes	
• If No, please upload the minutes of the meeting(s) and Action Taken Report	No File Uploaded	
<b>10.Did IQAC receive funding from any funding agency to support its activities during the year?</b>	No	
• If yes, mention the amount		
11.Significant contributions made by IQAC dur	ing the current year (maximum five bullets)	
External AAA Audit was conducted on 12 May 2021 in online mode. The Expert were Dr. O.G. Kakde - IIIT, Nagpur, Dr. A.G. Keskar - VNIT, Nagpur, Dr. N.C. Shivaprakash - IISc, Bangalore.		
Functional MoUs with industry/institutions signed are 32 by the Institute/Dept./T&P Cell, Centre of Excellence in the AI & ML is started in CT Department, Major Quality Decisions taken in consultation with AC & BoM to Start 04 new generation UG Programs, Minor & Honors Degree scheme is started, Certification courses to be offered by departments		
231 Faculty members attended/participated in STTP/FDP, 93 Workshops/Seminars are conducted on Research Methodology, IPR, entrepreneurship and skills development, 51 Faculty members has done SWAYAM/NPTEL Certification and 07 Faculty members are awarded PhD and also published Patent+ Copyrights are 103.		
84 student development activities under various Professional Societies are organized by the respective Professional Societies of the departments/institute,15 Virtual Industrial Visits are Organized during pandemic and teacher's Course Lecture Video Recording is made available to students		
Through 22 Carrier Guidance Programs 814 Student's got benefited in Campus Placement		
12.Plan of action chalked out by IQAC at the beginning of the academic year towards quality enhancement and the outcome achieved by the end of the academic year:		

Plan of Action	Achievements/Outcomes
Submission of pre-Qualifier for NBA Accreditation of UG Program CT & PG Program Structural Engineering	It has been decided to submit the per-qualifier before 30 Oct 2021 and ensure the committee visit before Feb-March 2022
Preparation of SSR for 2nd cycle of NAAC Accreditation	The draft SSR is prepared and reviewed by all the concerned Deans. The suggested changes are to be incorporated.
External AAA Audit	External AAA Audit was conducted on 12 May 2021 in online mode. The Expert were Dr. O.G. Kakde - IIIT, Nagpur, Dr. A.G. Keskar - VNIT, Nagpur, Dr. N.C. Shivaprakash - IISc, Bangalore. The committee submitted the detailed report.
Implementation of Quality initiatives (AWL, DLA, CRT, VPS, PQAI, etc.)	AWL 2020-21 Audit is planned in the last week of July 2021. • DLA 2020-21 is planned to be completed before 15 August 2021. Completed in Sept 2021. • CRT is conducted during summer vacation. • PQAI: Cancelled
Periodic Audit of online Class engagement to ensure the proper T-L Process	The audits of the online class engagement are carried out. The reports are submitted for necessary actions.
The student support center to address the students issues in the online mode	The team of faculty members & Student Activity In-charge addressed the issues in timely manner.
Functional MoUs with industry /institutions	32 (Institute/Dept./T&P)
Faculty Qualification Improvement	07 (Awarded PhD)
Participation of Faculty in STTP/FDP	231 (Attended

SWAYAM/NPTEL Certification	51 (Certification)
Consultancy by the Departments	More than 1 Crore
Faculty Recognition & Achievements	Dr. R.C. Dharmik, Head & Assistant Professor, Department of Information Technology Department, received a grant of Rs.2,46,000/- from AICTE for organizing STTP.,
Faculty Recognition & Achievements	Prof. Yogesh Kale, Asst. Professor, Department of Electronics & Telecommunication Engineering, received Rs.1,35,000/- (from NYSS) as Medical consultancy for Shalinitai Meghe Hospital, Wanadongari, A COVID CENTRE, It includes 1) Mobile operated food trolly, 2) COVISAFE, 3) Automatic Hand Sanitizer and 4) Fogger.
Faculty Recognition & Achievements	Dr. J.P. Giri, Asso. Professor, Department of Mechanical Engineering received grant of Rs.3.00 Lakh under AICTE AQIS scheme for the project title : Advances in Additive Manufacturing.
Faculty Recognition & Achievements	Dr. S.S. Chaudhari and Prof. A.P. Edlabadkar from Mechanical Department received the grant of Rs.2,84,667 /- for conducting the STTP under AQIS scheme by AICTE Delhi.
Faculty Recognition & Achievements	Dr. S.S. Chaudhari and Prof .A .P. Edlabadkar from Mechanical received Department the grant of Rs.2,80,000 /- for Technology Based Entrepreneurship Development Programme (TEDP) through online platform by DST India.

Faculty Recognition & Achievements	Patent has been granted to Dr. Shubhangi Rathkanthiwar, Professor, Department of Electronics Engineering. The title of patent is 'OFDM Transceiver with Self-organized ANN'.
Faculty Recognition & Achievements	Prof. T.G. Panse, Asst. Professor, Department of Electronics Engineering has received a grant of Rs.2.00 Lakh under RGSTC Scheme on 12th February, 2021
Organization of various Student development activities under Professional Societies	Event Organized:84
Guidance for Competitive Examinations	Expert Lectures : 21 through GATE Clubs
Student Joint Projects/Events	No. of Projects: 55
Industrial Visits Organized	15 Virtual visits • (Amazon Transportation Services Hyderabad, Nagpur, Metro, Virtual visit at ICAR - Citrus Research Institute
No. of MOOC Courses offered by Department	No. of offered Courses: 05
Recording of faculty course lectures:	100% Teacher's Course lecture Video Recording
Student Placement & Carrier Guidance	Campus Placement: 814 • Carrier Guidance Programs Organized: 22
Enhancement of Employability/ Entrepreneurship/ Skill Development	Regular Courses offered with focus on: 335 • Value-added Courses Organized: 25
Student Achievements	Ms. Anubhuti Gupta, Received Best Paper award for presentation in technical session in International Conference on

Student Achievements	Bhavesh Mishra Received Goldmedal in Tug of war, Bronze medal in Debate competition in Organised by NCC, VNIT campus Nagpur dated 22-26 February 2021.
Ph.D. Research Centre	Recognized Research Guides: 37 (YCCE Teachers) • YCCE Faculty Awarded PhD: 07
Project Co-guides from Research labs	06 (Co-guides)
Thrust Areas Specific Activities: Publication, STTPS/FDP/SDP/ Training	Publications: 173 • FDP/SDP Organized: 158
Proposals Submission to funding agencies	Proposals Submitted: 10 Cr. • Funds Received: 31L
Workshops/Seminars conducted on Research Methodology, IPR, entrepreneurship and skills development	93
Incubation Center Activities	Startups commenced: 09 • Incubation ideas submitted:11 (by Departments)
Patents and Copyrights	Patent+ Copyrights: 103
Industry Experts involvement in development activities	Industry Expert Guest Lectures: 58 • Resource Person for FDP/ STTP, CDW: 61
Industry Linkages through Internship & Visits/tours etc.	Students Internship: 270 • Visits to industry: 36
Industry Aligned Courses offered by department	05: CT: 02 (ISF, EIT), EE: 01 (Analog VLSI Design), ME: 01 (Pipe Design), EL: 01 (Electric Vehicles)
Centre of Excellence in the Department	AI & ML CoE is started in CT Department.
Industry Supported labs.	• CT: Internet of Things • ME: High Pressure Hydraulics Lab with Minar Hydrosystems Pvt.

	Ltd.
Management Interaction with students	Cancelled due to Pandemic
Alumni involvement in dept. activities	• Alumni Involved:62 • Alumni Meets: 03
Parent Teacher Meets	Organized as per academic calendar in online mode.
Extension Activities	FOOD DONATION DRIVE :- The Food Donation Drive was on 24th Oct 2020 by NSS Club of YCCE in association with the NGO - The Creator's Club. It was organised on the special occasion of Dussehra. The main purpose of the event was to feed needy peoples and to spread message of mankind. It was one of the biggest event for both the clubs as they feed more than 1000 peoples from various places of Nagpur.
Extension Activities	YATHOGATHA :- YATHOGATHA salaam- e-hindustan event was organized by NSS Club of YCCE on 15th August 2020 on the occasion of Independence Day. The main purpose of the event was to thank our real heroes for their great contribution towards our nation and to thank all those who contributed their life in the safety of nation.
Extension Activities	ARPAN :- A Notebook Donation Drive was organised by NSS Club of YCCE on 2nd Oct 2020 on the occasion of Gandhi Jayanti. The main purpose of the event was to help needy students by donating books, pens, pouches, etc.The drive was in collaboration with the NGO - The Creator's Club. NSS YCCE were in contact with

	Z.P Primary School, Mohgaon for this donation drive.
Extension Activities	The SANITARY PAD DONATION DRIVE was successfully organised by the NSS Unit of YCCE on 24th January 2021 on the occasion National Girl Child Day. The main purpose of the event was to make the society aware about the nicety of the girl child and to focus on the untold, real facts and their importance
Extension Activities	THE CLEANLINESS DRIVE was successfully organised by NSS Unit of YCCE on 21st Feb 2021 at Shivaji Krida Mandal Ground, Gandhi Nagar, Nagpur. The main purpose of the drive was to introduce people about the embel purity and importance of cleanliness and to awake them about their responsibilities towards nature. The event was held with the collaboration of NISHI TRUST under which many clubs were joined. Mask, sanitizer, gloves, etc were provided to each member. The Cleanliness Drive initiated with Four groups of each 12 - 15 members.
13.Was the AQAR placed before the statutory body?	Yes
• Name of the statutory body	
Name of the statutory body	Date of meeting(s)
Academic Council	04/09/2021
14.Was the institutional data submitted to AISHE ?	Yes

• Year	
Year	Date of Submission
21/01/2020	21/01/2020
Extended Profile	e
1.Programme	
1.1 Number of programmes offered during the year:	14
2.Student	
2.1 Total number of students during the year:	4816
2.2 Number of outgoing / final year students during the year:	1177
2.3 Number of students who appeared for the examinations conducted by the institution during the year:	10138
3.Academic	
3.1 Number of courses in all programmes during the year:	488
3.2 Number of full-time teachers during the year:	248
3.3 Number of sanctioned posts for the year:	234
4.Institution	
4.1 Number of seats earmarked for reserved categories as per GOI/State Government during the year:	r 545
4.2 Total number of Classrooms and Seminar halls	86
4.3 Total number of computers on campus for academic purp	poses 1600
4.4 Total expenditure, excluding salary, during the year (INR Lakhs):	R in 1390
Part B	
CURRICULAR ASPECTS	
1.1 - Curriculum Design and Development	
1.1.1 - Curricula developed and implemented have relevance	to the local national regional and glob

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

Factors considered for Curriculum Design: The cutting-edge curricula are designed in consultation with the various stake holders so as to identify the local, regional, national and global aspirations of industry players. Curricula is perfectly aligned which reflects the lofty vision and mission of the institute. The outcome- based education (OBE) is the central idea around which the whole exercise of curricula design, development and implementation revolves. It encompasses the central theme of graduate attributes as advocated in the philosophy of NBA.

1. The cutting-edge courses are designed to provide a level playing field to the learners so as to develop their critical thinking, problem solving acumen, teamwork, and above all social and moral values.

2. The teaching departments ropes in the experts from the industry and academia so as to design the courses which are at par with industry 4.0.

3. The curricula are developed with an aim to sensitize the learners on universal human values, social, moral, and environmental obligations.

4. The curricula are designed such a way that it provides an ample room for ICT based learning. MOOCS certificate courses through NPTEL, UDEMI etc. shall migrate the learners up the value chain by enhancing their technical know-how and augmenting their employability index. Add-On and value-added courses through MOOCS platform shall position the learners high on a learning curve.

5. The students skills and competencies shall be developed through the centres of excellences established in the institution. The Curriculum is designed to ensure that the students have the required domain knowledge, skills, and innovative mind sets, opportunities to learn through ODL using Swayam / NPTEL and extensive use of ICT. The documents referred for the curriculum design are: (i) Model curriculum prescribed by AICTE, (ii) The Program Specific Criteria of professional bodies, (iii) Suggestions by industry experts and alumni, (iv) Syllabus of various reputed Indian and International Universities, (v) Recent technological developments in the domain and more recently the areas covered under National Education Policy. The core values specified by NAAC are taken into consideration in curriculum to enhance human resource development, capacity building of individuals, and the needs of the society, industry, and the nation.

Addressing POs through the Curriculum: The institute follows outcomebased education (OBE) model as advocated in the philosophy of NBA. Every program has a set of unique program objectives (PO). The courses under the program at different levels are having a unique set of Course Outcomes (CO). Course outcomes are mapped with program outcomes using various rubrics as well as direct and indirect methods of assessment. Through continual assessment corrective actions are taken so that the program objectives are met with, and graduates are eventually demonstrating all the essential attributes as advocated in the philosophy of NBA.

Process for Curriculum Design: The initial version of the curriculum is prepared by having the above design criteria, through discussions with stakeholders. The curriculum is then placed for discussion/approval by the BOS (Board of Studies) constituted as per prevailing norms, and has industry, academic experts in addition to faculty as members. The curriculum suitably revised based on suggestions by BOS is then placed for approval by the Academic Council (AC). The curriculum is finally evolved after incorporating suggestions by AC, if any. The academic autonomy of the Institution provides the opportunity to frequently revise the curriculum based on needs and suggestions of various stake holders. The major revisions of curriculum are carried out once in every four years ; up to 20% minor changes are done every year as per the need.

File Description	Documents
Upload additional information, if any	<u>View File</u>
Link for additional information	Nil

#### 1.1.2 - Number of Programmes where syllabus revision was carried out during the year

8

File Description	Documents
Minutes of relevant Academic Council/BOS meeting	<u>View File</u>
Details of syllabus revision during the year	<u>View File</u>
Any additional information	<u>View File</u>

# **1.1.3** - Number of courses focusing on employability/entrepreneurship/ skill development offered by the Institution during the year

348	

File Description	Documents
Curriculum / Syllabus of such courses	<u>View File</u>
Minutes of the Boards of Studies/ Academic Council meetings with approval for these courses	<u>View File</u>
MoUs with relevant organizations for these courses, if any	<u>View File</u>
Any additional information	<u>View File</u>

#### 1.2 - Academic Flexibility

#### **1.2.1** - Number of new courses introduced across all programmes offered during the year

#### 34

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	<u>View File</u>
Any additional information	<u>View File</u>
Institutional data in prescribed format (Data Template)	<u>View File</u>

# **1.2.2** - Number of Programmes offered through Choice Based Credit System (CBCS)/Elective Course System

14

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	<u>View File</u>
Any additional information	<u>View File</u>
List of Add on /Certificate programs (Data Template)	<u>View File</u>

#### **1.3 - Curriculum Enrichment**

1.3.1 - Institution integrates cross-cutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability, and Human Values into the curriculum

The institute has well acknowledged in letter and spirit the fundamental building blocks of the society and nation at large. With technical know-how certain cross cutting issues such as professional ethics, universal human values, sustainable environment and corporate citizenship are given the due importance. The tolerance, harmony at workplace, team spirit, corporate governance are some of the few value added trainings which are being successfully imparted to the learners and the faculty.

The curriculum includes courses that are diverse and can cater the needs of cross cutting issues. This enriches students' knowledge base and improves the self-realization and belongingness to the society. A sample of courses offered to the students for enhancing the knowledge in the above aspects is listed below.

Environment and Sustainability: The institute spreads awareness about environmental conservation and optimum utilization of natural resources. The environmental issues are dealt in the classroom through a regular course like Environmental Management, Air Pollution and Solid Waste Management, Environmental & Social Impact Assessment, Water Reuse and Recycling, Rural Water Supply and Sanitation, Energy Conversion and Management, Environmental Legislation and Management System, Industrial Waste Water Treatment and Reuse, Solar Energy and It's Utilisation, Renewable Energy System, Industrial Safety, Electrical Energy Audit and Safety Analysis, Energy Conservation and Management. The campus is ecofriendly with lush green area, free from smoke and dust.

Professional Ethics: Professional ethics are covered in various subjects like RCC Design, Steel Structures and Estimating & Costing, Software engineering, Ethical Hacking and Cyber Forensics, Ethical Hacking, Semantic Web and Social Networks, Privacy and Security in Online Social Networks, Information Security. Various events are regularly organized to spread cognizance about copyright violations and plagiarism checks.

Gender: The institute is committed to provide education to all irrespective of gender, caste, creed, religion, and the social strata by providing quality education for overall growth and development. The girls and boys are treated equally and are given equal opportunities. Gender equality is also being strictly followed in the selection of faculty as functional heads and other supporting staff. Gender Equality is covered in courses like Fundamentals of Management. There are many platforms for hands-on experiences related to gender sensitivity which enable the students to interface with real life situations such as field work, community outreach, and gender sensitization activities.

Human Value Orientation: The Institute has been developing valuebased holistic vision by imparting moral education viz., instilling values of respect towards elders, honesty, loyalty, and equality of opportunity by examples and practical actions motivated through regular lectures by faculties and guests. Departments also organize various events on Human Values, Women Empowerment. A special 10 days residential camp was conducted by the NSS Cell for students to familiarize with the prevailing problems of rural India. The students are also engaged in value added programmes which create awareness about social responsibilities.

Institute conducts seminars/guest lectures/awareness programmes inculcating human values and moral ethics into students. Few of them are Blood donation camp, Tree plantation, Swachh Bharat, Motivation lectures, World Environment Day, Teachers Day etc. Several programmes on "Gender Sensitization and Social Responsibility" are also conducted. So far around 20 programmes like "Awareness on Sexual Harassment at Work Place", "Laws related to Women", "Cervical Cancer Awareness" etc. are conducted for inculcating human values among the staff and students.

File Description	Documents
Upload the list and description of the courses which address issues related to Gender, Environment and Sustainability, Human Values and Professional Ethics in the curriculum	
Any additional information	No File Uploaded

# **1.3.2** - Number of value-added courses for imparting transferable and life skills offered during the year

#### 25

File Description	Documents
List of value-added courses	<u>View File</u>
Brochure or any other document relating to value-added courses	<u>View File</u>
Any additional information	<u>View File</u>

#### **1.3.3** - Number of students enrolled in the courses under 1.3.2 above

#### 3242

File Description	Documents
List of students enrolled	<u>View File</u>
Any additional information	<u>View File</u>

### 1.3.4 - Number of students undertaking field work/projects/ internships / student projects

#### 1313

File Description	Documents
List of programmes and number of students undertaking field projects / internships / student projects	<u>View File</u>
Any additional information	<u>View File</u>
1.4 - Feedback System	
1.4.1 - Structured feedback and review of the syllabus (semester-wise / year-wise) is obtained	

#### from 1) Students 2) Teachers 3) Employers and 4) Alumni

File Description	Documents
Provide the URL for stakeholders' feedback report	<pre>https://www.ycce.edu/pdf/SSS/Structure- feedback-for-design-and-review.pdf</pre>
Upload the Action Taken Report of the feedback as recorded by the Governing Council / Syndicate / Board of Management	<u>View File</u>
Any additional information	<u>View File</u>
1.4.2 - The feedback system of the Institution comprises the following A. Feedback collected, analysed and action taken made available	

on the website	
File Description	Documents
Provide URL for stakeholders' feedback report	https://www.ycce.edu/pdf/SSS/Stake-holder-

-	feedback-system-and-ATR.pdf
Any additional information	<u>View File</u>

#### **TEACHING-LEARNING AND EVALUATION**

#### 2.1 - Student Enrollment and Profile

#### **2.1.1 - Enrolment of Students**

#### 2.1.1.1 - Number of students admitted (year-wise) during the year

#### 1236

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

**2.1.2** - Number of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc.) as per the reservation policy during the year (exclusive of supernumerary seats)

545

File Description	Documents
Any additional information	<u>View File</u>
Number of seats filled against seats reserved (Data Template)	<u>View File</u>

#### 2.2 - Catering to Student Diversity

2.2.1 - The institution assesses students' learning levels and organises special programmes for both slow and advanced learners.

The needs and aspirations of the advanced and the slow learners are distinct. Hence the institute has a well laid scientific procedure, to identify the advanced and the slow learners. The institute has special and well concentrated mechanism to address the special needs and aspirations of advanced and slow learners. However, the institute never demarcates the two types of the learners from the basic constitution, culture and cohort of the institute. The institute is committed towards social justice, equity through increasing access to higher education. The institute assesses the level of students regularly and plans various activities as per the requirement. The institute is having structured process of identifying the slow and advanced learners based on the performance of the students. The HoD's , class teachers and the course teachers assesses the strengths and weakness of individual students ; through classroom interactions and the performance. A structured Mentoring is in place wherein every student is provided with a faculty advisor and the scheduled interactions even recoded.

Catering the needs of advanced Learners:

The institution offers a variety of academic opportunities for advanced learners by encouraging them, to participate in several competitions and events. Students are motivated and mentored to participate in: Smart India Hackathon, Code Chef and other Coding contests, National and International Paper Presentations and project competitions. Students are steered to take up additional courses viz. NPTEL/SWAYAM courses, MOOCs, Certification Courses, learning tools like R Lab, MATLAB, Android OS, CAD/CAM. The advanced learners are involved in industry based/collaborative projects, multidisciplinary/ interdisciplinary projects. Advanced learners are motivated to become members of professional bodies such as ACM, CSI, IETE, ISTE and Institution level clubs/forums.

The advanced learners are being mentored by expert for excelling in extracurricular activities. The alumni of the college also mentor

these students in startups and other activities. Mentor understands the needs of these students and encourages them to work on innovative ideas, incubate it and boost their own start-ups. For incubation of their ideas all necessary facilities are provided through YCCE's TBI incubation center.

Catering the needs of slow Learners: The slow learners are identified by every department based on the performance of students in the mid sessional examinations. Slow learners are mentored through interactive sessions. Faculties take every possible effort such as conducting remedial sessions, special assignments, counselling, planning of studies etc.

The Bridge courses are conducted for Lateral Entry students and the slow learners, for subjects like programming, mathematics, and English communication skills etc. to bridge the gap. To enhance English proficiency special courses like 'Talk in English (TIE)'are offered. This provides confidence among students to be on par with the regular students. Study materials are also provided to the slow learners for boosting their learning ability and ameliorating their performance. Remedial Classes are conducted to overcome their difficulties in that specific course. Learning methods like: Think-Pair-Share, shadow learning etc. are used to enhance the learning abilities of students. These activities help the slow learners immensely to work on their weak arrears and improve their performance.

A special term called Summer Term is offered during the summer break to those students who have either failed or detained in regular terms in order to complete the term before commencement of the next academic session.

A special provision has been made for specially-abled students. These students are entitled for extra timings to complete their tests, during mid-sessional and end semester examinations. They can also seek the services of a writer who can write on their behalf during their exam.

The institution helps in encouraging the slow learner to become an advanced learner and prepare an advance learner to reach the highest opportunities.

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

#### 2.2.2 - Student – Teacher (full-time) ratio

Year	Number of Students	Number of Teachers
01/07/2021	4816	248
File Description	Documents	
Upload any additional information	Y	<u> /iew File</u>

#### 2.3 - Teaching- Learning Process

2.3.1 - Student-centric methods such as experiential learning, participative learning and problemsolving methodologies are used for enhancing learning experiences:

The institute adopts various types of proven pedagogy for teaching and learning. The special emphasis is given to collaborative teaching and learning practices. The entire processes of the institute are learner centric and the end outcome of every process is evaluated on the basis of satisfaction index of the learner and other stake holders of the institute. Through collaborative learning, efforts are made to develop critical thinking and problem solving abilities among the learners.

The teaching-learning process is one of the strength of the institute. We focus on learner-centric approaches in the delivery of curriculum for enhancing learning experiences and ensuring the allround development of students. The institute has adopted innovative teaching and learning process as its differentiators which makes the classroom teaching as well as practical performing very much captivating and interesting for the students. The courses are designed in student centric fashion, by emphasizing on learning outcomes and making the classroom teaching participative and interactive.

The innovative experiential methodologies used are:

- Learning by doing
- Storyboard

- Shadow teaching
- Internships/Industrial Visits

Problem Solving Methodologies used are:

- Think Pair Share
- Mini projects/Major Projects
- Project Based Learning

Participative Learning Methodologies used are:

- Flipped classroom & Blended learning
- Case studies
- Open House
- Field visits

Every faculty of the institution uses one or the other Studentcentric methods and lot of E-content are developed. IQAC and Academic Audit keeps track on the student-centric methods followed by each faculty. All these unique methods are successful and evident through the students' feedback

Modern tools and technological innovations are used in teaching learning process. The institution encourages extensive use of ICT in teaching and learning. The institute has Computer labs with internet facility, Wi-Fi, LCD Projectors, Smart Boards, Video conferencing facility, and Language lab and Conference halls to develop interactive skills. The Moodle based departmental websites, the T-L platforms like: Impartus, Google Class Rooms, Zoom etc. provides E-Learning solution of recording and distribution of classroom lectures.

In the seventh semester, real time projects are given to the students which are being guided by academicians, industry and research personnel A students has to perform a minimum of two laboratory courses per semesters. The Assignments are given to the students to nurture their problem-solving abilities. All the laboratories are equipped with both hardware and software facilities. For the experiments, detailed instruction manuals are provided. The experiments challenge the student's critical thinking, analysis and design capabilities. The students are also trained on virtual labs and modern simulation tools.

Departmental professional technical societies have been established with an objective of tapping, nurturing and channelizing the energies of every individual student. The academic clubs of the departments organize activities to facilitate the creative academic quests of the students individually and collectively. Every department organizes various co-curricular events like quiz, postermaking, technical symposia, debates, etc. that help students in carving and shaping their personality. The Inter-college and interdepartmental academic programs besides enhancing creativity bring a competitive edge to the academic endeavor of the students.

The industrial visits, site visits, camps survey, guest lectures are conducted regularly based on the latest trends in the industry. Hands on training workshops by the industry experts, add to the practical learning of the students.

The Institution has established incubation center for students with an aim to inculcate the culture of innovation amongst students and encourage them to generate new ideas.

File Description	Documents
Upload any additional information	<u>View File</u>
Link for additional Information	Nil

#### 2.3.2 - Teachers use ICT-enabled tools including online resources for effective teaching and learning

The institute gives limitless importance to the mitigation of digital divide and enhancement of digital literacy. The online learning resources are brought to the door step of the students and they are motivated to acquire add on and value added certifications, which position them high on the learning curve. MOOCS courses using various technology platforms are made popularised with the learners and the faculty members so that together they can migrate up the value chain in acquiring advanced know-how in their respective domain of learning/expertise.

Unleashing with the routine and obsolete teaching methodology the institute has developed various innovative methods of teaching learning process for the students. Institution encourages extensive usage of ICT enabled tools and online resources by teachers for student centric effective learning. All the courses offered by the institute extensively make use of ICT facility. All classrooms are provided with required ICT enabled facilities for conducting the online lectures. Faculty members used IMPARTUS, Google Classroom, Zoom Platforms for conducting online lectures. Virtual lab platforms are used for conducting practical. The computers in different laboratories, faculty rooms, research labs, central computing center, Student Hostels, are provided with Internet facility. Entire campus is Wi-Fi enabled. In-house Moodle based departmental website is used for sharing of e-resources, even faculty uploads lesson plans, time- table, course materials, and question banks, submitting online assignments as well as its assessments. The lecture notes, the laboratory manuals are made available on intra- net, accessible to every student and faculty member.

There is an exclusive Digital Library with 40 computers which works from 8:00 am to 8:00 pm every day. Several Online journals, e-books, e-lecture materials are made accessible available. Faculty members use E-learning - resources from National Programme on Technology Enhanced Learning (NPTEL), the e-material developed by the institute (DTEL). The entire institution is provided with LCD video display screens for instant communication of information in every building. The student support center addressed the student's quires in online mode. Special course queries solving online sessions were organized by teachers.

Online industry visits are organized by the departments for the students. During the pandemic period faculty development programs, guest lectures, webinars, student's technical and cultural events, alumni meets are organized in an online mode. Majority of the faculty members and the students have completed SWAYAM/NPTEL/Coursera Certification in online mode.

The mid-semester and end semester examinations both theory and practical are conducted in online mode. The results of these examinations are made available to students through online mode. Faculty members inform the status of the mentees to their parents on a regular basis through SMS and telephone. Google apps and student diary are also used to communicate with the students.

The student admission process to the higher semesters was conducted online with online fees payment facility. Most of the students and faculty members joined Graduation day event and The Republic day and Independence day celebrations through online mode. Parent teacher meets are conducted using ICT enabled tools.

File Description	Documents
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	https://www.ycce.edu/naac/pdf/criteria-2/2.3 _2/2.3.2%20ICT%20USAGE_2020-21.pdf
Upload any additional information	<u>View File</u>

#### 2.3.3 - Ratio of students to mentor for academic and other related issues

#### 2.3.3.1 - Number of mentors

#### 247

File Description	Documents
Upload year-wise number of students enrolled and full-time teachers on roll	<u>View File</u>
Circulars with regard to assigning mentors to mentees	<u>View File</u>

2.3.4 - Preparation and adherence to Academic Calendar and Teaching Plans by the institution

The Dean (Academic Matters) and the Principal collectively prepares academic calendar well in advance before the commencement of the academic session/semester after discussion with the Dean's HoD's, CoE. The academic calendar is made available to the students before the commencement of classwork. The academic calendar is displayed on all the department notice boards, and is made available on the institute website. The academic activities are strictly adhering to the calendar. In adverse cases decision to deviate from the academic plan is taken collectively, with the approval of competent authorities. All the examinations are being conducted as per the Academic Calendar.

The semester wise academic calendar is prepared at the institute level. All the academic activities are planned on the basis of the academic calendar. The academic calendar outlines the session/semester schedule, test schedule, examination schedule, YCCE cultural fest schedule and the departmental technical events schedule. Every department schedule an additional professional body activity, industrial visits, value added programs, conference, workshop, symposium, training programs etc. without affecting the Academic Calendar prepared at the institute level. Timetable in-charge of each department prepares the class timetable and individual teacher's time table as per the guidelines provided by Dean (Academic Matters). Before finalizing the department timetable, the head of the department allocate the courses to the faculty members based on their choice and areas of expertise. The faculty before the commencement of semester prepares the teaching plan and is reviewed by the one of the senior faculty member in the department and finally approved by the Head of the Department.

#### Teaching Plans:

Every faculty prepares the Teaching plan (Hand Outs) in the prescribed format before the commencement of the classwork in every semester. The teaching plan is prepared to adhere to the needs of Outcome Based Education Prescribed by National Board of Accreditation (NBA). The contents of the plan include:

- Course prerequisites
- Course objectives and outcomes
- Mapping of course outcomes with program outcomes
- Course syllabus
- Detailed unit wise lecture plan
- Learning resources/Text Books/Reference Books
- Delivery methodologies
- Assessment methods
- Content beyond syllabus/Any Additional information

The copies of the same are maintained in the department. The web link for the teaching plan is available at http://ycce.edu. Adherence to the academic plan is followed by the faculty and details are recorded in the college management information system (MIS) viz. lectures engaged, topics covered, and student's attendance and evaluation record. Academic Audit Committee does the audit of class engagement by each faculty. These audit reports are submitted to the Head of the departments for necessary follow up action. The consolidated class engagement is discussed in the monthly meetings which are attended by all the Heads of Departments and the Principal. The informal feedback by the departmental committee ensures progress of content delivery and its quality. Feedback from the students is collected in between the semester and towards the end of the semester.

File Description	Documents
Upload the Academic Calendar and Teaching Plans during the year	<u>View File</u>

### 2.4 - Teacher Profile and Quality 2.4.1 - Number of full-time teachers against sanctioned posts during the year 248 **File Description** Documents Year-wise full-time teachers and View File sanctioned posts for the year List of the faculty members View File authenticated by the Head of HEI <u>View Fil</u>e

### 2.4.2 - Number of full-time teachers with PhD/ D.M. / M.Ch. / D.N.B Super-Specialty / DSc / DLitt during the year

#### 95 **File Description** Documents List of number of full-time View File teachers with PhD./ D.M. / M.Ch. / D.N.B Super-Specialty / D.Sc. / D.Litt. and number of fulltime teachers for 5 years View File Any additional information

### 2.4.3 - Total teaching experience of full-time teachers in the same institution: (Full-time teachers' total teaching experience in the current institution)

#### 17.70

Any additional information

File Description	Documents
List of teachers including their PAN, designation, Department and details of their experience	<u>View File</u>
Any additional information	<u>View File</u>

#### 2.5 - Evaluation Process and Reforms

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

File Description	Documents
List of Programmes and the date of last semester-end / year-end examinations and the date of declaration of result	<u>View File</u>
Any additional information	<u>View File</u>

# **2.5.2** - Number of students' complaints/grievances against evaluation against the total number who appeared in the examinations during the year

41

File Description	Documents
Upload the number of complaints and total number of students who appeared for exams during the year	<u>View File</u>
Upload any additional information	<u>View File</u>

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

In order to keep pace with the developments ICT-enabled processes has been adopted by the institution in the examinations and administrations. This has helped the institute immensely to bring reforms and rejuvenation the entire system. The college has experienced the significant improvement in the examination procedures by having continuous internal assessment and provides ready and relevant information to the stakeholders. The academic rules and regulations, the regulations governing examination, evaluation and mal-practice etc. are enshrined in the college prospectus. The course teacher plans the evaluation by applying appropriate assessment tools. This evaluation pattern is being made known to the students at the beginning of the semester with rubrics and assessment frameworks.

The software is available with integrated modules, which includes Admission, Registration, Timetable, Attendance, Marks Entry, Pre-Examination Processes, Online Payment of fees, Result Processing, Generation of Various Reports, Grade Card, Result Gazette, TR etc.

Reforms on the Examination Procedures and Processes:

The Institute follows semester system for both undergraduate and postgraduate programs. The student's performance in each semester shall be evaluated course wise with a maximum of 100 marks for theory and 100 marks for the practical courses. The mini- project, seminar, comprehensive viva-voce each have a weightage of 100 marks and final year project work have 200 marks respectively. A candidate will have to score minimum 40 marks in theory course and 50 marks in practical courses in the end semester examination. The UG student has to earn credits and an M. Tech student has to earn credits to satisfy the minimum academic requirement to obtain the degree. Marks obtained in all the credits are considered for the calculation of CGPA.

The facility of showing the answer sheet before declaration of the result and challenging the evaluation system are the measures taken to showcase the transparency in the evaluation system. All the examinations are conducted with strict adherence to the Institute academic calendar and timely publication of results.

Question papers are thoroughly moderated to ensure the standard, coverage of the syllabus and mapping of COs as per BLOOMS taxonomy. For engineering drawing practice and examinations the Institute is using Auto cad.

Processes Integrating IT:

Examination Management System services are available to integrate all the activities in the examination cell. The pre and post examination activities are integrated, starting with examination notification. Panel of internal or external examiners for setting question papers and moderation and valuation of answer sheets are being constituted. Appointment letters of examiners for setting question papers and internal and external examiner for practical courses are generated through software and sent through mails. Payment gateway is also available for the payment of various fees online by the students to make the registrations online for various services. Roll number allotment for examination, generation of examination roll list and hall ticket are being done through software. The system is enabling the student to download the hall tickets and results online. Internal marks entry is done in software module by the respective course teacher.

The valuation of the answer sheets are done in online mode. The system automatically generates the result on the basis of the entered marks. The tabulation committee re-examines marks and decides the grade cut-offs on the basis of certain standard calculations. The trial results are sent to RRMC for the review and comments. The final results are processed through tailor made software. Gazette, Tabulation registers and Grade Sheets are prepared through the software. Complete automation of examination process helps in the successful execution of examination processes such as monitoring of examination, fee payment, examination schedule, seating arrangement, attendance monitoring, coding and decoding of scripts, on line valuation, marks data entry, preparation of programme wise results.

Continuous internal assessment system:

Continuous internal assessment is done through conducting various mid-semester tests from time to time as per the academic calendar. Three mid semester exams for each theory course, one online test for Teachers Assessment marks for each course are conducted in each semester for B.E. and M. Tech Programs. The continuous evaluation of practical course is carried out every week. Seminars, quizzes etc. activities are also conducted. The test marks of the student are uploaded in database software and can be viewed by students. For the final year project evaluation rubric based standard operating procedure is followed by every department. It starts with the title selection seminar, synopsis submission, periodic progress seminars and demonstrations, thesis evaluation, internal viva voce and external examinations.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	Nil

#### 2.6 - Student Performance and Learning Outcomes

2.6.1 - Programme Outcomes and Course Outcomes for all Programmes offered by the institution are stated and displayed on the website and communicated to teachers and students

Ever since the embarkation of outcome-based education (OBE) model the institute has published and democratised the essential features of OBE. The learners and the faculty members are through special trainings and awareness initiatives are acquainted with the philosophy and style of OBE. To imbibe the required skill sets and competencies among the students fostering the critical thinking as per the global requirement the institute always design course outcomes. The institute is practicing the Outcome Based Education (OBE) as per the guidelines of National Board of Accreditation since 2014 as it gives emphasis on what is expected from the student when they finish their course. In line with OBE Program Specific Outcomes (PSOs), Program Outcomes (POs) and Course Outcomes (COs) are evolved.

The institution has adopted the Programme Outcomes (PO's) given by the NBA. Every department has defined 2-4 Programme Specific Outcomes (PSO's) through consultation process with the stake holders by considering the inputs evolved in cognizance of latest technology demand, job prospects and societal requirements for all the programmes offered by the institution.

Course outcomes (CO's) describe the essential and enduring disciplinary knowledge as well as the abilities that the students should possess and the depth of learning that is expected upon completion of a course. These relate to the skills, fundamental knowledge, and behavior that students acquire by pursuing the course. The Course outcomes are designed in sublime manner which appropriately commensurate the PO's and PSO's. The course outcomes are designed based on blooms taxonomy and are lucidly mentioned in the syllabi.

COs are correlated with the POs in the scale of 1 to 3, 1 being the slight (low), 2 being moderate (medium) and 3 being substantial (high). CO-PO mapping matrix is prepared for every course in the program including the elective subjects. Each Course Outcome is mapped to Program Outcomes and Program Specific Outcomes in terms of their correlation. The contribution of a course to each PO/PSO is expressed in terms of the average relevance of COs mapped to that particular PO/PSO.

The Department Quality Assurance Committee (DQAC) reviews the defined CO's and sent to the IQAC for the approval. IQAC approves it or suggests changes if required. Once IQAC approves course teachers include it in the Teaching Plan/Handouts.

The institution communicates these COs and POs to the teachers and students through-

- College website: <u>http://www.ycce.edu</u>
- Department Moodle
- Department Notice Boards and Displays
- Program Specific Laboratories notice boards
- Display in HoD Office
- Course Hand-Outs/Teaching Plan

- Course Files
- Laboratories Manuals and Notice Boards
- Department Magazine/Newsletter
- Display at the Prominent Locations in the Campus
- Standees in the departments

Apart from these outcomes are disseminated to the stakeholders of the program through faculty meetings, student awareness workshops, student induction programs, Parents meetings etc. Faculties brief the students about the course outcomes and attainment process in regular class room teaching at the start of the academic session.

File Description	Documents
Upload COs for all courses (exemplars from the Glossary)	<u>View File</u>
Upload any additional information	<u>View File</u>
Link for additional Information	https://www.ycce.edu/

2.6.2 - Attainment of Programme Outcomes and Course Outcomes as evaluated by the institution

Attainment of program outcomes and course outcomes are the mirror image of the graduate attributes being attended by the learners. Acquiring the properties as enunciated in graduate attributes as advocated by NBA is a constant evolving process which requires a continuous monitoring and corrective remedial measures. The institute leaves no stone unturned to ensure that the the pass out batch of the program is endowed with all the graduate attributes as advocated by NBA.

The Program Outcomes (POs) / Program Specific Outcomes (PSOs) are the qualities that must be imbibed in the graduates by the time of completion of their program. At the end of each program, the PO/PSO assessment is done from the CO attainment of all curriculum components. The process of COs, POs and PSOs starts from writing appropriate COs for each course of the program from first year to fourth year in a four-year engineering degree program. Each course has defined set of course outcomes and corresponding evaluation criteria. The course outcomes are mapped to the program outcomes which are used to provide the quantitative measurement of how well the program outcomes are achieved. The attainment of Course Outcomes, Program Outcomes/Program Specific Outcomes are carried out by the teachers. Attainment of COs of the Course is measured directly and indirectly. Direct attainment of COs is determined from the performances of students in all the relevant assessment tools. Indirect attainment of COs is determined from the surveys. In each course, the level of attainment of each CO is compared with the predefined targets, if is not achieved then the course teacher takes necessary steps for the improvement to reach the target.

The CO attainment levels are measured based on the student's performance in the mid semester assessment and end semester examination conducted by the college. This is a form of direct measurement of attainment. In the institute, three mid semester examination assessment tests are conducted for each course in a semester. In each mid semester examination and end semester examination the percentage of students scoring a set target of marks (usually, 60% of the maximum marks) for the COs that are covered is computed. The average of these percentages is computed to decide the attainment level. NBA guidelines are used for arriving at an attainment level:

Attainment Level 1: 60% of students score more than 60% marks out of the maximum relevant marks.

Attainment Level 2: 70% of students score more than 60% marks out of the maximum relevant marks.

Attainment Level 3: 80% of students score more than 60% marks out of the maximum relevant marks.

The average of percentage of students attaining all the COs decides the CO attainment level

For the assessment of outcomes direct and indirect assessment methods are used. The various assessment tools used are:

- 1. Direct tools:
  - Mid-Semester Examinations
  - End-Semester Examinations
  - Continuous Evaluation of Laboratory work
  - Tutorials/Assignment
  - Project
- 2. Indirect tools:
  - Student Survey (Couse outcome, Exit Survey)
  - Faculty Survey
  - Alumni Survey
  - Parent Survey

The institute decided to use 40% weightage for mid semester

examination assessment and 60% for the end semester examination assessment. Hence the above weight proportion for computing overall CO attainment for each course. The procedure of computing overall CO attainment is repeated for each course from first year to final year in an academic year in order to enable computation of PO and PSO attainment levels.

Program outcomes and Program Specific outcomes are attained through the attainment of CO's. Using the overall course attainment levels of all the courses, the PO attainment values are computed. This is direct attainment of POs and PSOs. Another element included in the assessment of attainment of program outcomes is the opinion of exiting graduates through surveys about the attainment of each program outcome. This is indirect attainment of POs and PSOs. The overall program outcome attainment is calculated with 80% weightage to direct assessment and 20% weightage to indirect attainment.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	Nil

#### 2.6.3 - Pass Percentage of students

**2.6.3.1** - Total number of final year students who passed in the examinations conducted by Institution

#### 1193

File Description	Documents
Upload list of Programmes and number of students appear for and passed in the final year examinations	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for the annual report	https://www.ycce.edu/pdf/NAACPLUS/YCCE- Annual-Report_Academic-Session_2020-21.pdf

#### 2.7 - Student Satisfaction Survey

**2.7.1** - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design its own questionnaire). Results and details need to be provided as a weblink

#### https://www.ycce.edu/pdf/SSS/S-S-Survey.pdf

#### **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

The objectives of the institute are in-line with the vision of the institute to contribute to the national development through human resource development and capacity building of individuals, to cater to the needs of the economy, society and the country as a whole. The Institution has framed research policy to promote R&D culture amongst the faculty and students in the Institution through structured systems of research among faculty and students. It is implied that the outcome of the policy shall be the enhancement of R&D activities and achievement of set targets. Initially the R&D related activities were looked after by R&D cell comprising of various research groups 1. Funding Proposal Drafting, 2. Research Centre Coordination and 3. Patents and copy rights. The R&D Cell is reorganized in 2018 to address the new areas as per the need of the hour empowering the coordinators of various activities. The more emphasis is on publication and citations, open avenues for industrial collaborations, more focus on innovation and incubation and strengthen the journal published by the institution.

Accordingly, the R&D cell is decentralized into five verticals from the academic session 2019-20 with defined functions of the verticals as given below:

i) Division of Research Advocacy: This vertical looks primarily after PhD programmes in YCCE, Institutional Journal and Research Portal. The vertical frames academic rule and regulations for the scholars pursuing PhD in the institute research centres and update the same as and when desired.

ii) Division of Research Publications: This vertical is responsible for strengthening the quality of publications and increasing the citations of faculty and students in reputed research databases. This division organizes programmes based for enhancing publications. The plagiarism checking is the main responsibility of this division.

iii) Division of Experimental Research: This vertical takes care of funding proposal guidance, drafting and submission. The vertical organizes various activities related to their domain of responsibilities.

iv) Division of Research Innovation & Incubation: This vertical primarily looks after IPR, Innovation and Incubation activities of the institution. The vertical framed policy for providing seed money to incubates. Vertical leader is responsible for providing the required infrastructural support for incubation of ideas and monitor proper utilization of seed money.

v) Division of Industrial Research & Consultancy: This vertical looks after Industry related Coordination and collaborations, Consultancy in departments and Joint Research with Industry. The vertical organise programmes for enhancement of activities under its domain.

The verticals follow specific guidelines.

i) Faculty members, assigned specific responsibility in the research verticals carry out work in specific domain under the supervision of Mentors and Vertical Leaders.

ii) Vertical leaders frame action plan for achieving targets as given in the Five-year action plan. Vertical leaders frame activity calendar and monitor progress of the targets every month ensure the achievement of the set targets.

iii) The verticals propose in-house funding schemes and distribution of seed money as per requirements.

The Institute encourages faculty members to involve themselves in research by providing well equipped research laboratory facilities and offering several incentives to the faculty members. The research incentives policy of the institute is furnished below:

Faculty Policies (Research):

- Policy for industry/research Laboratory (Sabbatical Leave) 2 Months paid leave +TA+ DA 750/- per day
- Publication of papers in reputed International Journals -Rs.5000/-
- Presentation of paper in International Conf. Registration Fees Max. Rs.5000/- + On duty Leave
- Presentation of paper in abroad International Conf. -Rs.35000/- + On duty Leave

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• Publication of Books/Monographs - Rs. 3000/-
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•

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Student Policies (Research):
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- Policy for participation in design competitions: Max. Rs. 10000/- registration fees, 50% carting charges
- Attending Reputed Conf.: 100% registration fees (Max. up to 5000/-)
- Publication of Paper in reputed Journal:25% of publication charges (Max. up to 5000/-)

File Description	Documents
Upload the Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	<u>View File</u>
Provide URL of policy document on promotion of research uploaded on the website	http://ycceresearchportal.org/policies.html
Any additional information	No File Uploaded

#### 3.1.2 - The institution provides seed money to its teachers for research

# **3.1.2.1** - Seed money provided by the institution to its teachers for research during the year (INR in lakhs)

#### 2.46

File Description	Documents
Minutes of the relevant bodies of the institution regarding seed money	No File Uploaded
Budget and expenditure statements signed by the Finance Officer indicating seed money provided and utilized	<u>View File</u>
List of teachers receiving grant and details of grant received	<u>View File</u>
Any additional information	No File Uploaded

# **3.1.3** - Number of teachers who were awarded national / international fellowship(s) for advanced studies/research during the year

# 103

File Description	Documents
e-copies of the award letters of the teachers	<u>View File</u>
List of teachers and details of their international fellowship(s)	<u>View File</u>
Any additional information	No File Uploaded

# 3.2 - Resource Mobilization for Research

# **3.2.1** - Grants received from Government and Non-Governmental agencies for research projects, endowments, Chairs during the year (INR in Lakhs)

### 31.32

File Description	Documents
e-copies of the grant award letters for research projects sponsored by non-governmental agencies/organizations	<u>View File</u>
List of projects and grant details	<u>View File</u>
Any additional information	No File Uploaded

# 3.2.2 - Number of teachers having research projects during the year

#### 147

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	Nil
List of research projects during the year	<u>View File</u>

# **3.2.3** - Number of teachers recognised as research guides

62

File Description	Documents
Upload copies of the letter of the university recognizing teachers as research guides	<u>View File</u>
Institutional data in Prescribed format	<u>View File</u>

# **3.2.4** - Number of departments having research projects funded by Government and Non-Government agencies during the year

07

File Description	Documents
Supporting document from Funding Agencies	<u>View File</u>
Paste link to funding agencies' website	Nil
Any additional information	<u>View File</u>

### **3.3 - Innovation Ecosystem**

3.3.1 - Institution has created an ecosystem for innovations and creation and transfer of knowledge supported by dedicated centres for research, entrepreneurship, community orientation, incubation, etc.

Division of Research Innovation and Incubation is the key research vertical for innovation, incubation and transfer of knowledge. The vertical has taken major initiatives for development and effective implementation of ecosystem like,

- Incubation policy
- SOP and policy for IPR
- Inhouse patentable product development scheme
- SOP for Inhouse seed fund support

The students and faculty have an excellent opportunity to share their ideas. The selected ideas which are feasible to implement and have commercial advantage get shortlisted. The ideas get further elaborated by framing a problem understanding the customer requirements, brainstorming and identifying a set of solutions and realizing these ideas into prototypes and commercialize products.

The institution has created an eco-system for innovations and incubation activities by setting up YCCE TBI Foundation, a section eight registered company for technology business incubation. The college has received funding of Rs. 30 Lakhs from ministry of MSME under a scheme for promotion of innovation, rural industries and entrepreneurship with equal contribution of institute. The fabrication laboratory is developed and readily available for incubatee at YCCE TBI Foundation.

At present, total 08 start-ups are incubated at YCCE TBI Foundation. The startups are initiated by every technical department to commercialize prominent innovative projects of their respective department. The college has established institute innovation council (IIC) as per the guidelines provided by MHRD Innovation Cell (MIC) and AICTE. It is constituted with a view to provide platform to the innate creativity in the students. It is the small step taken by institute to develop innovation ecosystem within campus. The institute has established IPR Cell to facilitate students and faculty for filing patent and registration of copyright. In the process of conceptualization, solution identification and the realization, the IPR Cell of the institution sees scope for IP creation. The Institute strongly encourages IP creation and it laid out a well-defined IP policy for commercializing the IP either through (a) Technology licensing or (b) Incubation through institute's incubation centre. The college provides professional expertise from Khurana & Khurana IP attorney and bears all expenses towards patenting. The institute has developed "Innovative Gallery". Total of 84 innovative projects from all branches of engineering are on display, out of which 21 projects-based patents have been filed.

The College has established Fabrication Laboratory to nurture innovative ideas of students and faculties. The laboratory is developed under ASPIRE scheme of MSME. The Fabrication laboratory is 24 X 7 open for students and faculties for project work. The required equipment and tools from different technical streams are made available.

The college works jointly with the medical university DMIMS (DU) Wardha for innovative ideas, internships of college students, Medical theme related UG/PG projects, which are completed under the scheme of semester long internship of YCCE at DMIMS (DU).

The departments are having university approved PhD research centres for carrying out doctoral research work.

Division of Industrial Research & Consultancy looks after Industry related Coordination and collaborations, Consultancy in departments and Joint Research with Industry.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://ycceresearchportal.org/

# **3.3.2** - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR), Entrepreneurship and Skill Development during the year

File Description	Documents	
Report of the events	No File Uploaded	
List of workshops/seminars conducted during the year	<u>View File</u>	
Any additional information	No File Uploaded	
3.4 - Research Publications and	Awards	
of its Code of Ethics for Research uploaded in the website through the following: Research Advisory Committee Ethics Committee Inclusion of Research Ethics in the research methodology course work Plagiarism check through authenticated software		
the website through the followin Advisory Committee Ethics Con Inclusion of Research Ethics in t methodology course work Plagia	ng: Research nmittee the research arism check	
the website through the followin Advisory Committee Ethics Con Inclusion of Research Ethics in t methodology course work Plagia	ng: Research nmittee the research arism check	
the website through the followin Advisory Committee Ethics Con Inclusion of Research Ethics in t methodology course work Plagia through authenticated software	ng: Research nmittee the research arism check	

**3.4.2** - Number of PhD candidates registered per teacher (as per the data given with regard to recognized PhD guides/ supervisors provided in Metric No. 3.2.3) during the year

3.4.2.1 - Number of PhD students registered during the year

35

File Description	Documents
URL to the research page on HEI website	http://ycceresearchportal.org/
List of PhD scholars and details like name of the guide, title of thesis, and year of registration	<u>View File</u>
Any additional information	<u>View File</u>

# **3.4.3** - Number of research papers per teacher in CARE Journals notified on UGC website during the year

#### 406

File Description	Documents
List of research papers by title, author, department, and year of publication	<u>View File</u>
Any additional information	No File Uploaded

# **3.4.4** - Number of books and chapters in edited volumes / books published per teacher during the year

#### 12

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://ycceresearchportal.org/

# 3.4.5 - Bibliometrics of the publications during the year based on average Citation Index in Scopus/ Web of Science/PubMed

# 3.4.5.1 - Total number of Citations in Scopus during the year

### 1911

File Description	Documents
Any additional information	No File Uploaded
Bibliometrics of the publications during the year	<u>View File</u>

# 3.4.6 - Bibliometrics of the publications during the year based on Scopus/ Web of Science - h-

# **Index of the University**

# 3.4.6.1 - h-index of Scopus during the year

5	
File Description	Documents
Bibiliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	<u>View File</u>
Any additional information	No File Uploaded

#### **3.5 - Consultancy**

# **3.5.1 - Revenue generated from consultancy and corporate training during the year (INR in lakhs)**

### 41.31

File Description	Documents
Audited statements of accounts indicating the revenue generated through consultancy and corporate training	<u>View File</u>
List of consultants and revenue generated by them	<u>View File</u>
Any additional information	No File Uploaded

# **3.5.2** - Total amount spent on developing facilities, training teachers and clerical/project staff for undertaking consultancy during the year

41.31

File Description	Documents
Audited statements of accounts indicating the expenditure incurred on developing facilities and training teachers and staff for undertaking consultancy	<u>View File</u>
List of training programmes, teachers and staff trained for undertaking consultancy	<u>View File</u>
List of facilities and staff available for undertaking consultancy	<u>View File</u>
Any additional information	<u>View File</u>

#### **3.6 - Extension Activities**

3.6.1 - Extension activities carried out in the neighbourhood sensitising students to social issues for their holistic development, and the impact thereof during the year

The institute has taken a significant stride in community development which also aims at inculcating the core values like truth and righteousness among the learners through various extension activities. The institute carries out a number of extension activities in the neighborhood community for sensitizing the students.

There is a Unit of NSS with enrolment of student volunteers and a faculty In charge as program officer. Students and faculty are encouraged to participate in extension activities through NSS. All the activities are conducted by proper planning, sponsoring and by extending proper facilities. The various activities are conducted as a part of Social Services activities sponsored by the college like blood donation camps, antismoking campaigns, I vote for better India campaign, Swachchata Abhiyan on campus, Nirmalya (Flower and other Waste from Worship of God) Sankalan on the occasion of Ganapati Visarjan at prominent places in the city, traffic rules awareness program in collaboration with RTO, Nagpur and Jan Aakrosh - an NGO.

1. Unnat Bharat Abhiyaan (UBA): The institution is an active member of UBA of Government of India. The 5 villages in Hingna Tehsil have been adopted under this scheme.

a. Degma (Khurd), b. Wanadongri, c. Raipur, d. Sukli, e. Degma (Budruk). Many activities are organized in these villages for their development in consultation with the Village Panchayat on

regular basis. The technical knowledge sharing as and when demanded by the people of these villages and other community services like donation drives, cleanliness drives, health and other awareness camps, training workshops for eligible students are frequently carried out in these villages.

2. Tree plantation: It is a regular activity carried at institutional as well as departmental level. On an average around 25-30 trees are planted per year. It is an initiative of the institution towards green environment to inculcate the human values in the students.

3. Blood donation camps: This is also an activity carried out regularly in campus. Approximately 6 -7 camps per year are organized in collaboration with 4 different renowned blood banks in the city and around 550 students and faculty members voluntarily donate the blood and motivate each other for the noble cause.

4. Swachchta Abhiyaan: This activity focuses on cleanliness of the campus and the area in vicinity. The students involved in the National Service Scheme (NSS) of RTM Nagpur University take this initiative under the guidance of faculty in-charge and other officials of the institution and conduct the cleanliness drive under the 'Swachchta Abhiyaan' scheme of Government of India. This inculcates the habit of cleanliness in the students which helps the institution and the society to maintain the hygiene and clean environment.

5.Nirmalya Sankalan: The collection of used garlands and flowers (Called as 'Nirmalya' in local language) from the idols of Lord Ganesha on the last day of Ganesha Festival, marks an important extension activity carried out by the students of the institution since last 6 years on regular basis. This activity is normally carried out in collaboration with Nagpur Municipal Corporation, Hingna Tehsil office and NGOs like Rotary club. The students request the people not to throw the 'Nirmalya' in the river or the lake and collect that garbage to hand over to the municipal corporation for proper disposal. This helps to keep the environment and the rivers clean, thereby avoiding the pollution. The students develop the tradition of polite and humble interaction with the people through this activity.

6. The young boys and girls are provided the computer awareness in the neighboring village.

7. Helping the flood and other affected people by donating vital

#### life-saving things.

NSS unit also works in collaboration with other institutions for community development activities. Organized guest lectures on ethical values, community service, and social service for the students and neighboring school children. Through these activities the students interact with the poor and needy rural people and develop an attitude to give back to the society. They also develop among themselves a holistic approach to look at the various social issues. Our students participate in several technical, cultural and sports events conducted by Institutes like IIT's and RTMNU University etc.

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

**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 the year

12

File Description	Documents
Number of awards for extension activities in during the year	<u>View File</u>
e-copy of the award letters	<u>View File</u>
Any additional information	No File Uploaded

3.6.3 - Number of extension and outreach programmes conducted by the institution through NSS/NCC/Red Cross/YRC, etc. during the year (including Government-initiated programmes such as Swachh Bharat, AIDS Awareness, and Gender Sensitization and those organised in collaboration with industry, community and NGOs)

30

File Description	Documents
Reports of the events organized	<u>View File</u>
Any additional information	<u>View File</u>

3.6.4 - Number of students participating in extension activities listed in 3.6.3 during the year

4485	
File Description	Documents
Reports of the events	<u>View File</u>
Any additional information	<u>View File</u>

### 3.7 - Collaboration

**3.7.1** - Number of collaborative activities during the year for research/ faculty exchange/ student exchange/ internship/ on-the-job training/ project work

#### 360

File Description	Documents
Copies of documents highlighting collaboration	<u>View File</u>
Any additional information	<u>View File</u>

3.7.2 - Number of functional MoUs with institutions of national and/or international importance, other universities, industries, corporate houses, etc. during the year (only functional MoUs with ongoing activities to be considered)

#### 56

File Description	Documents
e-copies of the MoUs with institution/ industry/ corporate house	<u>View File</u>
Details of functional MoUs with institutions of national, international importance, other institutions etc. during the year	<u>View File</u>
Any additional information	<u>View File</u>

# 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 equipments, etc.

The institute is constantly infusing adequate capital to support teaching learning process. Injection of fresh capital goes into the development of modern and state of the art infrastructure like smart class rooms, conference halls, startup ecosystem, modern laboratories, library resources, to name a few.

The Institution has adequate infrastructure and physical facilities for teaching-learning as per the norms prescribed by regulatory bodies. To keep pace with growing demands of engineering education, the college has significantly enhanced the infrastructure. The college has excellent infrastructural facilities spread over 14 Acres against the required 7.5 Acres with a total Carpet Area of 37750.45 Sqm. and a built-up area of 41527.49 Sqm. The deficiency report against infrastructure is NIL. The infrastructure comprises of Administrative Building, Departments Buildings, Controller of Examinations office, State of the Art laboratories, Centers of excellence, Incubation Center, Central Computing Center, Innovation Gallery, well-furnished classrooms, Auditorium, Conference Halls, Library, Canteen, Hostel, Gym, Student Support Centre, Power supply systems, Water supply etc.

Each department is provided with separate physical infrastructural facilities as per the AICTE requirements. The sufficient number of Classrooms, Tutorial rooms and Laboratories are made available as per the programs offered by each department. All the class rooms, seminar halls and many of the laboratories are ICT enabled with e-learning facilities. Well-equipped laboratories are available in the institution for effective conduction of laboratory courses. Virtual lab facility of IIT Bombay is available in the institute. The details of T-L physical facilities available are:

Number of Class Rooms: 81

Number of Laboratories : 100

Number of Seminar Halls: 05

Number of Workshops: 03

Number of Computer Centers: 03

Number of Language Labs: 03

Number of Auditoriums: 02

The college library has rich collection of textbooks and reference books. The library has a collection of total 32994 titles, with 101520 volumes with a total cumulative investment of Rs.3,33,87,764/-. A digital library with 44 computers is available for online access of teaching learning material. The college has the IEEE digital library subscription to promote research. It subscribes 179 national journals and 2952 international journals. Specialized services like Reprography, Inter Library Loan Service, OPAC, Inhouse/remote access to e-resources, INFLIBNET/IUC facilities are provided.

The college always emphases on the use of standard tools and open source as well as proprietary software's. College has adequate computing and learning resource facilities as per the requirements of statutory bodies. The computers available on campus are 2200; out of which 1600 are for the student usage and others are used for the faculty members and administrative purpose. 2:1 Student Computer Ratio is being maintained in the institute. 20 laptops, 160 printers, and 24 scanners are available for academic purpose. The network is established in the entire campus; the connectivity between the core switch to the access switch is through multimode fibre optic backbone. Campus intranet has paved way to provide seamless access to e-journals, online lecture streaming and application software. Entire campus is Wi-Fi enabled with the help of 25 indoor and 5 outdoor high end controller base CISCO access points. The internet connectivity with 200 MBPS leased lines is available throughout the campus. The website provides access to official information of the college.

To facilitate proper and continuous power supply a 400 KVA transformer is installed in the campus. The solar panels are installed on the roofs of the buildings which satisfies maximum energy requirements of the college.

Round the clock security is provided for campus by availing the services of security guards. Surveillance cameras are installed in the college campus.

Thus, with proper advanced academic planning, adequate availability of physical infrastructure is ensured with optimum utilization

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

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

The institute leaves no stone unturned to ensure all round development of the learners. Apart from academic excellence the institute focuses its attention on holistic development of the learners. The institute believes in developing the personalities of the learners which will give positive vibes to the society. Apart from intellectual quotient the institute pays equal attention to spiritual quotient of the learners. The cultural and sports initiatives are the hall mark practices of the institute. Adequate capital injection into the development of infra for sports, cultural events and yoga practices are the pioneering USPs of the institute.

The institute encourages the organization of cultural and sports activities that stimulate growth, development and retention of students in a contemporary and safe environment that develops fitness and wellness, social interaction and leadership opportunities. The Department of Physical Education and Sports provide a broad spectrum of sports, recreation, and leisure activities for students, staff and faculty. The College offers multiple facilities on campus to cater to the physical development of students. The college has made a name for itself in several sports and cultural activities by winning a numbers of awards/medals for outstanding performance in sports/cultural activities at national/international level in indoor and outdoor activities i.e., Badminton, Basketball, Chess, Cricket, Football, Swimming, Table Tennis, Volleyball etc. and the cultural activities-Dance, Music, Theatre, Fine Arts & Literary. The college felicitate outstanding achievers with cash prizes and certificates.

The institution has well equipped big auditorium with 850 seating capacity to organize cultural activities, Seminars, Professional/Invited Talks, Awareness programs etc. Also additional well equipped small auditorium with 150 seating capacity is available to organize small events/functions.

In a campus big playground about 3.5 acres, with all required facilities is available for outdoor games like Athletics, Cricket, Football, Hockey, Kabaddi, Kho-Kho. Separate Volley ball, Basketball courts are also available. Facility for indoor games like Table Tennis, Chess, Carrom etc. is also provided in campus. Students won medals and awards in national/international tournament. Wellequipped Gymnasium with trainer for training both the students and faculty is in the campus. Yoga / Meditation room is also available. Every year on June 21st, the International Day of Yoga is conducted where all the students and faculty proactively participate. The students are encouraged to practice and participate in intercollegiate, inter-university state level and national level competitions. The mega sports event is conducted as a part of YCCE Fest in the institute.

Students clubs like Literary club, Music club, Creative arts club, Dramatics club, Classical dance club, Photography club are established. Students actively practice and participate in extracurricular activities, participate in National level competitions and won awards and prizes. The college encourages the students to take part in cultural activities that enable them to showcase their talent and creativity in various inter-collegiate events. The necessary training is provided through experts to the participating students. Every year, YCCE organizes, YCCE FEST, the annual cultural fest comprising of various cultural and sports activities to groom students' organizational skills and talents. The event consists of Inter-Collegiate competitions.

File Description	Documents
Geotagged pictures	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for additional information	Nil

#### 4.1.3 - Number of classrooms and seminar halls with ICT-enabled facilities

#### 86

File Description	Documents
Upload any additional information	<u>View File</u>
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	<u>View File</u>

# **4.1.4 - Expenditure for infrastructure augmentation, excluding salary, during the year (INR in Lakhs)**

381.98

File Description	Documents
Upload audited utilization statements	<u>View File</u>
Details of Expenditure, excluding salary, during the years	<u>View File</u>
Any additional information	No File Uploaded

### 4.2 - Library as a Learning Resource

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

The institute has a die-hard faith in developing the reading culture among the learners. The library is considered as a soul and heart of the institute. The teaching department and head of the library together makes it sure that the visiting and reading turn over in library goes on soaring in a healthy manner. The huge and unique library resource is the focal point of attraction for the learners. The ambience in the library is congenial for reading as well as for conducting transaction. The entire library process functions in a copacetic manner.

The Central Library of the College is well furnished in accordance with the AICTE norms. It is

Well-equipped and computerized, rendering services for effective and efficient operational use.

The library is fully automated with LIBSYS 7.0 version. Touch screen catalogue is available.

The college has a voluminous library which caters to the needs of students, research scholars and faculty. The Library resources have been completely Bar Coded and automated using LIBSYS 7- Integrated Library Package for Transactions and OPAC (Online Public Access of Catalogues) for the users.

- Name of the ILMS software Lib Sys
- Nature of automation (fully or partially) Fully
- Version 7.0
- Year of automation 2000

\* LIBSYS software was acquired in 2000.

\* LIBSYS 4 was upgraded to LIBSYS 7 in the year 2015-16.

The college library has rich collection of textbooks and reference books. The library has a collection of total 32994 titles, with 101520 volumes with a total cumulative investment of Rs.3,33,87,764/-. The college has the IEEE digital library subscription to promote research. It subscribes 179 national journals and 2952 international journals. Library also subscribes e-ShodhSindhu and Shodhganga Membership. Specialized services like Reprography, Inter Library Loan Service, OPAC, In- house/remote access to e-resources, INFLIBNET/IUC facilities are provided.

Web OPAC (Online Public Access Catalog) facility is made available to know the bibliographical details about the collection. One separate node is made available in the Central Library for OPAC facility. User can search the library collection by giving Title, Author, and domain. All the books have been classified and catalogued using and arranged on Open shelves, Books are organized subject-wise for easy access and quick retrieval.

Exclusive reference section is available in the library. New arrivals of books and journals are displayed on separate stands and racks. Stock maintenance is done effectively using software. CCTV cameras are installed in the library for strict surveillance.

A digital library with 44 computers is available for online access of teaching learning material. The Digital Library provides On-line access to e-resources on Science and Technology for studies and research. Access to all the On-line library collection, such as the NPTEL lectures of all IITs and IISc have been procured and made available throughout the campus using Intranet for the use of Faculty & Students, Digitized CD ROM information pertains to all the important Books, Question papers, and e-Journals have also been provided in the same platform. As the access facility to e-journals is multi-user and IP address-based, it can be accessed from anywhere in the campus. The faculty and students are issued library cards, which are used for well management of circulation of books and journals. Apart from the central library, a small library as a departmental library is also established in each department.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	http://192.168.19.6:8080/libsys7/

4.2.2 - Institution has access to the journals e-ShodhSindhu Shodhg Membership e-books Databases to e-resources	ganga
File Description	Documents
Details of subscriptions like e- journals, e-books, e- ShodhSindhu, Shodhganga membership	<u>View File</u>
Upload any additional information	<u>View File</u>

# 4.2.3 - Expenditure on purchase of books/ e-books and subscription to journals/e-journals during the year (INR in lakhs)

#### 17.49

File Description	Documents
Audited statements of accounts	<u>View File</u>
Any additional information	<u>View File</u>
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the year (Data Template)	<u>View File</u>

# 4.2.4 - Usage of library by teachers and students (footfalls and login data for online access)

# 4.2.4.1 - Number of teachers and students using the library per day during the year

3540

File Description	Documents
Upload details of library usage by teachers and students	<u>View File</u>
Any additional information	<u>View File</u>

### **4.3 - IT Infrastructure**

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

The institute makes holistic efforts in mitigating the digital divide in the campus. The institute takes all required initiatives for enhancing the digital literacy among the faculty and the

learners. The campus wide internet facility, Wi-Fi facility, remote access facility provides uninterrupted access to all which facilitates the furtherance of academic and research pursuits.

The campus wide network has been established in 2000 and the Centralized Computer Centre manages procurement and maintenance of computer equipment's. The present wired and wireless network infrastructure has been established with priority on reliability, performance and cost efficiency. YCCE IT policy exists to maintain, secure, and ensure legal and appropriate use of Information technology infrastructure established on the campus. This policy establishes YCCE-wide strategies and responsibilities for protecting the Confidentiality, Integrity, and Availability of the information assets that are accessed, created, managed, and/or controlled by the YCCE. Information assets addressed by the policy include data, information systems, servers, computers, network devices, intellectual property, as well as documents and verbally communicated information.

IT policies is classified as:

1] IT Hardware Installation Policy, 2] Software Installation and Licensing Policy 3] Network (Intranet & Internet including Wi-Fi) Use Policy 4] E-mail Account Use Policy, 5] Web Site Hosting Policy, and 6] Cyber Security

The policy applies to-

- ? Stake holders on campus or off campus
- ? Students: UG, PG, Research
- ? Employees (Permanent/ Temporary/ Contractual)
- ? Administrative Staff (Non-Technical / Technical)
- ? Guests
- ? Vendors

Resources covered under policy are

- ? Network Devices wired / wireless
- ? Internet Access

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?	Official Websites, web applications
?	Official Email services
?	Data Storage
?	Mobile/ Desktop / Laptops / Server computing facility
?	Documentation facility (Printers/Scanners)
?	Multimedia Contents

Intranet & Internet services have become the most important resources in educational institutions & research organizations. Realizing the importance of these services, YCCE established basic network infrastructure in 2000 and upgraded from time to time as per the requirements. 2200 network connections covering all buildings in the campus are available. At present, the institute has sufficient number of computers in laboratories to meet the requirements of curriculum and content beyond the curriculum. The configuration of computers is upgraded to i3 and i5 configuration to meet the technological advancements. Computer labs are well equipped with the latest system and application software.

The institute is very keen on upgrading internet bandwidth from time to time. Currently, internet bandwidth is 200 Mbps (leased line) to provide fast internet access. Wi-Fi facility is provided throughout the campus through 30 access points.

Sonic Firewall is installed to prevent illegal access to the internet. DHCP, DNS, Email, web and application servers are used for managing the network operations. The computer systems are protected from virus and worm attacks using antivirus software. Bio-metric Attendance System has been effectively implemented in the institution for college staff. CCTV cameras have been installed in all the prominent places for 24x7 campus surveillance. Budgetary provisions are made for update, deployment and maintenance of IT infrastructure. The Central Computing Center has qualified technical support staff for effective maintenance.

The Classrooms, seminar/conference halls, Auditoriums are equipped with LCD Projectors with all accessories. The institute faculty members have been using Impartus and Google Class Room platforms with a built in recording facility.

	Descente	
File Description	Documents	
Upload any additional information	<u>View File</u>	
Paste link for additional information		Nil
4.3.2 - Student - Computer ratio	)	
Number of Students		Number of Computers
4816		1600
File Description	Documents	
Upload any additional information		<u>View File</u>
4.3.3 - Bandwidth of internet connection in the Institution and the number of students on campus		
File Description	Documents	
Details of bandwidth available in the Institution		<u>View File</u>
Upload any additional information		No File Uploaded
4.3.4 - Institution has facilities for e-content development: Facilities available for e-content development Media Centre Audio-Visual Centre Lecture Capturing System (LCS) Mixing equipments and software for editing		
File Description	Documents	
Upload any additional information		<u>View File</u>
Paste link for additional information		Nil
List of facilities for e-content development (Data Template)		<u>View File</u>

# 4.4 - Maintenance of Campus Infrastructure

# **4.4.1** - Expenditure incurred on maintenance of physical and academic support facilities, excluding salary component, during the year (INR in lakhs)

# 1008.20

File Description	Documents
Audited statements of accounts	<u>View File</u>
Upload any additional information	<u>View File</u>

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

The institute has robust arrangement for maintaining the assets of the institute. It has well equipped and qualified maintenance staff whose key responsibility areas inter alia includes the maintenance of entire campus and physical assets of the institute. It makes sure that every utility on the campus is in a 24/7 functional mode. Preventive and breakdown maintenance are carried out on a regular basis. Annual maintenance contracts (AMC) are established with the vendors and they are renewed regularly. All the equipment and machineries are well calibrated for accuracy in reading.

Well defined procedures are available and executed within the Institute for the maintenance of its physical equipment. Standard Operating Procedures are available for maintaining and Utilizing physical, academic and support facilities. Maintenance Department looks after the maintenance of entire physical infrastructure on the college campus. College has provided sufficient number of supervisory and other staff to take care of all sorts of maintenance work viz, water supply, plumbing and sanitation maintenance, electrical maintenance, carpentry, cleaning of the entire college premises etc. Maintenance department is responsible for supervision of ongoing construction work, cleaning and maintenance works of entire campus and also for bringing out improvement in the physical ambience of the college campus.

Entire housekeeping work of the campus including, sanitary maintenance has been outsourced. Housekeeping staff daily carry out work such as: cleaning, sweeping, dusting of all departmental laboratories, class rooms, library, administrative block etc. Apart from the maintenance staff, departmental non-teaching staff keep track record of daily cleaning of their respective departmental laboratories and class rooms and give monthly report to HoDs and the maintenance department.

#### Laboratories:

All laboratories are effectively used by the students as per their time table during the college hours and can also be availed even after the college hours. Lab Attendance register, stock register, Invoice files and purchase bills are maintained for each lab. The entry register is maintained to ensure the effective utilization of equipment. Lab Assistants and supporting faculties are responsible for maintaining lab equipment. All Major/advanced equipment are maintained by Annual Maintenance Contract (AMC). Minor Equipment's are repaired and maintained regularly.

#### Computers and IT facilities:

The academic requirements of computers are taken care and procured to enable the usage for the research and the project work. Stipulated procedures are documented and executed for the maintenance of the systems.

System Analyst and his team of network engineers and programmers are responsible for the maintenance of IT facilities in the campus. They resolve the issues such as, hardware troubleshooting, software installation/update, maintaining biometric devices, ICT facilities, printers, anti-virus installation, website maintenance, and other network-related issues. The complaints posted through E-mail/online system are addressed by the team. Lab assistants under the supervision of system analyst upkeep the efficiency of computers and IT accessories in the institution. LAN and Wi-Fi are regularly checked by the network team. All the IT facilities are maintained by the Annual Maintenance Contract (AMC).

#### Library:

Library updates its books repository on a yearly basis as per the changes in the curricula. Inputs from the student and faculty are collected in the prescribed format for books to be procured. Library committee discusses and approves the procurement of the same. The library committee meets regularly to upgrade and procure any additional books resources related to both technical and nontechnical. The list is duly verified and approved by the Principal. A suggestion box is provided in the library to collect suggestions from users to enrich the library resources.

'No dues' clearance from the library is made mandatory for the students before appearing in the exam in view of stock verification of books. Entry register for visitors is maintained to ensure the effective utilization of library resources. The issues such as weeding out of old titles, maintaining torn books are resolved with the help of the library committee.

#### Sports Facility:

The gym and other equipment servicing are taken up as and when required under the supervision of the physical director. The Physical Director maintains the sports facilities in the institution. The stock Register and Issue Register are maintained to ensure the proper handling of the sports equipment. Stock verification of sports equipment is carried out at the commencement of each semester. The playgrounds are maintained under the supervision of the Physical Director. The playgrounds are made ready and are kept up to the mark before the commencement of the sports activity.

#### Class Rooms:

At the beginning of each semester the classrooms, ICT facilities and furniture are verified and upgraded by the Administrative Officer. The classroom amenities are verified and maintained periodically to uphold effective teaching-learning practice.

#### Electrical Maintenance:

To supervise the electrical maintenance of the campus electrical maintenance team is available comprising of electrical technicians and helpers. They are responsible for the maintenance of electrical equipment's and are ensuring uninterrupted power supply in the campus. Generators have been installed in campus for uninterrupted electrical supply. Maintenance of other Infrastructural facilities:

Administrative Officer of the institution oversees the maintenance of buildings, classrooms, and Laboratories. He works with a group of dedicated supporting staff to upkeep the facilities in virtuous condition. He also looks after the maintenance of other infrastructural facilities such as a playground, drinking water, parking areas, lawns, gardens, sewage treatment plants, whitewashing, restrooms, keeping campus maps and direction board, etc. Apart from this, student volunteers of NSS unit and other students forums, undertake plantation work periodically on the campus. The sustained efforts taken by one and all enabled substantial improvement of physical ambience on the college campus.

Water coolers have been established in all the buildings to cater for safe drinking water. The quality of drinking water is tested in every three months. The fire extinguishers are refilled and kept in a serviceable condition throughout the year. The institution provides vehicle parking facilities inside the campus. Provision/Space to park cars and two-wheeler vehicles are available. Round the clock security on the college campus is done by the external agency

Process for Repair/replacement Complaints:

- Dully Filled Complaint Form is forwarded to Maintenance Department. The concerned people inspect the site and depute a technical person / suitable person for maintenance.
- 2. If in-house repair is not possible then the work is outsourced.

Once the complaint is resolved it will be closed with the signature of the person logged the complaint

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

### STUDENT SUPPORT AND PROGRESSION

#### **5.1 - Student Support**

**5.1.1** - Number of students benefitted by scholarships and freeships provided by the Government during the year

3062	
File Description	Documents
Upload self-attested letters with the list of students receiving scholarships	<u>View File</u>
Upload any additional information	<u>View File</u>

# 5.1.2 - Number of students benefitted by scholarships and freeships provided by the institution and non-government agencies during the year

1777		
File Description	Documents	
Upload any additional information	<u>View File</u>	
Institutional data in prescribed format	<u>View File</u>	
5.1.3 - The following Capacity Development and Skill Enhancement activities are organised for improving students' capabilities Soft Skills Language and Communication Skills Life Skills (Yoga, Physical fitness, Health and Hygiene) Awareness of Trends in Technology		
File Description	Documents	
Link to Institutional website	Nil	
Details of capability development and schemes	<u>View File</u>	

5.1.4 - Number of students benefitted from guidance/coaching for competitive examinations and career counselling offered by the institution during the year

View File

924

Any additional information

File Description I	Documents	
Any additional information	<u>View File</u>	
Number of students benefited by guidance for competitive examinations and career counseling during the year (Data Template)	<u>View File</u>	
5.1.5 - The institution adopts the f mechanism for redressal of studer grievances, including sexual haras ragging: Implementation of guide statutory/regulatory bodies Creat awareness and implementation of zero tolerance Mechanism for sub online/offline students' grievances redressal of grievances through ap committees	nts' ssment and elines of ting f policies with bmission of s Timely	
File Description I	Documents	

File Description	Documents
Minutes of the meetings of students' grievance redressal committee, prevention of sexual harassment committee and Anti- ragging committee	<u>View File</u>
Details of student grievances including sexual harassment and ragging cases	<u>View File</u>
Upload any additional information	No File Uploaded

# 5.2 - Student Progression

# 5.2.1 - Number of outgoing students who got placement during the year

File Description	Documents
Self-attested list of students placed	<u>View File</u>
Upload any additional information	<u>View File</u>

5.2.2 - Number of outgoing students progressing to higher education

### 74

File Description	Documents
Upload supporting data for students/alumni	<u>View File</u>
Details of students who went for higher education	<u>View File</u>
Any additional information	No File Uploaded

5.2.3 - Number of students qualifying in state/ national/ international level examinations during the year

# 5.2.3.1 - Number of students who qualified in state/ national/ international examinations (e.g.: IIT-JAM/NET/SET/JRF/ GATE /GMAT /CAT/ GRE/ TOEFL/Civil Services/State government examinations) during the year

#### 100

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File Description	Documents
Upload supporting data for students/alumni	<u>View File</u>
Any additional information	<u>View File</u>

# 5.3 - Student Participation and Activities

**5.3.1** - Number of awards/medals for outstanding performance in sports and/or cultural activities at inter-university / state /national / international events (award for a team event should be counted as one) during the year

3	
File Description	Documents
e-copies of award letters and certificates	<u>View File</u>
Any additional information	<u>View File</u>

5.3.2 - Presence of an active Student Council and representation of students in academic and administrative bodies/committees of the institution

The institute believes in democratic and participative model of administration. The student welfare and the student councils are the important building block of the institute. The institute ensures the students participation in the decision making process. The representatives of the students are taken into the confidence and they are allowed level playing field for their healthy participation in the decision making process which concerns academics, extracurricular, co-curricular and other matters of importance to the learners community.

The students are involved in decisions making processes through representation on various academic and administrative committees. The objective of involving students is to give importance to the views of students; thereby improving their confidence, leadership, and decision-making skills. The institute has various vibrant Student Forums/Clubs providing opportunity to participate in Co-Curricular, Extra-Curricular, Social Activities. Throughout the year events are organized for the students to pursue their hobbies. Students are office bearers in various professional society chapters like IEEE, IETE, ISTE, CSI, ACM, IEI, SAE, ASME etc.

Students' Council of institute is the representative body of the entire student community. The Student Council organizes various activities under the guidance of faculty members; develop leadership quality, social awareness and a sense of social responsibility. The institute has an active Student Council consisting of General Secretary (Gathering), General Secretary (Gymkhana), Other Secretaries, core members and other members. The students' council mainly coordinates with the students in organizing various cultural and sports events in the institute. Annual Social Gathering - YASH, Independence Day Celebration, Republic Day Celebration, National Youth Day Celebration, Women's Day Celebration, Indian Air Force Day Celebration, Sports Week, participation in various inter institutional sports and cultural activities etc. are some of the activities managed and organized by this council. The General Secretary (Gymkhana) is the institute representative in the university student council.

Every department is having department student forum and Professional Society Chapter. The technical events are organized with financial support provided by the institute and the sponsors.

The student representation is in IQAC/DQAC, Anti-ragging committee, Library Committee, Student Grievance Redressal Committee, Internal Complaint Committee, SC/ST Cell etc.

Internal Quality Assurance Cell (IQAC)

The overall institute topper of the third year is a member of

Institutional Quality Assurance Cell (IQAC). Student member help to propagate quality policies adopted by the institute among the student fraternity and help in projecting the student view point while taking quality policy decision.

Department Quality Assurance Cell (DQAC):

The department third year topper represents students in Departmental Quality Assurance Cell (DQAC). Student representatives actively participate in framing academic plans, conducting value added courses, add-on programs, and other curricular & extracurricular activities.

Anti- Ragging Committee:

Student members assist the institute in implementing rigid antiragging measures to make ragging free campus.

Library Committee:

Students from UG and PG are the members of Library Committee. The student representatives give suggestions for improvement of library functioning, requirements of books, journal, e-resources etc.

Student Grievance Redressal Committee:

Student Grievance Redressal Committee involves student representatives in resolving issues and grievances of students.

Internal Complaint Committee (ICC):

The student representative from UG, PG and Doctoral Programmes in ICC committee helps to sustain a healthy and congenial atmosphere for female students and staff.

Hostel Committee:

The student representative play major role in ensuring food quality, hygiene and other facilities. They voluntarily monitor day to day activities and bring to the notice of the warden.

#### YCCE Fest Organizing Committee:

The annual Cultural fest "YASH" is organized and executed by the students. Student members of all professional societies and student clubs actively participate in hosting this event a grand success.

#### Editorial Board, College Magazine:

The Editorial Board of College Magazine is having student representation. College magazine gives exposure to the student talents through story writing, poems, articles and fine arts.

Editorial Board, Department Magazines and News Letters:

The technical newsletter and department magazine is compiled and printed by the student representative.

In addition to the above committees, student representatives are in the Hostel Committee, Canteen Committee to ensure its effective functioning and resolving issues if any. Student representatives of Discipline Committee help to ensure a calm and a peaceful academic atmosphere on the campus. Active involvement of the students in various committees significantly leads to their holistic development

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

#### 5.3.3 - Number of sports and cultural events / competitions organised by the institution

# 39

File Description	Documents
Report of the event	<u>View File</u>
List of sports and cultural events / competitions organised per year	<u>View File</u>
Upload any additional information	No File Uploaded

# 5.4 - Alumni Engagement

5.4.1 - The Alumni Association and its Chapters (registered and functional) contribute significantly to

the development of the institution through financial and other support services

The institute has rich bank of alumni which are the brand ambassadors of the institute. The institute through alumni association maintains healthy relations with the alumni. The institute ropes in alumni through various strategic initiatives such as developmental projects, placements, expert talks, mentoring, guidance, start-up initiatives to name a few. Alumni of the institute have indomitable faith in their alma mater which is our success factor.

Alumni Association "Yeshwantrao Chavan Abhiyantriki Mahavidyalaya Alumni Association", Nagpur is a registered body consisting of a Coordination Committee, Executive Committee and student Coordination Committee to engage, execute and enhance various activities of the Association. The Alumni association works to strengthen the camaraderie and network among the alumni, faculty and the management. Around 7500 alumni are the registered members of this association. The alumni association of the institute is the conglomeration of leaders, entrepreneurs, social entrepreneurs, professionals and bureaucrats catering to the society in various designations. The objectives of Alumni Association is to reinforce the sense of belonging towards the alma mater and the spirit of fraternity among alumni by providing a common platform for social and intellectual interaction; and establishing channels for effective communication.

To meet and part is the way of the life, but to meet again and again is the hope of the life. As the students complete their education and leave the college to pursue their career, putting an end to the collaboration with institute. Fortunately it's not meant to be so and it does not need to be so. Actually it's just walking into another beautiful relationship with the college in the capacity of its alumni. Though the first relationship has to end the second one is eternal.

So as to nurture and enjoy this relationship Alumni association organizes alumni meets to reunite with their friends, faculty members, and management, revitalize their memories and share professional experiences with the prospective graduates.

The institution gives high regard to the suggestions of alumni and utilizes their services for the development of the institution in all the possible ways. The institution has included alumni in academic and administrative bodies such as Internal Quality Assurance Cell, Board of Studies, etc. Alumni are invited to participate in curriculum development workshops of the respective departments. The activities by alumni like Guest Lectures, arranging industry visit or training for the students and staff are arranged.

#### Alumni play a significant role:

Students on campus are benefited through alumni interactions in the areas:

Facilitating Internship, Trainings, Industrial Visits, Final year Major Projects development, Skill Development, Invited talks on recent trends, Career Guidance Assistance for higher studies, Assistance for placement Guidance, campus interviews, curriculum design and review, extend the network of professional contacts, promotion of the institute's reputation in society, important role in industry institute interactions and bridging the gap between industry and institute and get real insight into the growth of the institution.

Apart from formal alumni meets, the institute also engages the alumni support in many ways such as collecting suggestions, feedback on existing curriculum, updates on emerging trends, etc. through various networking platforms like LinkedIn, Face book, Twitter, WhatsApp, etc.

Alumni contributed financial assistance of Rs. 3, 46, 65,000/- to the institute in the last five years.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	Nil
5.4.2 - Alumni's financial contribution during A. ? 15 Lakhs the year	
File Description	Documents
Upload any additional information	<u>View File</u>

# 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

The leadership cadre of the institute consists of visionaries who are highly proactive, agile and believes in adopting hand holding approach for the overall development of the institute. The leadership of the institute adopts the practice of corporate governance and having unfathomable belief in quality initiatives. In tune with the vision and mission of the institute the leadership cadre takes all strategic decisions and initiatives which go a long way in furtherance of the lofty ideals and goals. They meet regularly to take the review of the direction and growth. Academic and over all welfare of the learners and the faculty members are upper most in the minds of leadership cadre.

The Academic Advisory Board consisting of eminent academicians from prestigious technical institutes provide guidance in effective implementation of autonomy since session 2010-11. The Institute's focus and core ideology is reflected in its Vision, Mission, and Quality Policy.

Vision Statement:

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

We YCCEian's believe in providing a quality technical education coupled with strong fundamentals along with practical perspectives and global standards through which our students would enable to excel in their respective field of study. We also empower students to perform better at their workplace and become a better citizen.

#### Mission Statement:

YCCE is committed to

- Attract best talent and create learning ambience
- Practice Innovative teaching-learning & research
- Integrate Industry-Institute Collaborations
- Nurture students towards holistic development and choicest career

The mission is tuning the policies and objectives of education by maintaining academics with global standards and ethics. The institution recruits qualified and experienced faculty as per faculty-student ratio requirements of statutory bodies, to make the students globally competent and locally relevant. Training and Placement Cell strives for a good number of placements in reputed MNCs. Institute organize conference every year to enrich and promote research activities. All the departments have state of the art laboratories for enhancing Engineering and Research skills. The curriculum and mode of training are in tune with the needs of the students and current technologies. Humanistic values in education are upheld in the classroom and college activities.

#### Governance of the institution:

The Governance and Leadership of the Institution ensure that its operations are functioning well by nurturing the decentralization and participative decision-making. The governing body provides guidelines through the academic council to maintain high standards in imparting education by setting objectives relevant to policy, hiring quality professionals, rewarding the achievers, provide infrastructure, facilities and encouraging the best utilization of the resources. Principal along with overall administration motivates faculty, supporting staff and students to maintain a competitive and conducive academic environment.

The Institutes perspective planning for the upcoming academic years based on imparting quality education and all round development. Hence, decision-making and quality planning process are articulated keeping in view of Vision and Mission of the institution. The implementation of calendar activities is monitored at different levels of administrations and the management by providing the necessary support.

The implementation of the functionalities are ensured in decentralized manner at various levels; through Deans, Heads of the Departments Director (R&D), Director (Training and Placement), Controller of Examinations, Registrar, Student Activity In-charge, Director (Sports) and team of research vertical heads.

Teacher's role is major in decision-making, planning, implementation; perform the academic and administrative functions in various committees of the Institution. The inputs of teachers in strategic academic planning play important role as the teacher is the key executor. Teacher also holds responsibility for examining and assessing the students in a transparent way and in time with adherence to regulation.

Thus, all stakeholders of the Institute are involved at various levels in assessing actual needs, budgetary, requirements, academic standards and policy-making, progression in innovation and research. The, Principal subsequently drives the resulting policy, strategy, resource allocation, and operations through the Governing Body and the NYSS Society. Societal impact and responsibility of prime importance; that the Institute contributes to sustainable socioeconomic development through globally competitive competence.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	https://www.ycce.edu/

6.1.2 - Effective leadership is reflected in various institutional practices such as decentralization and participative management

The leadership of the institute believes in delegation of responsibility and authority. Decentralization is the core governing philosophy of the institute. Brainstorming, empowerment, freedom for decisions and actions, accountability and corporate governance are some of our core values.

The college involves all the stakeholders in decision making process for framing guidelines and rules & regulations to ensure smooth and systematic functioning of the institute. Two senior faculty members (on rotation basis) are invited to the BoM meetings and their view obtained and duly considered. The relevant information of BoM, Academic Council and Board of Studies is shared with the employees through various meetings/circulars. Budgetary provisions for the departments are made based on the requirements provided by the HoD. The Institution also publishes audited financial statements on its website.

All the Head of the Departments are members of the Academic Council where major Academic/Administrative decisions are taken. More academic power is delegated to the Heads of the Departments. The institution has in place several committees to continuously monitor/guide the academic and administrative activities. The committees comprise of key stakeholders including government, administrators, faculty, staff, industry, employer, alumni, parent and students.

The budget proposal for equipment purchase is submitted to the Principal by the Heads of the departments. The proposed budget is submitted to the Management for approval. The approved budget is then communicated to all heads and in-charges. Through effective decentralization, the institution practices successful delegation. Thus participative management ensures constructive delivery of financial activities.

The Institution practices decentralized governance culture with welldefined inter-relationships. Many senior faculty members occupy administrative positions like the Principal, Deans, Director (R&D), Director IQAC, Controller of Examination, Registrar etc. Institute delegates adequate authority to the departments to work along with departmental committees. The various committees involving faculty are constituted to ensure smooth functioning of institutional activities. Senior faculty members are heading various Academic/Administrative committees. Committees are constituted for the various curricular, co-curricular and extracurricular activities. The departments are encouraged to arrange various activities with the support of Management for the benefit of Students and Faculty. The management has extended enough financial powers to Head of the Institute and Department Heads.

The Management has brought out a service rules handbook to ensure transparency and guide the staff to discharge their responsibilities with ease and efficiency. The book provides policies, procedures, rules, benefits and other service matters. The Management has an advanced planning for senior leadership positions at all level. The management has also devised the policy of rotation of functional heads with an aim to induct and groom the next in line to lead the department/institute. The management has prescribed the necessary guidelines for the appointment of faculty as HoD on rotation basis.

A Case study: Conference Budget Proposal, Approval and Allocation

YCCE organizes national conference with an aim to provide a platform for researchers, scientists, technocrats, academicians and engineers to exchange their innovative ideas in the field of Engineering. The conference provides an excellent opportunity to budding engineers to showcase their innovative talent through presentation of papers and posters and interact with academicians, students from various colleges in the country particularly in Maharashtra. Every year the responsibility of organize the conference is given to different engineering departments on round robin basis.

Budget planning for the conference starts 4-5 month before by the organizing committee of the conference. The Department Head and the various committee in-charges plan the budget for the forthcoming conference. The budget proposal includes the expenses likely to be incurred for various activities like brochures design and printing, website development, publicity, Expert talks, kits, hospitality arrangements etc. The conference in-charges coordinates with all other teaching and non-teaching staff involved in the different committees like conference brochures and website design and development committee, Publicity committee, publication committee, hospitality committee, stage and decoration committee, technical committee, transportation committee, etc. The committee in-charges come up with a budget proposal of their requirements. The final budget proposal is prepared after scrutinizing and submitted to the head of the institute. Principal forwards the budget to the management for the approval. It is further scrutinized by the Charter Accountant of the institute. The management approves the budget. After the successful completion of conference the final budget report of incurred expenses supported with the bills is submitted to the college by the organizing committee

File Description	Documents
Upload strategic plan and deployment documents on the website	<u>View File</u>
Upload any additional information	<u>View File</u>
Paste link for additional Information	Nil

# 6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic/ Perspective plan has been clearly articulated and implemented

In line with the vision and mission of the institute at large the various functional and teaching departments crafts their vision and mission statement and prepares a perspective plan with meticulous planning and active involvement of all the concerns. This perspective and strategic plans serves as a guiding lamp post for the institute. These perspectives plans are prepared keeping in view the basic constitution and the SWOT analysis of the institute. The institutes remain meticulously adhered to the perspective plans which are effectively implemented and continuously monitored.

#### Strategic Plan 2015-2020

The college has distinguished itself among the top engineering institutions for its commitment to reaching beyond the boundaries of traditional disciplines in pursuit of innovation and solutions to real-world problems. Our strategic plan honours and expands upon the core strength, aligning the employees, processes, and priorities around the vision, values and goals of the institute. The plan is deployed through regular plan of actions, day-to-day-activities, resource-allocation and involving all stakeholders at various levels. Performance, quality indexes measured at times provides clarity in achieving strategic-plan. Institution has a strong Strategic plan prepared for 5 years aiming at to achieve clearly formulated following 07 goals:

Goal 1:	Academic Excellence
Goal 2:	Research
Goal 3:	Quality assurance
Goal 4:	Infrastructure development
Goal 5:	Revenue generation
Goal 6:	Continuing education
Goal 7:	Services to community

Goal 3: Quality Assurance: Sub Goal: 3.1 Quality Assurance in Academic processes with a purpose to maintain the academic standards in its academic programs and the graduates of the institution shall have the professional opportunities in the country and abroad.

Targeted Activities Successfully Implemented:

- Annual Academic audits for every teaching department
- Annual Workload Plan for Teachers
- Accreditation (NBA/NAAC Accreditation)
- Ranking by various governmental and other agencies
- Students' feedback

Department Level Assessment (DLA) is conducted at the end of every academic session with the main purpose of assessing the academic processes implemented throughout the session. The criteria's covered under the assessment are: Vision, Mission of the department, Program Curriculum and Teaching-Learning Processes, Course Outcomes and Program Outcomes, Students' Performance, Faculty Contributions, Facilities and Technical Support, Continuous Improvement, Department SWOC, Implementation of Quality Initiative, Status of Annual Workload Plan (AWL) and Departmental Quality Assurance Cell (DQAC) and Student Interaction to take view on parameters like TLP, Infrastructure Facilities, Policies, Satisfaction level, effectiveness of initiatives.

Annual Workload (AWL) Plan for Teachers: The purpose of AWL Plan is to assign annual targets/responsibilities to the Institution/departments, functional heads of the institution and faculty members as per the quality assurance requirements of accreditation, ranking agency, and statutory bodies. The objective of the AWL plan is to ensure continuous improvement in the academic processes of institute and ensure the contribution of faculty members in quality assurance requirements.

The major components of the plan are key responsibilities to the functional heads, annual targets to the faculty members as per the standard format which includes, Publications, Funded Research Proposal, Product Development, Consultancy, Intellectual Property Rights, participation in Faculty Development Programs, Professional Society activities, Involvement in Collaborative, Innovations in Teaching and Learning, Generation of Self-Learning Material, Course Outcome Attainment, Identification of gaps and Corrective Actions. The periodic audits and corrective measures in case of nonachievement of targets streamlined the system.

As a result of well-planned implementation of these activities the institute's performance in the accreditation and ranking is improved in the last five years. The outcomes are clearly visible in terms of improved quality and number of faculty publications, submission of funding proposals, revenue generated through consultancy, numbers of patents and copyrights published, industry based students projects, 95% faculty are members of professional societies and actively participate in the activities, every teachers is practicing innovative methods of teaching, generated no. of self-learning material in terms of Note Books, PPT's, E-Question Banks and improvement in attainment levels of outcomes.

The successful implementation of these activities resulted in NBA

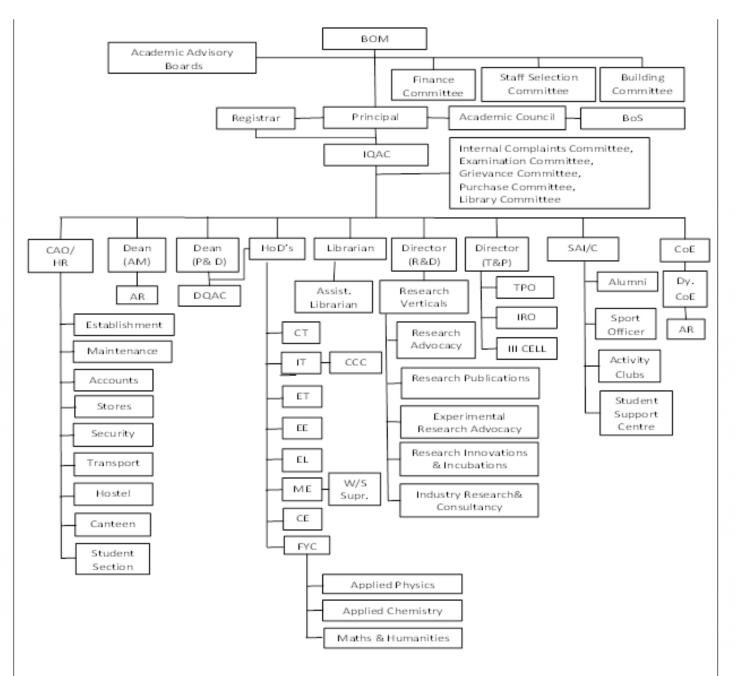
accreditation of programmes; 06 UG Programmes are accredited for 3 years and got extension of accreditation for three more years, 03 PG Programmes are accredited for two years and granted two times further extension of accreditation by one year. YCCE receives consistent NIRF ranking since 2016 with 93rd rank in 2016 and have secured the rank in the range of 101 to 150 in the year 2017-2020 and accreditation with "A" grade by NAAC for Cycle First.

File Description	Documents
Strategic Plan and deployment documents on the website	<u>View File</u>
Paste link for additional information	Nil
Upload any additional information	<u>View File</u>

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

The well-defined organizational hierarchy and structure supports decision-making processes in the institute. The organizational structure sustains institutional capacity and educational effectiveness through the external members in various Committees/Boards. The Principal, Deans and HODs review the achieved targets and challenges faced. The management always welcomes the suggestions of faculties in decision making. The presence of the faculty can be found in all the following committees.

Board of Management , Academic Advisory Board, Sub Committees, Academic Council, IQAC, Board of Studies, Student Council, Student Grievance Redressal Cell, Internal Complaint Committee, Anti-Ragging Committee, Library Committee, Alumni Association, SC/ST Cell, Hostel Committee, Canteen Committee, Students Clubs



External members on Governing Body enhanced the base and bring transparency and fairness in the system. The various committees are constituted for decentralized management of activities/affairs for better functioning. The major functions of various bodies are well defined in order to ensure role clarity and accountability. Service Rules, Promotion Policies, Welfare Schemes, and Grievance Redressal Mechanism are in place. Achievements of faculty and staff are recognized with financial and non-financial incentives. The Grievances of the faculty and staff are redressed timely to keep them motivated.

For effective coordination of day to day academic activities, administrative functions, planning, and to disseminate decision making powers authorities have created different Functional Heads. The statutory academic bodies Board of Studies and Academic Council formulate and subsequently implement academic policies of the college. These academic bodies have representations from academic peers and industry personnel/experts.

• The quality activities are planned and implemented by Dean Planning and Development.

• All the academic activities are coordinated and steered by Dean Academics Matters.

• Entire examination activities are planned, coordinated and executed by examination cell headed by Controller of Examinations (CoE) and assisted by Deputy Controller of Examinations.

• Research activities are coordinated by Research and Development Cell headed by Director, (R&D) and assisted by research vertical heads.

• Training and Placement Department is instrumental in planning and executing student's campus placement process headed by Director, Training and Placement and assisted by Training & Placement officer.

• Professor In-Charge Industry Institute Interaction Cell fosters Institute's relationship with industries by organizing various activities involving industry personnel.

• Professor In-Charge Alumni Cell acts as liaison officer between institute and the alumni association / alumni and coordinates various alumni activities.

• All the maintenance activities on the college campus with regards to Civil and Electrical maintenance of the infrastructure and the campus including Hostels, are planned, monitored and executed by Maintenance Department.

• Deans, Heads of the Departments, Registrar, Administrative officer, Accounts Officer, Hostel Wardens help Principal in the routine administration work.

• Local Management Committee comprising of management trustees, teaching and non-teaching staff representative and Principal is responsible for planning and implementing various academic and administrative policies of the college. Principal is member secretary of Local Management Committee. This is how various academic and administrative set-up functions in perfect co-ordination and disseminate power to different levels.

Service rules, Procedures, Recruitment and Promotional Policies:

The Institute has a set of well-established rules, policies and regulations within the frame work of AICTE, State Govt. and the affiliating university, which are approved by the Board of Management of the Institute. The rules and regulations of the institute are published and revised periodically.

The following documents are published and are made available in all departments to create awareness among the employees and students. The same is also available on intranet. Administrative Manual containing service rules, Procedures, Recruitment and Promotion Policies are circulated among all the staff (both Teaching and Nonteaching).

The following are the few manuals in which all the functional aspects of day to day activities are provided: Academic Regulations, Manual for Examinations, SOP for General Maintenance, SOP for Stock Verification, Research Policies, Consultancy Policy, IT Policy, Anti-Ragging Policy, Hostel rules and regulations.

Grievance Redressal Mechanism:

The Grievance Redressal Mechanism of the institution is established with an aim to provide easy and readily accessible procedure for prompt disposal of the day to day genuine grievances of the student and faculty community to maintain a congenial atmosphere. Grievance Redressal Committee was constituted in accordance with the AICTE/University Grants Commission regulations. Any student and faculty with a genuine grievance may approach the Grievance Redressal Committee to submit his/her grievance in writing to "The Chairman, Grievance Redressal Committee. The Grievance Committee considers only individual grievances of specific nature of members of the employee. The Grievance Committee considers all grievances submitted in writing by an individual member related to employment, working conditions, and quality of services assured to them and any other alleged injustice done to an employee while discharging his /her duties at the Institute. Grievances received are addressed systematically with active involvement and cooperation of the respective department/section concerned with the grievance; maintain necessary confidentiality in handling process.

The objectives of Grievance Redressal Committee are:

• All the grievances of the students/staff which could not be settled in the routine process should be referred to this committee.

• Committee tries to settle the issues amicably in a time bound manner.

• Introduces a reasonable and reliable solution for grievances of various issues received from students/parents

• Ensures that the grievances are resolved on time impartially and confidentially.

File Description	Documents	
Paste link to Organogram on the institution webpage	https://www.ycce.edu/	
Upload any additional information	<u>View File</u>	
Paste link for additional Information	Nil	
6.2.3 - Implementation of e-gove	5.2.3 - Implementation of e-governance in A. All of the above	

# areas of operation: Administration Finance and Accounts Student Admission and Support Examination

File Description	Documents
ERP (Enterprise Resource Planning) Documen	No File Uploaded
Screen shots of user interfaces	<u>View File</u>
Details of implementation of e- governance in areas of operation	<u>View File</u>
Any additional information	<u>View File</u>

#### **6.3 - Faculty Empowerment Strategies**

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

The institute has well defined welfare measures for the teaching and non-teaching staff members. The standard operating procedures are well laid down to avail such welfare measures. The human resource

is the back bone of the institute and they are well taken care of by the management. Less attrition ratio and high retention ratio of the staff members reflects upon the happiness index of the staff members.

All statutory welfare measures are implemented. Various monetary, non-monetary measures towards personal and professional growth are being followed to the satisfaction of the employees. Few of the welfare measures are listed below:

1. As per the norms of AICTE, 7th Pay commission recommendations are implemented.

2. Employees are covered under EPF and Gratuity.

3. Group Insurance Scheme from inception of the college for regular and permanent teaching and non-teaching staff members.

4. Study, Maternity and Medical leaves are sanctioned for the required staff.

5. Registration fees, DA, Travel grants for faculty attending conferences and workshops

6. Financial support for attending/presenting research papers in national and international conference

7. Financial support for Publishing research papers in reputed journals

8. Financial support for Filing Patents, Copyrights and Monographs

9. Children of the staff are rewarded for their best performance in academics.

10. Staff Welfare Fund

11. Concession in tuition fees of the ward of the staff of the college.

12. Medical reimbursement facility is provided.

13. Medical facility with qualified Doctor and nurse are available in the institution.

14. Sports, gym and yoga facilities are provided for staff and students.

15. ATM facility is available in the campus.

16. Security & Vigilance on campus

17. Counselling facility

18. Grievance Committee

In order to meet the medical emergency faced by any of its staff members college has insured all teaching and non-teaching staff members under Mediclaim Policy for Rs. 3 lakh per family having tieup with ICICI Lombard Insurance Company. The entire premium amount to be paid to insure the staff is borne by the college.

Besides these, teaching and non-teaching Staff members are the members of NYSS Employees Credit Cooperative Society. It serves the interest of the staff by offering them loan to the extent of 10 lakhs and emergency loan of Rs.20 thousand.

The college has adopted a system of rotating the post of Deans and Heads every three years. Through this system many faculty members got the opportunity to work in administrative positions. The additional incentives are paid to functional heads for discharging the duties. The institute has permitted many faculty members to pursue full time / part time Ph.D. programme.

Non-teaching staff members are given promotions by creating new posts and filling the vacant posts of superannuation non-teaching staff.

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

**6.3.2** - Number of teachers provided with financial support to attend conferences / workshops and towards payment of membership fee of professional bodies during the year

31

File Description	Documents
Upload any additional information	<u>View File</u>
Details of teachers provided with financial support to attend conference, workshops etc during the year (Data Template)	<u>View File</u>

# **6.3.3** - Number of professional development / administrative training programmes organized by the Institution for its teaching and non-teaching staff during the year

File Description	Documents
Reports of the Human Resource Development Centres (UGC HRDC/ASC or other relevant centres)	<u>View File</u>
Upload any additional information	<u>View File</u>

# 6.3.4 - Number of teachers who have undergone online/ face-to-face Faculty Development Programmes during the year: (Professional Development Programmes, Orientation / Induction Programmes, Refresher Courses, Short-Term Course, etc.)

# 231

File Description	Documents
Summary of the IQAC report	<u>View File</u>
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers)	<u>View File</u>
Upload any additional information	<u>View File</u>

# 6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly

Financial audit is an integral part of financial discipline and corporate governance of the institute. Due diligence is exercised in all financial matters and financial security of the institute is given the uppermost importance. The standard operating procedures and financial code of conduct are the corner stones of financial discipline in the institute. Financial Planning is exercised well in advance by involving the various Academic Departments and Administrative Sections of the Institute. An effective financial management system is in place and is helping the institution in overall growth. Financial planning and review is done in periodic intervals through statutory - Finance Committee. Flexible financial system allows spending more than the budget allocated as per the approved budget on the benefit of demands and requirement.

The Institute has a mechanism for internal and external audit to ensure financial compliance. The institutional accounts are regularly audited. The observation of the auditors if any are immediately corrected / rectified. Optimal utilization and execution of the budget is monitored through internal and external auditing.

Internal Audit: Internal financial audit is carried out by college appointed auditors. The accounts of the institute are audited regularly as per the Government rules. The internal auditor checks fee receipts and payments with vouchers and necessary supporting documents and ensures that all payments are duly authorized in financial year.

External Audit: The external audit is carried out by Chartered Accountant Agency "M/S V. K. Surana & Co. and M/S A. A. Solao & Co." in accordance with the auditing standards by the institute of Chartered Accountants of India every year. The external auditor conducts statutory audit at the end of financial year. The external audit has been completed for FY 2019-20. Audit reports for the FY 2018-19, 2017-18, 2016-17, 2015-16, are also prepared by the agency.

According to audit report the Balance Sheets, Statements of Income and Expenditure comply with the accounting standards, generally accepted in India. Various accounting policies are followed in finance and accounts including general accounting policies including basic of preparation of financial statements, depreciation accounting policies, revenue recognition, Institutional level accounting policies including annual budgets, accounting of salaries, advance deduction, accounting of non-salary expenditure, accounting of Capital Expenditure, Tuition Fees, Stock /Assets verification, Quarterly Audits, Annual Accounts.

Audited Financial Statement of College is uploaded on website as mandatory disclosure

Monitoring financial management practices is a significant process in the internal audit. Budget and statement of expenses are reviewed every quarter by the Finance Committee. The Audit Report is placed before the governing body for Vetting and rectification if any. The qualified remarks by the auditors are taken into consideration in the forthcoming years.

Finance Committee: The Board of Management constituted a Finance Committee to advice on all matters connected with the finances of the college.

Budgetary provisions for the departments are made based on the requirements provided by the HoD. The departments propose their budgetary requirement for the particular year. The Principal submits proposals, seeks approval and ensures its implementation. Annual budget for institute is prepared at the beginning of financial year, considering potential income and expenditures (recurring and nonrecurring) involved for the year.

The Institute publishes audited financial report on the college website and sent to the statutory and regulatory bodies.

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

# 6.4.2 - Funds / Grants received from non-government bodies, individuals, and philanthropists during the year (not covered in Criterion III and V) (INR in lakhs)

#### 1.70

File Description	Documents
Annual statements of accounts	<u>View File</u>
Details of funds / grants received from non-government bodies, individuals, philanthropists during the year	<u>View File</u>
Any additional information	No File Uploaded

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

Institutional strategies for mobilisation of funds and the optimal utilisation of resources. Mobilization of funds in the institute is through several ways. The primary source of revenue for the college is the Annual fee collected from students. The fee is collected as per the fee and the guidelines of the State fee regulatory authority. The collected fee is deposited into fixed deposits (FD's) and withdrawn periodically as per the requirements of the institute. The fixed deposits are withdrawn and used for the expenditure of the college. The interest earned on these fixed deposits is also being utilized for the needs of the institution.

Mobilization of funds is also done through sponsored projects from DST, FIST, DRDO, AICTE, UGC, Industry sponsored projects by the faculty. Funds are also mobilized through consultancy and philanthropic contribution. The details of mobilization of funds are as shown below.

Institutional strategies for mobilisation of funds and the optimal utilisation of resources. Mobilization of funds in the institute is through several ways. The primary source of revenue for the college is the Annual fee collected from students. The fee is collected as per the fee and the guidelines of the State fee regulatory authority. The collected fee is deposited into fixed deposits (FD's) and withdrawn periodically as per the requirements of the institute. The fixed deposits are withdrawn and used for the expenditure of the college. The interest earned on these fixed deposits is also being utilized for the needs of the institution.

Mobilization of funds is also done through sponsored projects from DST, FIST, DRDO, AICTE, UGC, Industry sponsored projects by the faculty. Funds are also mobilized through consultancy and philanthropic contribution. The details of mobilization of funds are as shown below.

Year	2019-20	2018-19	2017-18	2016-17	2015-16
Total	626581307.0	655767367.2	604635497.4	623751821.9	553722239.
(REV+CAP)	б	5	5	5	64
Salary &	456514251.5	433488052.5	401322029.6	368730223.8	360648473.
Allowance	9	0	4	4	94
Total	170067055.4	222279314.7	203313467.8	255021598.1	193073765.
Excluding	7	5	1	1	70
Salary					

Year	2019-20	2018-19	2017-18	2016-17	2015-16
Grants	5744121	5084268	1405025	1294556	4340618
Received					

Year	2019-20	2018-19	2017-18	2016-17	2015-16
Financial	411159	762452	912197	649415	656664
Support to					
Faculty					an a light (bar all than an a an a-constant an ann an

Strategies for optimal utilization of financial resources:

During the budget preparation all the academic and section heads are requested to provide the annual budget requirements keeping in view of development and updating of laboratories, computing facilities, library, teaching-learning process, training, extension activities, software.

Budget estimations are collected and Budget is prepared. The same is placed before the Finance committee and the committee in turn will deliberate and makes necessary changes for a proper balance of receipts and expenditure. The same will be submitted to Board of Management for approval. Budget approvals will be communicated to the departments and sections.

The institution keeps track of the budget. In any unforeseen circumstances, non-budgeted amount is considered and allotted depending on the merit of the case. The necessary budgetary provisions are done with efficient optimal utilization in the institution.

Adequate funds are allocated for effective teaching-learning practices that include conduct of FDPs, orientation programs, workshops, inter disciplinary activities, training programmes that ensure quality education. Adequate remuneration based on the performance-quotient of the teaching professionals is provided. Funds are provided to meet day-to day operational and administrative expenses and maintenance of the fixed assets. Funds are utilized for purchase of advanced laboratories equipment to encourage research interest of the faculty and students. Enhancement of library facilities leads to novel learning practices and accordingly required funds are provided every year. Adequate funds are utilized for development and maintenance of every good infrastructure for the institute.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional Information	Nil

# 6.5 - Internal Quality Assurance System

6.5.1 - Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing quality assurance strategies and processes visible in terms of incremental improvements made during the preceding year with regard to quality (in case of the First Cycle): Incremental improvements made during the preceding year with regard to quality and post-accreditation quality initiatives (Second and subsequent cycles)

The internal quality assurance cell of the institute is entrusted with the responsibility of injecting quality norms in every administrative process of the institute. The cell is working hand in hand with various departments to internalize and institutionalize the quality culture in the institute. The quality circles in line with the industry are established in teaching department to internalise the quality endeavour. The quality propagation, quality education and quality audits with quality suggestions are the pivotal pillars around which the functioning of internal quality assurance cell revolves.

The Internal Quality Assurance Cell was started in the year 2016 to monitor the quality of services being provided by the institution to its stakeholders. An IQAC committee is formed and approved by the governing body to take care of Quality assurance strategies and processes. The Institute's existing policies on academic and administrative systems are in respect of the process of teachinglearning and evaluation system, academic performance, faculty recruitment and training/qualification enhancement, are initiatives of IQAC. IQAC has contributed significantly to continually improve the infrastructure, enhance the faculty competencies, and empower the students to become employable.

Quality Parameters considered by IQAC for ensuring overall qualitative growth of the institute.

- 1 Accreditation by NBA, NAAC and NIRF Ranking
- 2 Placement Quality
- 3 Admissions for Higher Studies

Annual Quality Assurance Report of YESHWANTRAO CHAVAN COLLEGE OF ENGINEERING
4 Feedback Analysis
5 Result Analysis
6 Participation of student in Guest Lectures/Seminars/Workshops
7 Success Rate (Passed out graduates)
8 Success in competitive exam
9 Awards and recognition received by students
10 Faculty Quality & Contributions
11 Quality of Research publications
12 Consultancy & revenue generation
13 Research Projects Proposals
14 Workshops/Seminars/Conferences organized
15 Workshops/Seminars/Conferences participated
16 Patents/Copyrights Applied / Awarded
17 Books published/Reviewed/Edited
18 Awards and recognition to faculty
19 Faculty Guiding PhD's
20 No of Collaborations
21 Class room Quality, Seminar Halls Quality
22 ICT and Innovative Methods usage in T-L
23 MoU's with industries
24 Industry involvement in projects, internships, technical events, curriculum design,
Two examples of best practices institutionalized as a result of IQAC initiatives are:

#### 1. Annual Work-Load Plan:

Internal Quality Assurance Cell of YCCE has taken number of initiatives to ensure the overall development of the institution and its stakeholders. One of the most effective initiatives is Annual Work Load (AWL) Plan. The main objective of the initiative is to prepare the institute for the quality assurances requirements of the accreditation agencies NAAC and NBA, and ranking agency NIRF. The AWL SOP includes a) the key responsibility areas (KRA's) of the functional heads, b) Guidelines to the departments for target allotment based on the strength of the departments and c) Faculty allotment target sheet to assign the targets to faculty. The targets are assigned as per the cadre and some are mandatory targets. The major areas of targets includes qualification improvement, quality research publication, submission of funding proposals, Product Development, Intellectual Property Rights, Consultancy/Testing, involvement in professional society activities through active membership, Attending FDP/Training program, Organizing SDP/FDP for students and faculty, generation of learning materials, practicing innovative methods and usage of e-resources in T-L process. HoD ensures proper distribution of targets based on qualification, designation, experience, and thrust area etc. of concerned faculty. Target Completion dates are properly distributed in two quarters in an academic session without disturbing the T-L process.

Since the entire exercise has been developed in view of improving quality in technical education, it is imperative that every faculty member must contribute and strive for the betterment of the technical education, keeping in view student's education and interest. Therefore, it is important to take periodical follow up and bring it to the notice of the concerned faculty for completion of assigned targets, through proper communications during the year.

The outcome of the AWL plan-

- Significant improvement in number and quality of research publications by faculty. (1493 Papers)
- Large numbers of funding proposals are submitted to various funding agencies. The institute received funding of Rs. 5.5 Cr. in the last 5 years.
- 3. 95% faculty members have attended FDP/STTP every year.
- 4. 98% faculty members are the members of relevant professional societies of their discipline.
- 5. Each faculty member is practicing the appropriate innovative method while teaching the course.
- 6. The institute could receive 470 copyrights for learning

materials developed by faculty members. (44+28=72) Patents are published in last 5 years.

- 7. The institute has generated the revenue of Rs. 236.58 Lakhs through consultancy and testing.
- 8. New Innovative Expt. Setup/ New Instructional Lab Manual Research Lab activity are developed by faculty. (109)

As a result of the consistent performance of the faculty members in achievement of the assigned targets/responsibilities 06 UG programs are granted accreditation for 6 (3+3) years and 3 PG programs for 4 (2+1+1) years. YCCE is consistently getting good rank in the NIRF ranking scheme.

#### 2. Campus recruitment Training (CRT):

Campus recruitment Training (CRT) is one of the notable initiatives of IQAC, to enhance and improve the employability skills of students. As part of CRT the students have been trained in various skills such as communication skills, Aptitude skills, Reasoning skills, Leadership skills, and technical skills.

The Campus Recruitment Training aimed at sharpening the skills of Engineering Students for success in placement drives. The program aims to train pre-final year students to prepare them for the companies coming for place drives. The program is delivered by subject matter experts having rich experience from the industry, thus enabling the transition from college life to corporate ready individuals. A perfect blend of Aptitude and Technical skills ensures that the students develop confidence and are ready to face the ever evolving selection processes of various companies.

All companies recruiting students from various technical institutes look for different technical skills and personality traits before making an offer to the students. In order to sharpen their Technical Skills and polish their Aptitude Skills and to make them equipped for the corporate world, we offer comprehensive training programmes which are tailor-made for the requirement. This program aims at preparing the students from a campus point of view.

The major components of the training are:

- Quantitative Aptitude
- Logical reasoning
- Verbal Abilities
- Technical Skills
- Mock Interviews and GD

#### The objective of Campus Recruitment Training:

Campus Recruitment Training (CRT) program is exclusively designed for the students preparing for recruitment and is geared towards ensuring that the students are well equipped to get through the recruitment process of various companies. Following are the prime objectives of CRT program:

- To prepare the students for recruitment in various companies.
- To prepare the students for various quantitative exams.
- To enhance overall competency levels of the student
- To teach tricks & technique based concepts.
- To boost morale of participants through activity based learning.
- To build confidence to face interviews.
- To increase problem solving and analytical reasoning.
- To develop effective time management.
- To have quality placement conversion.

The outcome of Campus Recruitment Trainings:

1.The CRT program is developed on the lines of tests conducted by TCS, Wipro, CTS, Infosys, Tech Mahindra, Accenture, IBM and other IT and Non-IT companies. Hence, students are able to face competitive exam. after attending this training.

2. AMCAT score card through which students can attend various recruitment drives.

3. As a result of persistent efforts of the team YCCE, every year our students are getting placement in reputed MNC's with good salary packages. Our placement figures of last five years are- 3034.

4. The prominent recruiting MNCs are TCS, Wipro, Infosys, Techmahindra, NVIADIA, L&T InfoTech, Capgemini, Persistent, Accenture, Tata Motors, TVS, M&M, Kirloskar, Adani, Reliance, GMR, Vedanta, Shapoorji-Pallonji, HCC, Ambuja Cement, L&T Construction, Adani, Power Plants, Lanco, etc.

Incremental continuous improvement is an ongoing effort to improve our systems and processes. The observation of the external agencies is taken in right sprit and implemented rigorously. Major incremental improvements during the preceding five years are as under: Awards and Recognition: In the year 2016-17, UGC peer team visited YCCE & granted 'Extension of Autonomy' for 6 years (2016-2022). 09 programs (6 UG and 03 PG) NBA accreditation and getting extension of accreditation. Consistent NIRF ranking since 4 years. All India 134th Rank in 2019, Ranked amongst Top 150 Engineering Institutions in 2018 and also in 2017, 93rd rank amongst IIT's, NIT's, Government and Autonomous Engineering Institutions by NIRF, MHRD, Govt. of India, All India 32nd Rank, 23rd Rank amongst Self-Financing & 4th Rank in West Zone by Data Quest-CMR Ranking-2020. The institute is ranked 64th in Top 100 Private T-Schools for 2016 in All India and 9th in West Zone (Maharashtra, MP & Gujrat). Received 2nd prize for Best College Magazine of the RTM Nagpur University Nagpur in 2019-20.

Improvement in infrastructure: Establishment of three Centres of Excellence- Siemen's CoE, Aviva CoE in 2018-19, and AI and IoT CoE in 2019-20. MSME technology business incubators under ASPIRE (A scheme for promotion of innovation, rural industries and entrepreneurship) & business incubator under a scheme for development of managerial and entrepreneur skills through incubator. Nodal Centre for "Smart India Hackathon", an initiative of MHRD Govt. of India. Auditorium, Canteen facilities have undergone extensive renovation and up-gradation.

Progressing towards Digitization: Increasing the internet bandwidth to 200 MBPS post accreditation. Wi-Fi facility is made available to student and faculty in the college as well as in the hostel. This helps all to have free access to Internet. On screen evaluation of end semester examination answer books resulting into declaration of result within 15 days, the college prospectus and magazine were made available online to reach a wider audience, the official records are also in process to be stored in soft copies. Information and Communication Technology has been made an integral part of the teaching-learning process by converting some of the conventional classrooms into ICT enabled classrooms. These rooms have been equipped with LCD projectors and audio systems. Online teaching through various platforms is practiced particularly during lockdown periods.

Research Profile of the Institution: The YCCE has improved its research profile substantially through decentralized way of assigning responsibilities through research verticals headed by Director (R&D) in every domain to promote the research culture among faculties and students which is evident from the number of quality research publications, patents and copyrights received, funding received from various funding agencies, number of PhD scholars awarded doctoral degree, number of faculty members acquired doctoral degree etc. In last 5 Years, the institute has received financial assistance of Rs. 5.5 Cr. from various funding agencies like AICTE, DST, UGC etc. The institute research portal is available for showcasing the research activities of the institution

Teaching-Learning quality initiatives: 1) Teaching Plans: The Teaching plans are designed with a focus on Teaching inputs, course outcomes and student-centric methodologies adopted, with an objective to monitor and enhance the teaching-learning process. Moodle based access of T-L requirements through the college website. 2) Innovations: The IQAC has encouraged faculty members through Annual Work Load (AWL) Plan to attend the faculty development programs to abreast them with latest cutting-edge technologies and enhance quality in many areas and organized various FDP's, Seminars/Workshops/Training Programs. Every teacher is practicing innovative methods to ensure the student centric teaching learning.

Standardization of various formats: The IQAC has standardized various formats post accreditation, AWL formats, monthly meeting formats, Students Feedback formats, Departmental Perspective Plans (DPP) Format, Departmental Level Assessment (DLA) Format, Teaching Plans, Evaluation of POs, COs bringing about uniformity which is a prerequisite for monitoring quality and thereby enhancing it.

Increased interaction with alumni: Interaction and participation of alumni in the form of representations on various committees and boards. Developed YCCE Alumni Portal in 2018-19 keeping them informed about the happenings through portal. Regularly organizing alumni meet in India and abroad in 2019-20 at USA.

Towards Green Campus: Use of renewable energy through installation of solar panels to satisfy energy needs of the institution through solar energy since 2017-18. Use of LED lighting to save energy consumption since 2019-20. Installed TV Display units in the buildings for quicker communication instead of traditional notice boards in 2017-18.

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

6.5.2 - The institution reviews its teaching-learning process, structures and methodologies of operation

and learning outcomes at periodic intervals through its IQAC as per norms

IQAC cell of the institute functions on the basis of plan, do, and check and action approach (PDCA). It plans, monitors and control the functioning of teaching departments. Apart from teaching and learning processes it monitors and controls other administrative processes like purchase, recruitment, maintenance, training and placements and accreditations to name a few.

The institute reviews its teaching-learning process, structures & methodologies of operations through Academic Departments and IQAC.

The roles and responsibilities of the IQAC are:

1. Plan, monitor and control the academic functioning of all the Departments.

2. Introduce innovation in Teaching, Learning and Evaluation practices.

3. Advised for industry-oriented projects and internships, other technical training activities related to enhancing the employability skills

A constant review is done by IQAC in the college which guarantees the smooth functioning of the quality teaching-learning process. Some of them are as follows:

Methodologies -

The hand-outs containing teaching-learning plan and a course schedule are prepared by faculty members well before the commencement of the semester as per the academic calendar. The individual course schedules, plans, and related information/ materials are issued to the students at the commencement of the semester. This is done under the guidance of the HOD.

The class teacher/academic coordinator periodically reports to the HOD about the syllabus coverage and the number of classes engaged by the faculty. Guest lecturers are conducted for the subject difficult to understand.

IQAC through Dean (Academic Matters) and HOD's ensures the counselling to slow learners and Parents meet of such students are

arranged with their respective faculty advisors.

IQAC periodically ensures the attainment of learning outcomes of each course and program through the outcome based education committee, DQAC's.

Two examples of institutional reviews and implementation of teachinglearning reforms initiated by the IQAC.

#### 1.Course/Subject Files:

Course files of every course are used to bring objectivity and strategize the course of teaching and learning. The faculty ensure that all the students fulfil the pre-requisites of the course. A proper teaching plan for each topic and its delivery is made by the faculty. The course outcomes are defined by the teacher for the course. The mapping of the course outcome with the program outcome is done. The teaching material such as Notes, PPT's, previous year question papers, experiment list, attendance registers, student's performance details in mid semester exams., course outcome attainment etc. are maintained by faculty. Course files have proven to be great guiding tools that provide the faculty direction and a sense of clarity while teaching.

#### 2. Students Feedback on Teaching-Learning Process & Evaluation:

The feedbacks are taken twice in a semester; one in a mid of semester and other at the end of semester. Team of HoD and some senior faculty members also conduct a verbal feedback periodically. The Verbal feedback acknowledged at the beginning and/or throughout the course, is used to instruct the faculty about teaching and allow us to make appropriate alterations along the way. A "continuous improvement philosophy" is recommended with verbal feedback.

Students' feedback significantly showcases the actual quality of the teaching-learning process. The IQAC has brought several changes in the student's feedback process like standardization of feedback format and way of conducting the transparent feedback and its detailed analysis, making ATR's available to the students and ensure corrective measures timely implementation.

The IQAC of the institute also reviews the assessment of teaching learning outcomes through Course end survey which is collected after a semester course for every subject Course outcome analysis for each course after completion of the semester which incorporates the input collected from course end survey also. The result analysis in every semester, the Program assessment for the graduating batch and the Learning outcomes of program (POs) are assessed through curricular and co-curricular activities. All the suggested changes in the curriculum by the departments and their BOS are put forth to the academic council for approval.

Outcomes: 1. Exit survey has helped in revising the curriculum according to the needs of the present Day. 2. Alumni feedback has helped in refinement of curriculum. 3. Inclusion of value added courses, training programs, CRT led to better placements. 4. The revised curriculum has enabled the students to gain admission in Premier Institutions. 5. Six UG Programs are NBA Accredited with 6 years and 3 PG courses have been NBA accredited for 3 years. 6.The Institute has been recognized in NIRF Ranking with 134 rank

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://www.ycce.edu/pdf/StudentSatisfaction Survey.pdf

6.5.3 - Quality assurance initiatives of the	A.	Any	4	or	all	of	the	above	
institution include Regular meeting of the									
IQAC Feedback collected, analysed and used									
for improvement of the institution									
Collaborative quality initiatives with other									
institution(s) Participation in NIRF Any other									
quality audit recognized by state, national or									
international agencies (such as ISO									
Certification)									

File Description	Documents
Paste the web link of annual reports of the Institution	<u>https://www.ycce.edu/pdf/annual-</u> <u>report-2020-21.pdf</u>
Upload e-copies of accreditations and certification	<u>View File</u>
Upload details of quality assurance initiatives of the institution	<u>View File</u>
Upload any additional information	<u>View File</u>

## 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 year

- Specific facilities provided for women in terms of:
  - 1. Safety and security
  - 2. Counselling
  - 3. Common Rooms
  - 4. Day care center for young children
  - 5. Any other relevant information

The institute is an equal opportunity provider and promotes equity of all genders and classes in the growth of the institute. The institute has zero tolerance towards gender bias of any sort. In career progression and the empowerment of the female staffs, are treated at part with their counterpart. The females of the institutes are endowed with special responsibilities and equal authorities. Grievance cell is active to render justice to the female staff against any kind of unwarranted injustice to them.

The safety and security of the female students, faculty and staff is imperatively vital for college. Facilities like common room and counselling services are provided, because it believes that a supportive, safe and conducive environments are crucial for one's growth.

Safety & Security:

The entire campus is under CCTV Surveillance monitoring and ensuring the safety of the students. The entry and exits are guarded with Security checkpoints. Security guards are monitoring 24x7, around the campus and keeping a vigilant eye to ensure the safety and security of the students. The visitors are allowed only after providing the detail perlustration to the Security Guard at the main gate, which is recorded in the entry register.

Anti-ragging committee, Grievance Redressal Committee and Internal Complaint committee are constituted as per the guidelines of government and are functioning actively to address the related issues as well.

Separate hostels for girls and boys, ensuring good amenities and proper security arrangements within the campus.

Essential Security measures are ensured in the laboratories. The

security measurements are exhibited, and students are even instructed and directed about the security precautions to be followed in the laboratories. Fire extinguishers are installed on each floor in all the buildings and laboratories. Precautions are taken during transport, in the campus, canteen, library, sports.

In the Industrial visits and study tours, a female faculty is accompanying the girl students. All the students enrolled in the college are facilitated with insurance cover.

Medical facility is available in the campus, in case of medical emergencies. A Well-equipped ambulance is accessible 24x7 in the campus. In addition, a 'Sick Room' specially for the girl students is existing with essential facilities.

#### Counselling:

Students are counselled on stress and anger issues. A psychological counsellor is appointed for counselling students, who particularly need special and personal attention. The facility can be availed by the students and staff. The counselling cell dynamical and vigorously addresses various issues of student which also includes gender sensitive subjects. The students are encouraged to participate in various cultural events such as NSS, Sports, training sessions, etc. as per their ease and interests.

The Institution has a well-defined student mentoring system implemented from first semester. Under this a faculty advisor is allotted to students. The chief objective is to help each student in taking right decisions for their academic and personal growth. In addition, mentoring will also benefit to boost student's morale and will enhance their learning aptitudes and capacity.

#### Common Room:

Common room is a space provided to the students to unwind, relax and also to hold meeting to plan their events, cultural activities etc. Common Rooms facility for Boys' and Girl's are available for the students. Separate sick rooms are also available. Girl's common rooms are available in each classroom complexes with essential facilities like first aid box, bed, wash basin, etc.

• Annual gender sensitization action plan

File Description	Documents					
Upload any additional information		<u>View File</u>				
Paste link for additional Information		Nil				
7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation: Solar energy Biogas plant Wheeling to the Grid Sensor-based energy conservation Use of LED bulbs/ power- efficient equipment		A. Any 4 or All of the above				
File Description	Documents					
Geotagged Photographs		<u>View File</u>				
Any other relevant information		<u>View File</u>				

7.1.3 - Describe the facilities in the institution for the management of the following types of degradable and non-degradable waste (within a maximum of 200 words)

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

The learners and the members of the institute are well sensitized towards environmental concerns. Mitigation of carbon footprint, adoption of green practices, environment friendly processes, Egovernance, paperless administration, digital administration, plantation, waste management, compost plants are few of the measures that have been adopted to make institute an environment friendly one.

YCCE is conscious about its responsibilities towards the environment and works on the principles of three "R" model to maintain Eco-Friendly campus: Reduce, Re-use, Re-Cycle.

Solid waste management:

The solid waste generated in the campus includes plastics, food wastes, cardboard materials, paper wastes, metals, wood etc. Litterbins are provided in the institute at convenient locations. The staff rooms and offices have been provided separate dust bins. The single side papers are re-used for writing and printing circulars in all the departments. The college has prepared the writing pads from the unused pages of the answer sheets. The waste which is fit to recycle given to recycler and the damaged books are given for binding and are further brought to use again. Metal and wooden waste is stored and given to authorized agent for further processing.

Liquid waste management:

Liquid waste mainly consists of waste water from kitchens, wash rooms and mess. This waste water is managed through underground sewerage pipes. The waste is collected in the underground tanks located in the campus. The waste collected in Sewage Treatment Plant is treated and the treated water is used for several other purposes like watering to plants and trees, cleaning and etc. Periodic checkup of plumbing lines is undertaken to ensure minimal loss of water due to leakage.

E-waste management:

The e-waste obtained in the institute comprises of encompasses batteries, UPS, printer cartridges, discarded input devices like mouse, key-boards, wires and cables. The e-waste is re-used in case of re-parable and brought to make use of them again.

The discarded e-waste is exchanged with vendors to get new products at discount, which helps in saving money to great extent and also provides with safe disposals process.

All electronic equipment used in the campus are regularly maintained and repaired to ensure Minimum e - waste. UPS Batteries are recharged and repaired by the suppliers. Printer cartridges are used after refilling.

#### Hazardous chemicals management:

Except Environmental and Chemistry laboratory there are no other

departmental laboratories in the college wherein there is a possibility of usages of hazardous chemicals. In these laboratories safety measures for handling these chemicals are displayed. These chemicals are stored with special precautions. The first Aid box is provided for any emergency in the labs.

File Description	Documents		
Relevant documents like agreements/MoUs with Government and other approved agencies	<u>View File</u>		
Geotagged photographs of the facilities	<u>View File</u>		
Any other relevant information	No File Uploaded		
7.1.4 - Water conservation facilities available A. Any 4 or all of the above			

7.1.4 - Water conservation facilities available in the Institution: Rain water harvesting Bore well /Open well recharge Construction of tanks and bunds Waste water recycling Maintenance of water bodies and distribution system in the campus

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

# 7.1.5 - Green campus initiatives include

7.1.5.1 - The institutional initiatives for greening the campus are as follows:	Α.	Any	4	or	All	of	the	above	
1. Restricted entry of automobiles 2. Use of bicycles/ Battery-powered									
vehicles									
3. Pedestrian-friendly pathways									
4. Ban on use of plastic									
5. Landscaping									

File Description	Documents
Geotagged photos / videos of the facilities	<u>View File</u>
Various policy documents / decisions circulated for implementation	<u>View File</u>
Any other relevant documents	<u>View File</u>

# 7.1.6 - Quality audits on environment and energy undertaken by the institution

7.1.6.1 - The institution's initiatives to preserve and improve the environment and harness energy are confirmed through the following:	A. Any 4 or all of the above
1. Green audit 2. Energy audit	
3. Environment audit	
4. Clean and green campus recognitions/awards	
5. Beyond the campus environmental promotional activities	

File Description	Documents
Reports on environment and energy audits submitted by the auditing agency	<u>View File</u>
Certification by the auditing agency	<u>View File</u>
Certificates of the awards received	No File Uploaded
Any other relevant information	No File Uploaded

## reading materials, screen reading, etc.

File Description	Documents
Geotagged photographs / videos of facilities	<u>View File</u>
Policy documents and brochures on the support to be provided	<u>View File</u>
Details of the software procured for providing assistance	No File Uploaded
Any other relevant information	No File Uploaded

7.1.8 - Describe the Institutional efforts/initiatives in providing an inclusive environment i.e. tolerance and harmony towards cultural, regional, linguistic, communal, socio-economic and other diversities (within a maximum of 200 words).

Institution provides an inclusive environment for everyone with tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities. We believe in unity in diversity that's why our students respect the different religion, language and culture. Two important national festivals, Republic Day and Independent Day are celebrated in the campus.

The College always encourages the students to organise and participate in different programmes organised by college, intercollege, and university. Different sports and cultural activities are organized in the college to promote harmony towards each other. Commemorative days like Women's day, Yoga day, Teachers Day, Engineers Day, Meghotsava along with many regional festivals like Ganesh Puja, Gajanan Mahraj Pragat Din, Chhartrapati Shivaji Maharaj Jayanti, Swami Veevekanand Jayanti, are celebrated in the college. This establishes positive interaction among people of different racial and cultural backgrounds. On the eve of college annual gathering we organize a traditional dress competition and fashion show. In this competition students wore the different attire representing the different states, religions and cultures. Through this activity students get acquainted with the different culture of our nation and help to develop the tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities.

There are different grievance redressal cells in the institute like Student grievance redressal cell, faculty grievance redressal cell which deal with grievances without considering anyone's racial or cultural background. Institute has code of ethics for students and a separate code of ethics for teachers and other employees which have to be followed by each one of them irrespective of their cultural, regional, linguistic, communal socioeconomic and other diversities.

YCCE is tobacco free campus. Student forums organize various events for the purpose of spreading awareness

File Description	Documents
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	<u>View File</u>

7.1.9 - Sensitization of students and employees of the institution to constitutional obligations: values, rights, duties and responsibilities of citizens:

The institute propagates and educate all the members of the institute about their constitutional duties and obligations. It trains the members as to how to function while remaining with in the constitutional frame work and respect the constitutional obligations. The various facets of Indian constitution are well propagated amongst the learners and the members of the institute at appropriate occasions. The sacrosanct document of Indian constitution is well comprehended and propagated by the members of the institute.

The institute has well defined standard code of conduct for students, teachers and the staff. The institute undertakes different initiatives by organizing various activities to sensitize students and employees to the constitutional obligation: Values, Rights, Duties and responsibilities of the citizens. Every year Republic Day is Celebrated on 26th Jan by organizing activities highlighting the importance of Indian Constitution. Independence Day is also celebrated every year to highlight struggle of freedom and importance of Indian constitution.

Swach Bharat Mission, World Cancer Day, National Voter's Day Celebration, Teachers Day, Traditional Day, Environment Day, Yoga Day, Blood Donation Camp, National Youth Day, International Women's Day, Tree Plantation Drive, Engineers Day, Nirmalya Collection are organized to sensitize students and employees to the constitutional obligation,

File Description	Documents		
Details of activities that inculcate values necessary to transform students into responsible citizens	<u>View File</u>		
Any other relevant information	<u>View File</u>		
7.1.10 - The institution has a pre- of conduct for students, teachers administrators and other staff a periodic sensitization programm regard: The Code of Conduct is the website There is a committee adherence to the Code of Condu- organizes professional ethics pre- students, teachers, administrato staff Annual awareness program Code of Conduct are organized	s, nd conducts nes in this displayed on to monitor tot Institution ogrammes for rs and other		
File Description	Documents		
Code of Ethics - policy document	<u>View File</u>		
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programmes, etc. in support of the claims	<u>View File</u>		
Any other relevant information	View File		

7.1.11 - Institution celebrates / organizes national and international commemorative days, events and festivals

We celebrate National Festivals, Birth Anniversaries of great Indian Personalities to promote national unity, integrity and patriotism among the young minds. Thoughts of great Indian personalities sowed into the minds of students through the programs conducted on these days. Staff and students get to know the importance of national integrity in the country in general and their role in it in particular. The following programmes are celebrated for the holistic development of students.

- 15th August Independence Day
- 26th January Republic Day
- 15th September Engineers' Day

- 5th September Teachers' Day
- Ganesh Festival

Independence Day: The institution celebrates Independence Day every year by flag hoisting ceremony in the presence of invited Chief Guest. The topper student unfurls the national flag followed by the singing of National Anthem. The faculty members and the students are felicities for their achievements.

Republic Day: The Republic Day is celebrated with gaiety and patriotic fervor. On this privileged occasion, celebrations start with the vibrant and elegant National Flag hoisting ceremony. The faculty members and the students are felicities for their achievements.

Engineer's day (Birth Anniversary of Sir M. Visvesvaraya) -The institution celebrates this day on 15th September as an exceptional tribute to the best Indian Engineer Bharat Ratna Mokshagundam Visvesvaraya.

Teachers Day: The institution celebrates Teachers Day on 5th September to commemorate the birth anniversary of the second President of India, Dr. Sarvepalli Radhakrishnan, a great teacher and a staunch believer of education. Students organize various programs and games for faculty in the departments every year.

Ganesh Festival - The institution celebrates Ganesh Festival. "Lord Ganesh" as the God of New Beginnings and the Remover of Obstacles as well as the god of wisdom and intelligence.

International Yoga Day: International Day of Yoga is celebrated in full enthusiasm on June 21, every year.

Swatch Bharat Abhiyan is organized in the institute every year on 2nd of October as per the guidelines of Government of India.

Women's Day: Woman's Day is celebrated every year to acknowledge the importance and responsibility that women carry in a society. In order to recognize it, an event is organized on 8th of March and various activities like poster competition, message wall, gift distribution to women in the institution, etc. are conducted

File Description	Documents
Annual report of the celebrations and commemorative events for during the year	<u>View File</u>
Geotagged photographs of some of the events	<u>View File</u>
Any other relevant information	No File Uploaded

## 7.2 - Best Practices

7.2.1 - Provide the weblink on the Institutional website regarding the Best practices as per the prescribed format of NAAC

Best Practice I:

1. Title of Practice: "Academic Enhancement and Monitoring Practice" through Annual Workload Plan (AWL)

2. Objectives of the Practice:

Internal Quality Assurance Cell of YCCE has taken number of initiatives to ensure the overall development of the institution and its stakeholders. One of the most effective initiatives is Annual Work Load (AWL) Plan. The main objective of the initiative is to prepare the institute as per the quality assurances requirements of the accreditation agencies like NAAC and NBA, and ranking agency NIRF.

### 3. The Context:

Competent faculty is the backbone of any education system. In today's time, with rapidly changing scenario, role of a teacher has been extended to a facilitator.

The changing scenario has brought a paradigm shift from traditional teaching process to outcome-based education. With OBE: reconstruction of curriculum, evaluation, innovative teaching practices and training has helped to mirror the achievements in higher order of knowledge.

To cope up with this paradigm shift, developing capacity and increasing competencies of faculty has become very crucial.

On this backdrop, the IQAC of YCCE has suggested the quality initiative of enhancing skill and competencies of faculty which will in turn help students in receiving better education and guidance in the form of Annual Workload Plan (AWL) for faculty.

4. The Practice:

Annual Work-Load Plan

The AWL SOP includes

a) assigning the key responsibility areas (KRA's) to the functional heads,

b) Guidelines to the departments for target allotment based on the strength of the departments

c) Faculty allotment target sheet to assign the targets to faculty. The targets are assigned as per the cadre and some are mandatory targets.

The major areas of AWL targets include -

- Qualification improvement of faculty
- Quality research publication,
- Submission of funding proposals to various funding agencies to fetch grants for carrying out research and non-research based activities
- Product Development
- Creation of Intellectual Property Rights
- Application of knowledge through Consultancy/Testing
- Involvement in professional society activities through active membership
- Attending FDP/Training programs
- Organizing SDP/FDP for students and faculty
- Generation of learning materials
- Practicing innovative teaching learning methods
- Usage of e-resources in T-L process.

HoD ensures proper distribution of targets based on qualification, designation, experience, and thrust area etc. of concerned faculty.

Target Completion dates are properly distributed in two halves in an academic session without disturbing the T-L process.

Since the entire practice has been developed in view of improving quality in technical education, it is imperative that every faculty member must contribute and strive for the betterment of the technical education, keeping in view student's education and interest. Therefore, it is important to take periodical follow up and bring it to the notice of the concerned faculty for completion of assigned targets, through proper communications during the year.

5. The outcome of the AWL plan/ Evidence of Success:

- Significant improvement in number and quality of research publications by faculty (1493 Papers)
- Large numbers of funding proposals are submitted to various funding agencies. The institute received funding of Rs. 6 Cr. in the last 5 years.
- 96% faculty members are the members of relevant professional societies of their discipline.
- Each faculty member is practicing the appropriate innovative method while teaching the course.
- The institute could receive 578 copyrights + Patents for learning materials developed by faculty members.
- The institute has generated the revenue of Rs. 1,24,88,860 Lakhs through consultancy and testing.
- 109 New Innovative Expt. Setup/ New Instructional Lab Manuals have been developed by faculty.
- The college is ranked every year since 2016 in NIRF ranking. (Ranks within 150)
- The college is now one of the preferred destinations for aspiring students, which is evident from the admission statistics. (Avg. 94.4% Admissions)
- The college has received NBA accreditation & reaccreditation for 09 programs (6 UG,3 PG).
- Overall class attendance, engagements of classes (97%) and syllabus converge (90-95%) has substantially improved.
- There is an increase in curricular and extracurricular activities for students enhancement, A notable increase can be witnessed in students paper publication and their participation in various competition organised by reputed institutions.
- Quality of UG and PG projects have been profusely elevated, which is seemingly reflected through the varied competitions participated by students. (21 projects-based patents have been filed).

- There is an upturn hike in organizing and attending the faculty development programmes. (95% Faculty Members)
- Establishment of Centre of Excellence (05) in the institute is an added feature.
- Established YCCE TBI Foundation, a section 8 company for technology business incubation, housing 09 LLPs

Distinct upswing can be witnessed with number of patents (72) and copyrights (440).

6. Problems Encountered and Resources Required:

The arduous problems faced in executing the best practice were on lower side. Insufficient knowledge of the systems, coordination among team members and other responsibilities assigned to key faculty members were some of the trifling issues. Extensive work was required in developing formats. Funds were essential for upgrading MIS software, organizing FDPs and student activities. A welldesigned and configured support system is provided to Dean Academics and all the Functional Heads. There is a provision of special substantial incentives to all the functional heads. A new-fangled initiative, where faculty is mentored for areas such as OBE, Academics, R&D and department level administration has proven favourably constructive in overcoming hurdles.

#### 7. Notes:

Vision and directions of the Management and Principal, coordination among functional heads, commitment shown by faculty members and response from other stake holders are the essentials for streamlining the process. Mid-term and end-term reviews and audits in structured form are the integrated and intertwined parts for developing and triumphantly running the process.

The core team identifies the issues and resolves the same in a systematic way.

#### Best Practice II

1. Title of the Practice: "Administrative Coordination and Review Practice" through Department Level Assessment (DLA)

## 2. Objectives of the Practice:

Department Level Assessment (DLA) is one of the Quality Assurance Initiatives of the institute. The main objective of DLA Assessment is to ensure the continuous improvement in the academic processes adopted by the institute and implemented as per the requirements of outcome-based education. The annual DLA audit is conducted to ensure the preparedness of the institute for the accrediting & ranking agencies requirements.

### 3. The Context:

To maintain the pace with the expansion and escalation of technological advancement and the challenges faced by the society and industry; a distinguished and imperative upgradation is the need of Engineering Education. Hence, engineering education needs to contemplate and enshrine time and resources for the institutional development, adjoining with the teaching- learning process. To sustain in the vying competitiveness, it is imperatively vital to pertain accreditation, ranking and the other statutory and nonstatutory processes. The administrative framework, commitment of executors, tabulating coordination among themselves, and greater collaboration with academic processes is the eminent and conspicuous feature of the institution. Hence, Department Level Assessment is carried out in yearly mode to ensure the adherence of academic and administrative processes at every functional unit of the institution.

4. The Practice:

The DLA implementation is carried as per the prepared SOP. The assessment is conducted annually at the end of the academic session.

The standard format for the assessment is prepared based on the guidelines of NBA

Manual/SAR Format.

## The assessment parameters are:

- Vision & Mission of the department & Programme Educational Objectives (PEO's)
- 2. Program Curriculum and Teaching -Learning Process
- 3. Quality of Question Papers, Student Projects & Internship
- 4. Industry involvement in T-L
- 5. Course Outcomes & Programme Outcomes & its attainment
- 6. Academic Student Performance
- 7. Placements, Higher Studies data
- 8. Faculty Contributions
- 9. Innovations by the Faculty in Teaching and Learning
- 10. Research and Development: Academic & Sponsored Research
- 11. Consultancy
- 12. Facilities & Technical Support
- 13. Continuous Improvement based on outcomes of OBE.
- 14. Action Planned & Taken in case of low attainment
- 15. SWOC Analysis
- 16. Implementation of Group Level Initiative (AWL. PQAI etc.) for Improved Teaching Learning
- 17. Interaction with Students

5. The outcome of the DLA/ Evidence of Success:

Since 2003 most of our UG and PG programmes are accredited and reaccredited by NBA. (Currently 06 UG and 03 PG Programs are NBA Accredited).

Evident and marked thrust can be witnessed in the placement of students in various esteemed national and multinational companies. (Total Placements: 3810=61.29% in 5 Years)

- 1. Significant improvement in understanding OBE by Stakeholders
- 2. Planning of corrective measures well in advance based on attainment levels
- 3. Practicing appropriate innovative methods while teaching the course.
- 4. SWOC Analysis and Review of measures in tune with Road Map of the department
- 5. Implementation of all group level initiatives

Impact analysis of the adopted academic

processes/activities/initiatives for qualitative & quantitative outcomes

MoUs with many organisations is an important facet of organization. (Total MoU's:84)

Industry focused professional elective courses are offered by MNC's like Infosys, Pune & Global Logic, Nagpur, TCS, Nagpur.

6. Problem Encountered & Resources:

With the system, no specific stumbling blocks are been encountered. The institute has adopted a

policy of rotation system for the functional posts. If unable to find the competent person, this hurdle is overcome by mentoring the concern. All Deans and Functional Heads are equipped with required resources and are given special incentives for executing the duties.Various faculty and students centric policies are in place to support the faculty and students to encourage them to perform their best.

Contact Details:

Name of the Principal: Dr. U. P. Waghe, Principal

Name of College: Yeshwantrao Chavan College of Engineering

Address: Wanadongri, Hingna Road, Nagpur - 441 110

City: Nagpur, State: Maharashtra

Website: www.ycce.edu, Email: principal@ycce.edu

Phone: +91-7104-242919, 329249, 329250,242623

Phone (Principal office): +91-7104-242620,09764996477

Website: www.ycce.edu, Email: <a href="mailto:principal@ycce.edu">principal@ycce.edu</a>

File Description	Documents
Best practices in the Institutional website	https://www.ycce.edu/naac-plus.php
Any other relevant information	<u>1. "Academic Enhancement and Monitoring</u> <u>Practice" 2.Administrative Coordination and</u> <u>Review Practice</u>

## 7.3 - Institutional Distinctiveness

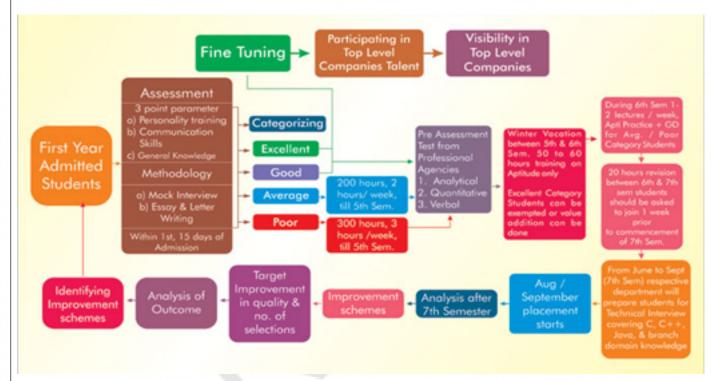
7.3.1 - Highlight the performance of the institution in an area distinct to its priority and thrust (within a maximum of 200 words)

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

The founders have envisaged the vision of providing innovative, research and value based, professional education through skilled and competent workforce to the society by imparting quality education and training. The institution follows systematic educational practices for producing quality engineers through state-of-the-art educational infrastructure and innovation eco system to enrich both academic and research practices. Some of the measures are envisaged hereunder:

The Institution has consciously put efforts in encouraging and adopting innovation in Teaching and Learning processes. The institute specially emphasises on Outcome Based Education (OBE) and Experiential Learning. Number of courses having focus on employability/Entrepreneurship/skill development are offered by the institution. Special focus is given for bridging the gap between Industry and Academia through Industry Institution Interaction. Centres of Excellence/incubation Centre and laboratories in collaboration with industry give the required industry blend to the students.

Campus recruitment Training (CRT) and Semester long internship in the industry are the notable initiatives of the institution through IQAC, to enhance and improve the employability skills of students. The Campus Recruitment Training aimed at sharpening the skills of pre-final year students to prepare them for the campus placement drives. As part of CRT the students have been trained in various skills such as communication skills, Aptitude skills, Reasoning skills, Leadership skills, and technical skills. The CRT program is developed on the lines of tests conducted by TCS, Wipro, CTS, Infosys, Tech Mahindra, Accenture, IBM and other IT and Non-IT companies. A perfect blend of Aptitude and Technical skills ensures that the students develop confidence and are ready to face the everevolving selection processes of various companies. The major components of the training are: Quantitative Aptitude, Logical reasoning, Verbal Abilities, Technical Skills, Mock Interviews and GD.



The prime objectives of CRT program are:

- To prepare the students for recruitment in various companies.
- To build self-confidence to face interviews and to explore a career path.
- To enhance overall competency levels of the student.
- To increase problem solving and analytical reasoning through activity-based learning.
- To develop effective time management.

YCCE adapted the AICTE's scheme of semester long internship. Semester Long Internship for UG Final year students and a year-long internship for final year MTech students. Summer Internships is offered during the summer of third year of all undergraduate programmes. The industries will be offered by the T&P department. However, students may contact industry for internship through their own resources and can join the internship after

### approval from T&P department

The intended objectives of internship training:

- Learn, apply, and sharpen the technical/managerial skills through hands-on work experience in real industrial situations.
- Exposure to the current technological developments relevant to the discipline
- Expose the students to future employers to prepare industry ready workforce.
- Expose students to the engineer's responsibilities, ethics, and aspects of quality control.
- Develop innovative solutions leading to positive impact.
- Understand the social, economic, and administrative considerations influencing work environment of industrial organizations.
- Understand the psychology of the workers, their attitudes and approach to problem solving.
- To establish network with professionals in the field

All the internships offered at YCCE are carried through standard processes and students are closely monitored. Students have to submit all reports in prescribed formats.

The internship is mutually beneficial for the industry, institute, and the students. The industry is benefited through the availability of year-round source of highly motivated pre-professionals, students bring new perspectives to problem solving, quality candidate's availability for seasonal positions and projects, availability of flexible, cost-effective workforce not requiring a long-term employer commitment, Proven, cost-effective way to recruit and evaluate potential employees, increased visibility of the organization on campus.

The students and the institute are equally benefited. An opportunity to get hired by the industry/organization, practical experience in an organizational setting, excellent opportunity to experience how the theoretical aspects learned in classes are integrated into the practical world, helps to decide if the industry and the profession is the best career option to pursue. It also gives an opportunity to learn new skills and supplement knowledge, opportunity to practice communication and teamwork skills, opportunity to learn strategies like time management, multi-tasking etc.

The outcome and impact of Campus Recruitment Trainings and Industry Internship:

 Significant improvement in placement of students in various reputed national and multinational companies. (Total Placements: 3810 = 61.29% in 5 Years)

Year	2019-20	2018-19	2017-18	2016-17	2015-16
No. of Placed	835	826	778	778	593
Students					
No. of	1161	1297	1255	1296	1214
outgoing					
Students					
Percentage	71.92	63.68	61.99	60.03	48.84
Avg. %			61.29%		

2) Prominent recruiters are, Adani Power Limited, Amazon Development (I) Pvt. Ltd., AMDOCS, Angloeastern Ship Management Ltd., Atos-Syntel India Ltd., Bajaj Finance Ltd., Bosch India Ltd., Byju's, Capgemini India Pvt. Ltd., Cognizant, Cybage Software Pvt. Ltd., Epic Research, Fujitsu Consulting (India), Galaxy Solar Energy Pvt. Ltd., GE Appliances, Grindwell Norton Ltd. (Saint Gobain), Hasan Juma Trading Oman, HCL Technologies Ltd., HSBC Software, IBM, Indian Air Force, INDORAMA Synthetics Ltd., Infosys, Jade Global Software Pvt. Ltd., JD Buildcon, JSW Steel Coated Products Ltd.,, L&T Infotech Ltd., LG Electronics, Mahindra & Mahindra Ltd., Medicaocean Asia Pvt. Ltd., Metlok Pvt. Ltd., Mindtree, Mphasis, Mu Sigma, Neosynergy Systems Pvt. Ltd., Persistent Systems Ltd.,, Ramkrisha IT Systems, Rane Holdings Ltd., Reliance Industries Ltd., Reliance Jio, Samsung R&D, Sunflag Iron & Steel Ltd., TAL Manufacturing Solutions Ltd., Tata Consultancy Services Ltd., Tech Mahindra Ltd., Triveni Turbines Ltd., Wipro Technologies Ltd., Xoriant Solutions Pvt. Ltd., Zensar Technologies Ltd., Zycus etc.

3) Average salary package is enhancing every year. Till date max. annual package offered is 17 Lakhs.

4) 84 MoUs for various types of student and faculty centric

activities with many organisations like Tata Consultancy Services Ltd. (TCS), Infosys, Persistent Systems Ltd., Infocepts Technologies Pvt. Ltd., GlobalLogic, SAP Control Systems & Engineers Pvt. Ltd., Cipher Technologies, ILabs Research Pvt Ltd, Mahindra & Mahindra Ltd.. Vidharbha Industries Association, Ceinsys Tech Ltd., Twin Star Display Technologies, Ashtavinayak Builders and Developers, MIA etc.

4) 08 Industry assigned professional elective courses are offered by MNC's like Infosys, Global Logic, TCS, Nagpur etc.

5) All final year students of Information Technology programme are doing semester long internships since 2017-18. The semester long internship is also offered to all Post graduate programmes (M.Tech).

6) Final year students of all PG programmes are offered year-long internship in the industry from session 2018-19 batch.

7) The students have to complete their projects successfully during the internship period which helped them to apply the skills practically and prepare the documentation.

8) The T&P department also helps students to provide stipends to the students during internship period.

9) These internships carry three credits in lieu of CRT.

10) AMCAT score card through which students can attend various recruitment drives.

11) As a result of persistent efforts of the team YCCE, every year our students are getting placement in reputed MNC's with good salary packages.

12) 150 live Industrial projects on Industrial Problems for the session 2019-20.

13) Faculty sabbatical training in industries

14) To bring Industry & Institute together for sustainable growth and development

File Description	Documents
Appropriate link in the institutional website	https://www.ycce.edu/naac-plus.php
Any other relevant information	<u>View File</u>

# 7.3.2 - Plan of action for the next academic year

Quality	2nd cycle NAAC Accreditation of YCCE
Assessment &	NBA Accreditation of CT (UG) & PG Structural Enginee
Accreditation	Autonomy Extension of YCCE
	Participation in NIRF and ARIIA
•	<ul> <li>Implementation of initiatives (AWL, DLA, CRT, VPS, M</li> <li>PQAI, Project Mentors, innovative T-L methods)</li> </ul>
	Internal Quality Review (IQR) Meetings with manageme quarter
•	<ul> <li>Increase the internet bandwidth in view of online te events</li> </ul>
	SWAYAM/NPTEL Certification by Faculty
Facultu	Permission to the Faculty for pursuing higher educat
Faculty Development	Teachers registration as PhD supervisors
	Participation of Faculty in STTP/FDP/Workshops
& Initiatives	Consultancy by departments as per assigned targets t requirements of NAAC/NIRF/NBA
	Faculty Recognition, Achievement
	Faculty Lecture Video Recording: Google Classroom
•	Establishing New Centre of Excellence (AI & IoT)
	Organization of various Student Development Activiti Professional Society Chapters, Value Added Courses
	Revision of faculty & student SOP/Policies
	Guidance for Competitive Examinations through GATE C
Student Development	Visit of Students to Institute of Eminence/Research
-	Development of e-Resources: Question Banks & Solutio
& Initiatives	Practicing Innovative Methods in Teaching and Learni
	SWAYAM/NPTEL Certification by Students
•	MOOCS Courses to be offered by the department
•	New language (German) to offer
	Workshops on Industry-Academia innovative practices Entrepreneurship

- MOOCS Courses to be offered by the department
- Offering Industry Aligned Courses/Research Organizat courses
- Carrier Guidance (CRT, Mock Interviews, Aptitude Tes
- Students performance in Sports & Cultural Activities
- Quality Paper Publications in SCI, SCOPUS, Web of Sci Journals and Conferences
- Increasing paper citations count & papers with i10 c
- Workshops/Seminars on IPR
- Book/Book Chapter and Monograph Publication

#### R & D Activities

- Patent & Copyright Proposal Submission
- Submission of Proposals to Funding Agencies

- Faculty/Students visits to Research Institutes/ Industries
  - Startups ideas incubation in Incubation Center
- Increasing PhD scholars registration under supervisors
- Teachers recognition as PhD supervisor
- Full time PhD in YCCE
- Research Lab Linkages for Collaborative Research/Joint Projects
- Industry involvement in development activities

Institute-Industry (Co-guides for Projects, Joint Projects, Joint Publications, Resource Person for Interaction CDW, FDP/STTP, Syllabus Content Delivery) • Industry Linkages through Industrial Tours/Visits etc. • Offering Industry Aligned & Open Elective Courses • Centre of Excellence in the departments

- Industry supported labs. establishment
- Industry based training programs for students
- Interaction of the management with the Students

Interaction with Stakeholde:	activities
	<ul> <li>Interactions with Recruiters/Employers</li> </ul>
	<ul> <li>More no. of Extension &amp; outreach activities with increase students participation under NSS</li> </ul>
Ext	<ul> <li>Video recordings of events and Geo-Tagged Photos</li> </ul>
ension	are to be maintained
Activitie	s • Blood, Book/Cloth Donation Camp
	• Orphanage Visit
	<ul> <li>Participation of students in University sports activities</li> </ul>
Initiative	
for Eco-	harvesting
Friendly	<ul> <li>Installation of Energy Conservation Devices in</li> </ul>
Campus	the Campus
Campus	
	<ul> <li>Automation of Academic Processes</li> </ul>